



Sensors and SONAR Systems Department

NUWC Division Newport, Code 15

NCMA RI Chapter Industry Day

25-26 October 2022

Sensors and SONAR Systems Department Head

Sensors and SONAR Systems Department

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

PEOPLE



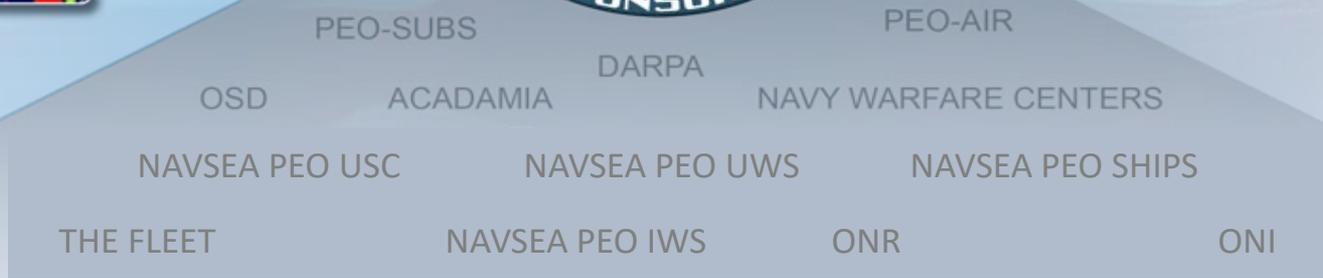
ISEA
In-service
Engineering

PRODUCTS AND CAPABILITIES



We Provide Sound Solutions for the Warfighter

S&T
Science and
Technology



SPONSORS, STAKEHOLDERS, AND PARTNERS

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

Sensors & SONAR Systems Department



Sensors & SONAR Systems Department

15 Department Head

15B Deputy Department Head

15T Director of Undersea Sensing Technologies

1501 Director, Business Operations

159 Director, Programs & Contracts

Department Contract Manager (DCM)

15B Customer Advocacy

- Surface Ship USW
- Towed Systems, Sensors and Acoustics
- Maritime Surveillance

1502 Director, Information Technology

15E Director, Engineering

Chief Systems Analyst

151 Science and Technology Division

152 Advanced Concepts Division

153 Sensors and Arrays Division

154 Submarine Systems Division

155 Surface Ship and Aviation Systems Division

1511 Automation Algorithm Development

1521 Developmental Systems Engineering

1531 Underwater Sound Reference

1541 Submarine and Surveillance Systems Engineering

1551 Surface and Aviation Systems Engineering

1512 Devices, Sensors and Materials R&D

1522 Prototype Development

1532 Towed and Deployed Arrays Engineering

1542 Systems Analysis and Passive Systems Engineering

1552 Active Systems Engineering

1513 Signal Processing Algorithm Development

1523 Technology Integration

1533 Hull Arrays and Distributed Sensors Engineering

1543 Submarine and Surveillance Systems Integration

1553 Surface and Aviation Systems Integration

1524 Concepts and Experimentation

1534 Handling Systems Engineering

1544 Submarine and Surveillance Test, Evaluation and Analysis

1554 Surface and Aviation Test, Evaluation and Analysis

1535 Fleet Sensors and Cables Engineering

1545 Submarine and Surveillance Training, Logistics and Fleet Support

1555 Surface and Aviation Training, Logistics and Fleet Support

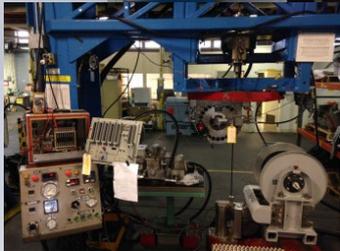
Over 600 Highly-Qualified Engineers, Scientists, Technicians, and Staff Professionals

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

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



C15 Strategy Map

NUWCDIVNPT OPERATING PRINCIPLES



Align with NUWCDIVNPT Strategic Guidance

NUWCDIVNPT STRATEGIC FOCUS AREAS



CODE 15 VISION: Sound Solutions for the Warfighter

CODE 15 MISSION: Conduct full spectrum research & development, prototyping, engineering, integration, training, test & evaluation, logistics, and acquisition support for sensors and SONAR systems in undersea warfare (submarine, surveillance, surface ship, aviation and associated areas of irregular warfare) for undersea superiority today and tomorrow.

