
Sensors and SONAR Systems Department

NUWC Division Newport, Code 15

NCMA RI Chapter Industry Day

29 October 2020

Mark A. Snyder, Department Head (Acting)

DISTRIBUTION STATEMENT A: Approved For Public Release; Distribution Is Unlimited

SENSORS AND SONAR SYSTEMS DEPARTMENT

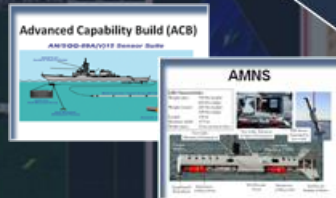
Core Values

- Trust / Honesty / Integrity
- Leadership
- Technical and Business Excellence
- Teamwork / Collaboration
- Innovation
- Dedication
- Accountable
- Respect

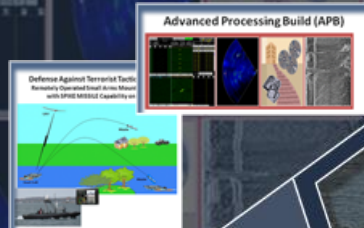
Core Competencies

- Undersea Warfare (USW)
- Sensors & Arrays
- Submarine & Surface Ship SONAR Systems
- Maritime Surveillance
- Science & Technology
- Advanced Development

DISTRIBUTION STATEMENT A:
Approved For Public Release;
Distribution Is Unlimited



ADVANCED CONCEPTS ENTERPRISE



SCIENCE AND TECHNOLOGY ENTERPRISE



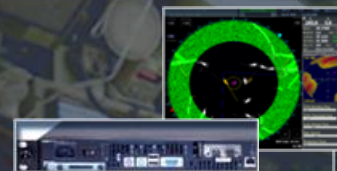
SENSORS AND ARRAYS ENTERPRISE



SOUND SOLUTIONS FOR THE WARFIGHTER



SURFACE SHIP AND AVIATION SYSTEMS ENTERPRISE



SUBMARINE SYSTEMS ENTERPRISE



Sensors & SONAR Systems Department

15 Department Head

15A Deputy Department Head

1501 Director, Business Operations

15T Director, Undersea Sensors

159 Director, Programs & Contracts

Department Contract Manager (DCM)

