The Naval Undersea Warfare Center Division Newport

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Presented to:
National Small Business Conference,
Installation Opportunities Panel

By:
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Mission and Vision

Mission

The Naval Undersea Warfare Center Division Newport provides research, development, test and evaluation, engineering, analysis and assessment, and fleet support capabilities for submarines, autonomous underwater systems, and offensive and defensive undersea weapon systems, and stewards existing and emerging technologies in support of undersea warfare. Executes other responsibilities as assigned by the Commander, Naval Undersea Warfare Center.

Vision:

Undersea Superiority: Today and Tomorrow
Working Together to Deliver the Best Solutions Quickly

Operating Principles: (1) Teamwork, (2) Integrity, (3) Accountability, (4) Initiative, (5) Respect
**Division Newport: 140 Years Of Progress**

<table>
<thead>
<tr>
<th>Year</th>
<th>Key Events</th>
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<tbody>
<tr>
<td>1869</td>
<td>Naval Torpedo Station at Goat Island 1869 - 1951</td>
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<tr>
<td></td>
<td>- Torpedo Repair</td>
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<tr>
<td></td>
<td>- Torpedo Ranging and Testing</td>
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<td>- Torpedo School</td>
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<td></td>
<td>- Pioneers in Sonar Systems Development</td>
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<td>1966</td>
<td>Naval Undersea Weapons Research and Engineering Station 1966 - 1970</td>
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<td></td>
<td>- Growth of Test and Evaluation Functions</td>
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<td></td>
<td>Naval Undersea Warfare Center Division, Newport 1992 - Present</td>
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<tr>
<td></td>
<td>- Test and Evaluation</td>
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<td></td>
<td>- Engineering and Fleet Support</td>
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<td>- Autonomous Underwater Systems</td>
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*At the Forefront of Undersea Systems Development for Over a Century*
NUWC’s Contribution to Submarine Technology

- Combat Control Systems
- Active and Passive Acoustic Sonar Systems
- Fire Control Systems
- Hull-Mounted, Fixed and Towed Arrays
- Towed Array Handling Systems
- Acoustic Transducers & Windows
- Antennas
- Exterior Comms

- Electronic Warfare
- Periscopes & Imaging Systems
- Missiles
- Launchers
- Torpedo System, Including Propulsion, Payloads, and Software
- Unmanned Undersea Vehicles
- Countermeasures

Towed Arrays
Hull Arrays
Periscopes & Antennas
Combat Control & Fire Control
Sail Arrays
Countermeasures (Not to Scale)
Sonar Room
Tomahawk Integration
Launchers
Spherical Array
UUVs
NUWC’s Contribution to Surface Ship Technology

Surface Ship Sonar

Surface Ship USW Offensive and Defensive Systems, Including Torpedo Recognition and Alertment

ASW Modules for Unmanned Surface Vehicles

Littoral Combat Ship with Mission Modules

Sonar Processing

Sonar

Towed Array Handlers

Towed Arrays and Transmitters

Remote Vehicles

Countermeasures (Not to Scale)

Torpedo Tubes

Torpedoes
NUWCDIVNPT Customers

Our FY08 Customers
$977.4M

Spectrum of Customers

- Fleet
- Program and resource sponsors
- Scientific sponsors
- Intelligence community
- Defense industry
- Non-defense industry
- Foreign Navies

We are a NWCF Activity

- We’re not a congressional line item
- Customers decide whether to bring work to the Warfare Centers
- NUWC is accountable for efficient delivery of products and services

Provide Best Value to Our Customers
Small Business Opportunity
Key Points of Contact

• Mr. David Rego
  – David.rego@navy.mil
    • 401.832.1766

• Dr. Theresa Baus
  – Technology Partnership Enterprise Office
    • Theresa.baus@navy.mil
      – 401.832.8728
Technology Partnership
Enterprise Office (TPEO)

• Partnerships and collaborations
  – Cooperative Research and Development Agreements (CRADAs)
  – Work for Private Party (WPP) agreements
  – Patent License Agreements

• Small Business Innovation Research (SBIR) & Small Business Technology Transfer (STTR)

• S&T Broad Agency Announcement (BAA)

Leveraging Partnerships and Collaborations to Enhance Capabilities for the Warfighter
Cooperative Research & Development Agreements (CRADAs)