CODE 15 GOALS

- 1.0 Focus Growth by Viewing our Customer's Problems or Challenges as our Own
- 2.0 Connect our Science and Technology to a Wide Spectrum of Needs
- 3.0 Efficiency through Expert Business Systems and Process

CODE 15 NEAR-TERM TECHNICAL FOCUS

- *Distributed Sensing and SONAR Systems*
- *Cloud Computing/Infrastructure Management*
- *Non-Traditional Sensing Technologies*
- *Foreign Military Sales*
- *Warfighter Performance*
- *System Commonality*
- *System Life-Cycle*
- *Science and Technology*

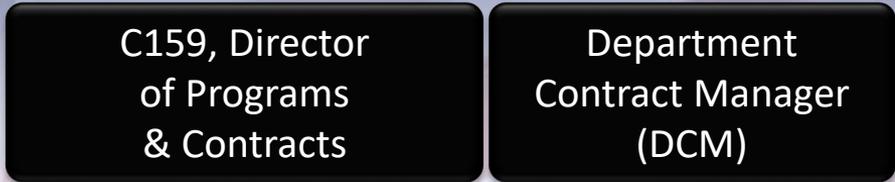
Leadership Thoughts and Outlook

- **Concerns- Thoughts from the Helm**
 - Demand for our products and services has never been higher
 - We are experiencing large numbers of retirements and we are hiring mostly new engineers to replace
 - Senior engineers and scientists are at a premium
- **Outlook Challenges or Changes regarding Product Line, Acquisition, etc**
 - Growing demand for our Depot products (technician support)
 - Growing demand for Sonar Systems analysis
 - Heavy workload in our ISEA areas- particularly wet end and ARCI
 - Heavy workload in Sonar T&E- particularly surface ship and submarine

