INDUSTRY DAY BRIEF

Michael Iacovelli
Propulsion, Power & Auxiliary Machinery Systems, Department 40

13 March 2019
Mission Statement:
Provide the Navy with Superior Engineering Solutions and Technologies for Propulsion, Power, Auxiliary and Machinery Systems to make our ships and systems operationally superior and affordable throughout their life cycle.

Vision Statement:
NAVSEA’s Life Cycle Engineering, Technology and Innovation Leader Providing superior machinery systems integration for Propulsion, Power, Auxiliary and Machinery Systems
ORGANIZATION CHART WITH TCs
DEPARTMENT 40 OVERVIEW

TOTAL END-STRENGTH
(Civilian, Military, Contractors)
808

TOTAL CIVILIAN
696

TOTAL MILITARY
0

TOTAL CONTRACTORS
112

EDUCATION LEVELS (ALL CIVILIANS)
Bachelors: 447
Masters: 126
Doctorate: 2

Total Civilian Workforce: 696
The Auxiliary Machinery Systems Division provides full spectrum and innovative engineering support for the following systems:

- Air Conditioning and Refrigeration
- Steam Systems
- Auxiliary Systems
- Combat Support Systems
- Life Support & Ventilation Systems
- Compressed Air Systems

In collaboration with our NAVSEA Technical Warrant Holders, the Division provides leadership for the research, development, testing, acquisition, integration, maintenance, sustainment, and modernization of these systems through:

- Technology Development
- Failure Investigation / Analysis
- Metrics Assessment
- Distance Support
- Land & Shipboard Test & Evaluation
- In Service Engineering

- Acquisition Support
- System Design
- Boiler and Pressure Vessel Inspections
- Energy Conservation
- Obsolescence Management & Legacy System Upgrades
- Training and Logistics
The Propulsion Systems Division provides full spectrum and innovative engineering support for the following systems:

- Gas Turbine Systems for Main Propulsion and Power Generation
- Diesel Engines for Main Propulsion and Power Generation
- Main Reduction Gears
- Shafting Systems
- Propellers, Waterjets, and Propulsors

In collaboration with our NAVSEA Technical Warrant Holders, the Division provides leadership for the research, development, testing, acquisition, integration, maintenance, sustainment, and modernization of these systems through:

- Technology Development
- Failure Investigation / Analysis
- Metrics Assessment
- Distance Support
- Land & Shipboard Test & Evaluation
- In Service Engineering
- Acquisition Support

- System Design
- Energy Conservation
- Obsolescence Management & Legacy System Upgrades
- Training
- Modeling & Simulation
- Machinery Arrangements
- 2S Cog / Depot Management
The Sail, Hull & Deck Machinery Systems Division provides full spectrum and innovative engineering support for the following systems:

- Anchor, Mooring, Towing and Amphibious Assault Systems
- Aviation & Material Handling and Stowage
- Weapons/Cargo Handling and Stowage Systems
- Launch/Recovery & Crane Systems
- Hydraulics and Steering Mechanical
- Hull Outfitting
- Shipboard Habitability
- Maintenance Technologies
- Submarine Sail Modernization/Maintenance
- Submarine Availability Material Planning

In collaboration with our NAVSEA Technical Warrant Holders, the Division provides leadership for the research, development, testing, acquisition, integration, maintenance, sustainment, and modernization of these systems through:

- Technology Development
- Failure Investigation / Analysis
- Metrics Assessment
- Distance Support
- Land & Shipboard Test & Evaluation
- In Service Engineering
- Acquisition Support
- System Design
- Hull & Deck Machinery Inspections
- Modernization
- Obsolescence Management & Legacy System Upgrades
- Training and Logistics
The Power Systems Division provides full spectrum and innovative engineering support for the following systems:

- Electrical Power Generation, Regulation, Distribution, Controls and Protection for all ship class
- Electric Power Conversion Systems and Special Frequency applications
- Advanced Integrated Electric Propulsion and Power Systems
- Arc Fault / Thermal management protection systems
- Software based Electric Plant Control systems
- Advanced Power Systems protection scheme
- Aircraft Electrical Service Stations
- Degaussing Systems

In collaboration with our NAVSEA Technical Warrant Holders, the Division provides leadership for the research, development, testing, acquisition, integration, maintenance, sustainment, and modernization of these systems through:

- Technology Development
- Failure Investigation / Analysis
- Metrics Assessment
- Distance Support
- Land & Shipboard Test & Evaluation
- In Service Engineering
- Acquisition Support

- System Level Design and Integration
- Energy Conservation
- Obsolescence Management & Legacy System Upgrades
- Hi Voltage management Safety Training
- Modeling & Simulation
-Fault Current Analysis
- Electrical System Infrastructure Alterations
Propulsion, Power & Auxiliary Machinery – Dept 40
Expanding the Advantage

Providing affordable, timely, quality engineering, acquisition, repair, modernization & testing services for Propulsion, Power Generation, Auxiliary, and Hull & Deck machinery systems aboard Surface Ships, Aircraft Carriers & Submarines throughout their lifecycle.
<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>Air Conditioning and Refrigeration System Field Service Repair Support.</td>
<td>$40M</td>
<td>FY20/Q1</td>
<td>411</td>
</tr>
<tr>
<td>Engineering and technical services for inspection and maintenance of Steam Systems Boilers, Heat Exchangers, Condensers, and Appurtenances.</td>
<td>$10M</td>
<td>FY19/Q4</td>
<td>412</td>
</tr>
<tr>
<td>Fleet Support Services for Compressed Gas Systems.</td>
<td>$75M</td>
<td>FY20/Q2</td>
<td>418</td>
</tr>
</tbody>
</table>
## Competitive Contract Requirements - Projected FY19 Announcements

<table>
<thead>
<tr>
<th>Brief Description</th>
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<th>Requiring Technical Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Services for Gas Turbines</td>
<td>$10M</td>
<td>FY19Q4</td>
<td>424</td>
</tr>
<tr>
<td>Installation Support for Gas Turbines</td>
<td>$15M</td>
<td>FY19Q4</td>
<td>424</td>
</tr>
<tr>
<td>Propeller Blade and Hub Repair Contract</td>
<td>$50M</td>
<td>FY19Q4</td>
<td>423</td>
</tr>
<tr>
<td>Brief Description</td>
<td>ROM</td>
<td>Anticipated Announcement Date (FY/QTR)</td>
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<tr>
<td>Engineering and Technical Service to support fiberglass mast fairings, closure</td>
<td>$15M</td>
<td>FY20/Q2</td>
<td>435</td>
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<tr>
<td>cap and fiberglass support services.</td>
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</tr>
<tr>
<td>White Collar Engineering and Technical Service Support for Non Cargo/Weapons</td>
<td>$10M</td>
<td>FY20/Q3</td>
<td>433</td>
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<tr>
<td>Handling Systems Hull, Deck, and Machinery</td>
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<td></td>
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<tr>
<td>Service Contract for the repair and rewind of electrical machinery</td>
<td>$50M</td>
<td>FY19/Q4</td>
<td>445</td>
</tr>
<tr>
<td>Contract to repair electrical systems on all surface ships</td>
<td>$75M</td>
<td>FY19/Q4</td>
<td>443</td>
</tr>
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