15E Director, Engineering

Chief Systems Analyst

15A Customer Advocacy

Surface Ship USW

Towed Systems,
Sensors and
Acoustics

Maritime Surveillance

151 Science and Technology Division

1511 Automation Algorithm Development

1512 Devices, Sensors and Materials R&D

1513 Signal Processing Algorithm Development

152 Advanced Concepts Division

1521 Developmental Systems Engineering

1522 Prototype Development

1523 Technology Integration

1524 Concepts and Experimentation

153 Sensors and Arrays Division

1531 Underwater Sound Reference

1532 Towed and Deployed Arrays Engineering

1533 Hull Arrays and Distributed Sensors Engineering

1534 Handling Systems Engineering

1535 Fleet Sensors and Cables Engineering

154 Submarine Systems Division

1541 Submarine and Surveillance Systems Engineering

1542 Systems Analysis and Passive Systems Engineering

1543 Submarine and Surveillance Systems Integration

1544 Submarine and Surveillance Test, Evaluation and Analysis

1545 Submarine and Surveillance Training, Logistics and Fleet Support

155 Surface Ship and Aviation Systems Division

1551 Surface and Aviation Systems Engineering

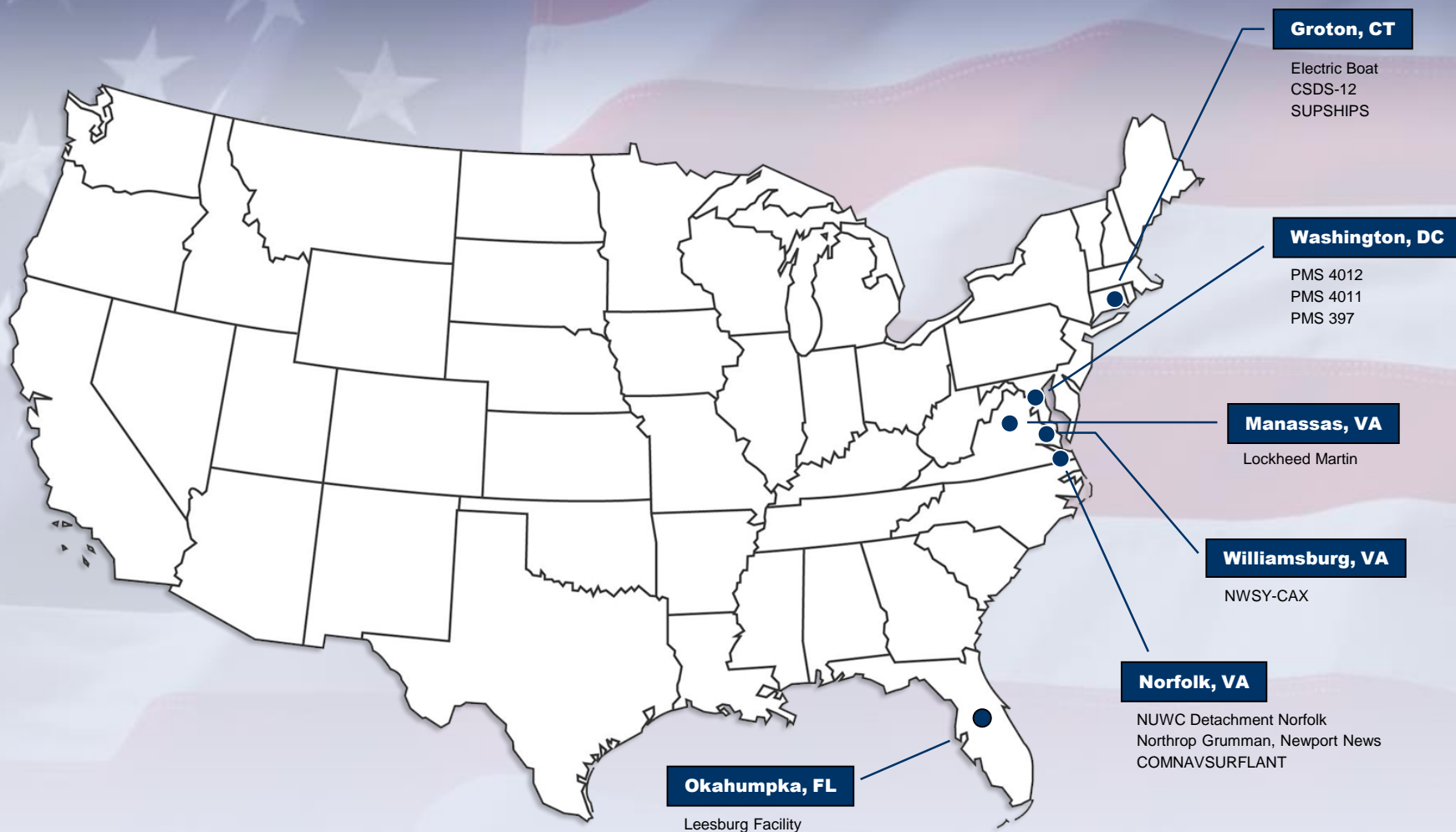
1552 Active Systems Engineering

1553 Surface and Aviation Systems Integration

1554 Surface and Aviation Test, Evaluation and Analysis

1555 Surface and Aviation Training, Logistics and Fleet Support

Strategically Located Offsite Personnel



Our Resources and Expertise Support National and Foreign Military Efforts

Sensors and SONAR Systems Department

We Advance Timely, Innovative, Integrated, Next Generation Solutions to Maintain FLEET UNDERSEA SUPERIORITY