- Agreements between DIVNPT and one or more non-Federal parties to perform cooperative & mutually beneficial R&D consistent with the DIVNPT mission
- DIVNPT may provide personnel, services, facilities and equipment
- Non-Federal Collaborator may provide all of the above plus funds to DIVNPT
- Preference for small businesses
- Preference for businesses agreeing to manufacture products substantially in the U.S.
- Intellectual Property (IP) rights are covered in the agreements
Navy Potential Contractor CRADA

- Establishes need-to-know to gain clearance
- Replaces NPC program no cost contract agreements
- Company continues development of product or service and provides yearly report on progress
- Division files paperwork with DSS that starts clearance process
- Three years duration
- Up to SECRET
Work for Private Parties (WPP)

- Provides private party access to Government facilities and expertise
- Non-collaborative agreement
- Private parties pay the Government & must recover all costs of use of the facility and associated Government labor
- References for details:
  - 10 USC 2539B (Test Services)
  - 10 USC 2563 (Engineering Services)
  - 10 USC 2681 (AUTEC Range Services)
- Cannot compete with industry – Government has to be the only source for the work/services required
Patent License Agreements

- Dual-use commercialization leverages NUWC’s R&D
- Exclusive and non-exclusive licenses available
- License agreements in conjunction with a CRADA to support transition to commercial products

To Date, NUWCDIVNPT has Licensed 103 Patents
SBIR & STTR

Program Descriptions

- Small Business Innovation Research (SBIR)
  - Set-aside program for small business concerns to engage in federal R&D -- with potential for commercialization (11 federal agencies required to participate)

- Small Business Technology Transfer (STTR)
  - Set-aside program to facilitate cooperative R&D between small business concerns and U.S. research institutions -- with potential for commercialization (5 federal agencies required to participate)

www.dodsbir.net
SBIR/STTR: 3-Phase Programs

- **PHASE I**
  - Feasibility Study
  - ~$100K for 6-9 months (SBIR) or 12 months (STTR)

- **PHASE II**
  - Full Research/R&D
  - ~$750K for 2 - 2.5 years (SBIR) or $500K (STTR)

- **PHASE III**
  - Transition Stage
  - Use of non-SBIR/STTR Funds
Role of the Resident Division
Newport SBIR/STTR Coordinator

- Coordinate all steps in Division participation
  - Topic calls
  - Proposal evaluation
  - Contract award
  - Funds allocation and expenditure
- Advise & inform on effective program use
  - Division scientists and engineers
  - Small businesses
  - Washington program managers
  - Prime contractors
- Facilitate partnerships for transition
- POC:
  - Mr. Jack Griffin, (401) 832-7283
  - John.F.Griffin@navy.mil
Science & Technology
Broad Agency Announcement (BAA)

- Center-wide BAA (S&T focus) – always ‘open’ & currently posted – invitation to submit proposals

For better defined technical needs:
- Topical BAAs
  - Focused subject matter with more specific needs defined
  - published periodically (usually with a ‘closing date’)

Detailed Requirements
Less
Unsolicited Proposals
“Center-wide” BAA
TPEO managed
More
“Topical” BAA
Department Managed
RFP

www.fedbizopps.gov
For NUWC specific BAAs see …

www.npt.nuwc.navy.mil/contract
TPEO Points of Contact

Technology Transfer Coordinator

- Cooperative Research and Development Agreements (CRADAs)
  - Mary Sylvia, mary.sylvia@navy.mil (401) 832-3339

SBIR/STTR Program Coordinator

- Jack Griffin, john.f.griffin@navy.mil, (401) 832-7283

University & Industrial Programs

- Education Partnership Agreements
- Center Wide S&T Broad Agency Announcement
- Intergovernmental Personnel Agreements
- NPC CRADAs
  - Dr. Greg Jones, gregory.b.jones1@navy.mil, (401) 832-1681
Collaboration on a Global Basis

International Symposium and Conference

- NWC NWDC Fleet & Fleet Reps
- International S&T Resources
- Innovation
- Stable, Long Term Investments - Stewardships -
  Office of Naval Research Etc.
- Service Laboratories/Centers
- High Risk, High Payoff R&D

- Foreign Military Sales
- Armament Cooperation Programs
- Data Exchange Agreements
- Technical Cooperation Programs
- Cooperative Research and Development Agreements
- U. S. Allies

- Basic Research, Fundamental Ideas, Scientific Talent Pool
- Educational Partnership Agreements +
- Academia
- 21 Educational Partnership Agreements

- Demo/Validation, Production
- Recent Alliances
  - Sandia
  - Electric Boat
  - Raytheon
  - Northrop Grumman
- CRADA's
- SBIR
- IRAD
- Industry