PEOPLE



ISEA
In-service
Engineering

PRODUCTS AND CAPABILITIES



S&T
Science and
Technology

THE FLEET

PEO-AIR

OSD

ACADAMIA

DARPA

NAVY WARFARE CENTERS

INDUSTRY



SPONSORS, STAKEHOLDERS, AND PARTNERS

Service Cost Centers

Towed Array Handler Equipment Facility (TAHEF)

- Center of Excellence for overhaul of Towed Array Handler Equipment
- Registered to ISO 9001-2000 and aligned with the Towed Systems ISEA Organization
- Land-based test facilities for 276 and 542 systems



Naval Array Technical Support Center (NATSC)

- Established as a result of a NAVSEA initiative to integrate all Towed Array and Tow Cable Repair Level Activity into a consolidated facility
- Responsible for the repair and refurbishment of Surveillance Towed Arrays (SURTASS) A180R and TL-29A; Surface Ship Towed Array TB-37; and Submarine Towed Arrays TB-16, TB-29A and TB-34
- Responsible for the manufacturing of TB-16, AN/SQR-19, TB-34 and SURTASS Tow Cables



Underwater Sound Reference DIVNPT (USRD)

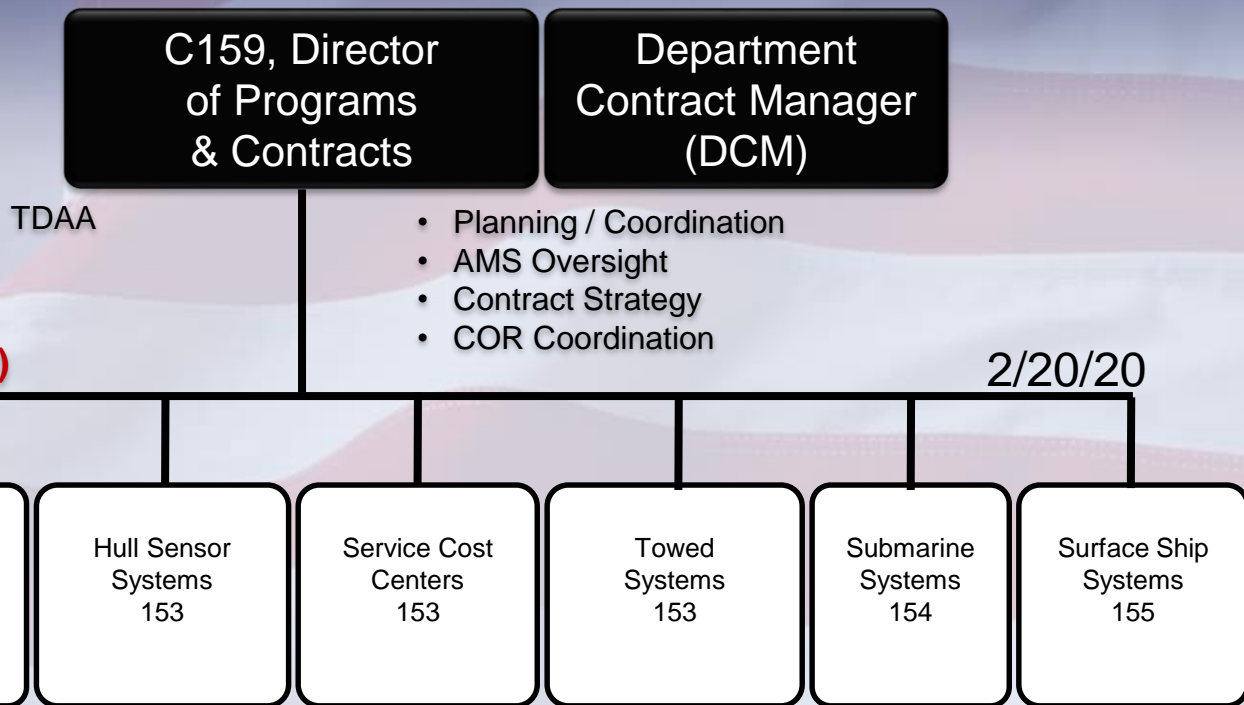
- Rapid array and sensor Calibration/Certification Response Center to accommodate urgent fleet requirements
- Navy's principal Activity for N.I.S.T. traceable calibration of Tactical Towed Arrays including developmental Towed Arrays and Submarine and Surface Ship coatings and hull sensors
- Towed Array calibrations include platforms: TB-16 (E,F,G), TB-23, TB-29, 29A, TB-34, TB-37 and new Fiber Optic Arrays; and Receive Sensitivity Calibration



Code 15 Contracting

Contract Management Structure

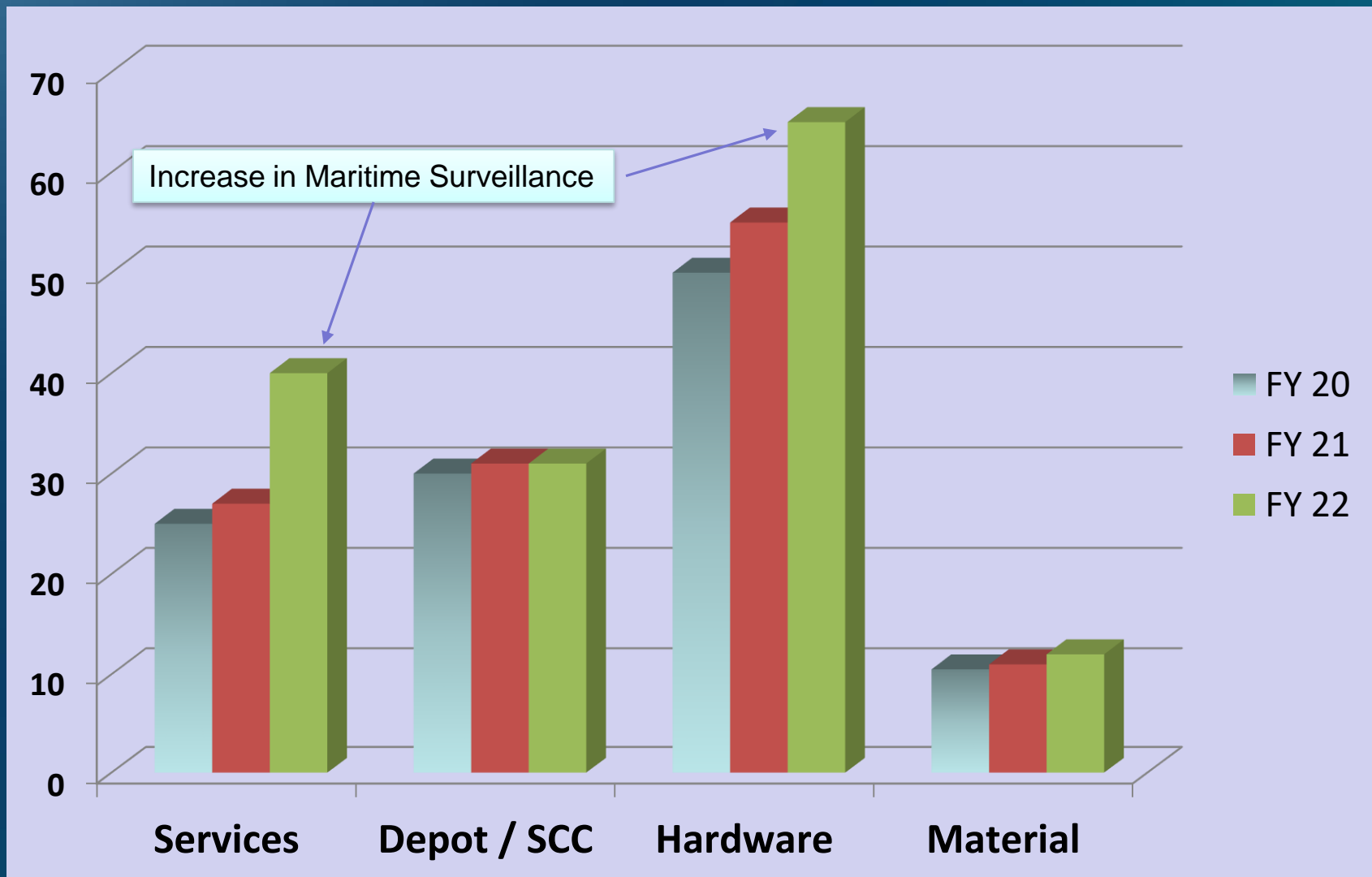
Administration of
AMS will be at the
Procurement IPT
Level



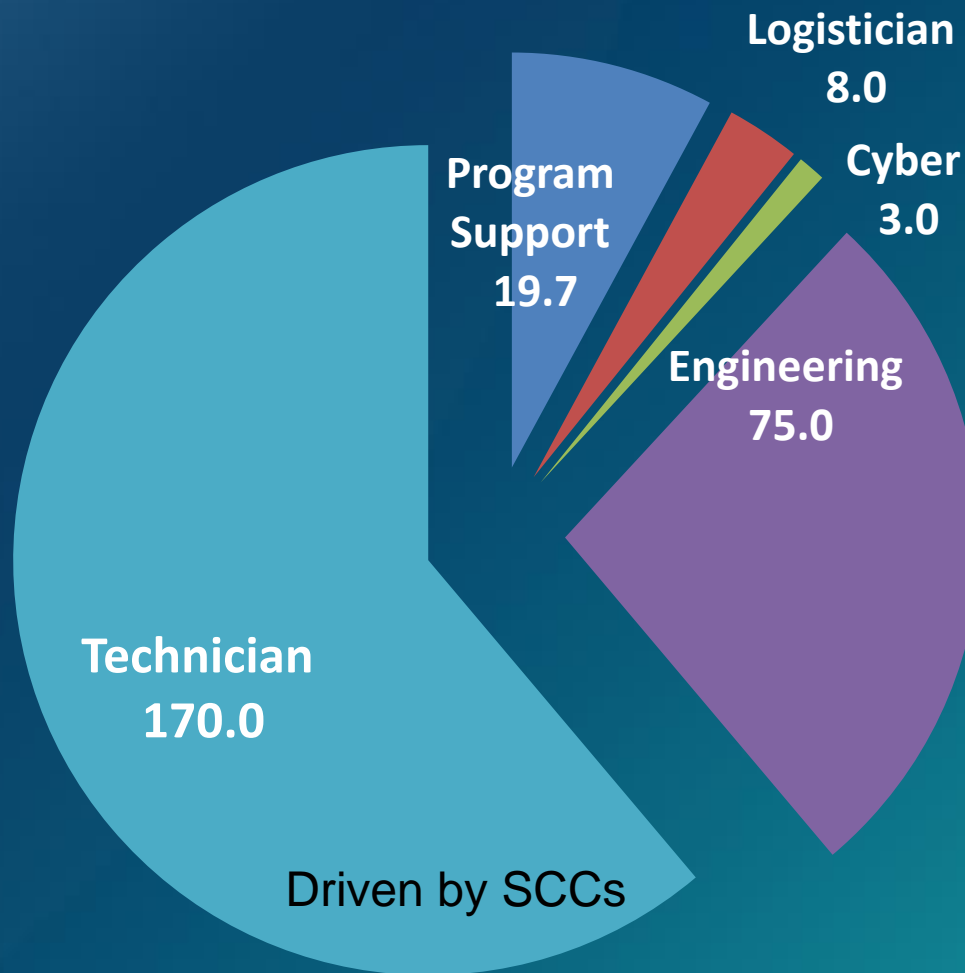
□ Key Attributes of Procurement Teams

- Senior Leader to facilitate planning, execution, follow-on's and collaboration across C15
- Planning at project level and responsibility to enter & monitor plans in Acquisition Management System (AMS)
- Certified Data Manager(s) (CDMs) in each team to approve CDRL packages
- CDRL Owners and Project Team Responsibilities
- Management of Technical Advisors (TAs)

Projected Contracting \$M's



Code 15 Outsourced By Skill FY 21 - 22



275.7 FTEs

Major Code 15 Contractors

| | |
|--------------------------------------|--|
| GVI | Towed Array Handler Equipment Facility (TAHEF) Maintenance, Repair & Overhaul |
| Leidos | Naval Array Technical Support Center (NATSC) |
| Hydroacoustics Inc. | HLF-1 Services & Refurb |
| L-3 Comms | TB-23/BQ Towed Systems Repair & Support |
| Leidos | Towed Array Intermediate Maintenance Activity (IMA) |
| SyQwest / Ultra / Massa / USS | Sensors, Hydrophones & Transducers |
| GVI Inc. | Wet End Engineering, Test & Evaluation |
| MIKEL | Dry End System Eng., Test & Evaluation |
| THOR Solutions | Business Operations Support |
| SEACORP | Trainers, Training & Human Factor Eng. |



Code 15 Projected Contracts – Services

| Current Contract # | Title | Current Contract Value | Incumbent | Seaport | Follow-On | Expected RFP Release | Strategy |
|-----------------------|-----------------------------|------------------------|-----------------|---------|-----------|----------------------|----------|
| N66604-20-D-A000 | HLF-1 Services and Hardware | \$8.9M | Hydro-acoustics | N | Y | FY22 QTR 1 | TBD |
| N00178-11-D-6705 N401 | Business Operations | \$20.9M | THOR | Y | Y | FY22 QTR 1 | SBSA |
| N00178-10-D-6066 N402 | SONAR Wet End Services | \$30.8M | GVI | Y | Y | FY22 QTR 1 | SBSA |
| | | | | | | | |
| | | | | | | | |

Code 15 Projected Contracts – Hardware

| Contract # | Title | Current Contract Value | Incumbent | Seaport | Current Contract Type | Expected RFP Release | Strategy |
|------------------|--------------------------------|------------------------|------------------|---------|-----------------------|----------------------|----------|
| NEW | WAA & LSA OBE Bottles | N/A | N/A | N | FFP | FY21 QTR 3 | TBD |
| NEW | Hybrid Underwater SONAR Cables | N/A | N/A | N | FFP | FY21 QTR 4 | TBD |
| N66604-13-D-2051 | TR 317 Transducer Restoration | \$5.0M | SyQwest | N | FFP | FY21 QTR 4 | TBD |
| N66604-15-D-0080 | DT-705A Sensor | \$5.9M | Teledyne | N | FFP | FY21 QTR 4 | TBD |
| N66604-16-D-0055 | TR-233D Transducers | \$2.6M | Massa | N | FFP | FY21 QTR 4 | TBD |
| N66604-15-D-0449 | HFSA Windows | \$14.5 | Goodrich | N | FFP | FY22 QTR 1 | TBD |
| N66604-17-D-A701 | CW-1147 & CW-1181D Domes | \$4.7M | Globe Composites | N | FFP | FY22 QTR 1 | TBD |

Opportunities

- **ASW Performance Analysis**
- **Distributed Sensors**
- **Cyber Security**
- **Hull Mounted Arrays**
- **Human Systems Integration**
- **Next Gen Arrays - Highly Skilled Technicians**
- **In Service Engineering**
- **Advanced Sensor Development**
- **Signal Processing**
- **Simulation/Stimulation**
- **Towed System Reliability**
- **Transducer / Hydrophone Technology**
- **Test & Evaluation**

Keys to Contracting Success:

- **Competition**
- **Advanced Planning**
- **Sources Sought**
- **Trusted Partner**

QUESTIONS?

Small Business Advocate
NUWC_NPT_OSBP@navy.mil



Working with Industry, Academia and Navy Labs to Deliver Solutions to the Warfighter Where and When They are Needed