Contracting Status

Sensors and SONAR Systems
Director of Programs & Contracts

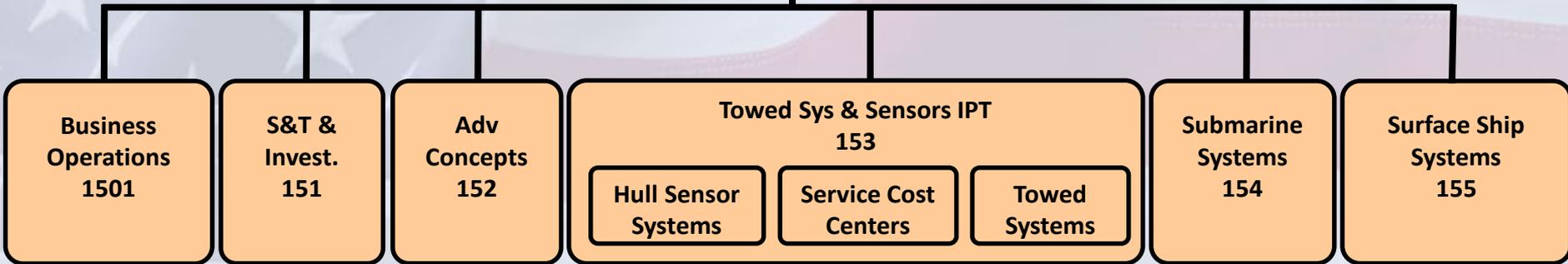
Contract Management Structure



TDAA

- Planning / Coordination
- AMS Oversight
- Contract Strategy
- COR Coordination

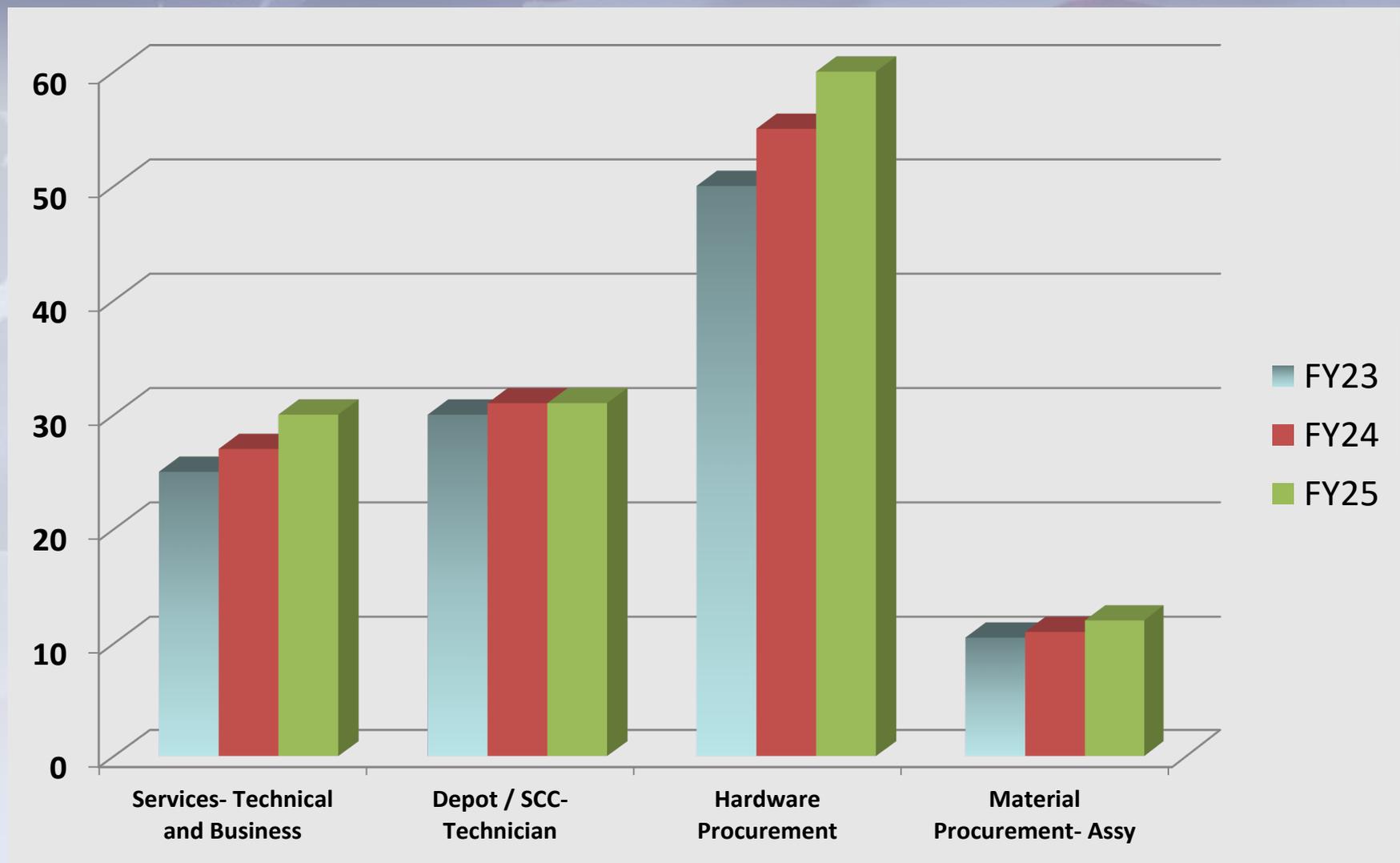
C15 Procurement IPTs



Key Attributes of Procurement Teams

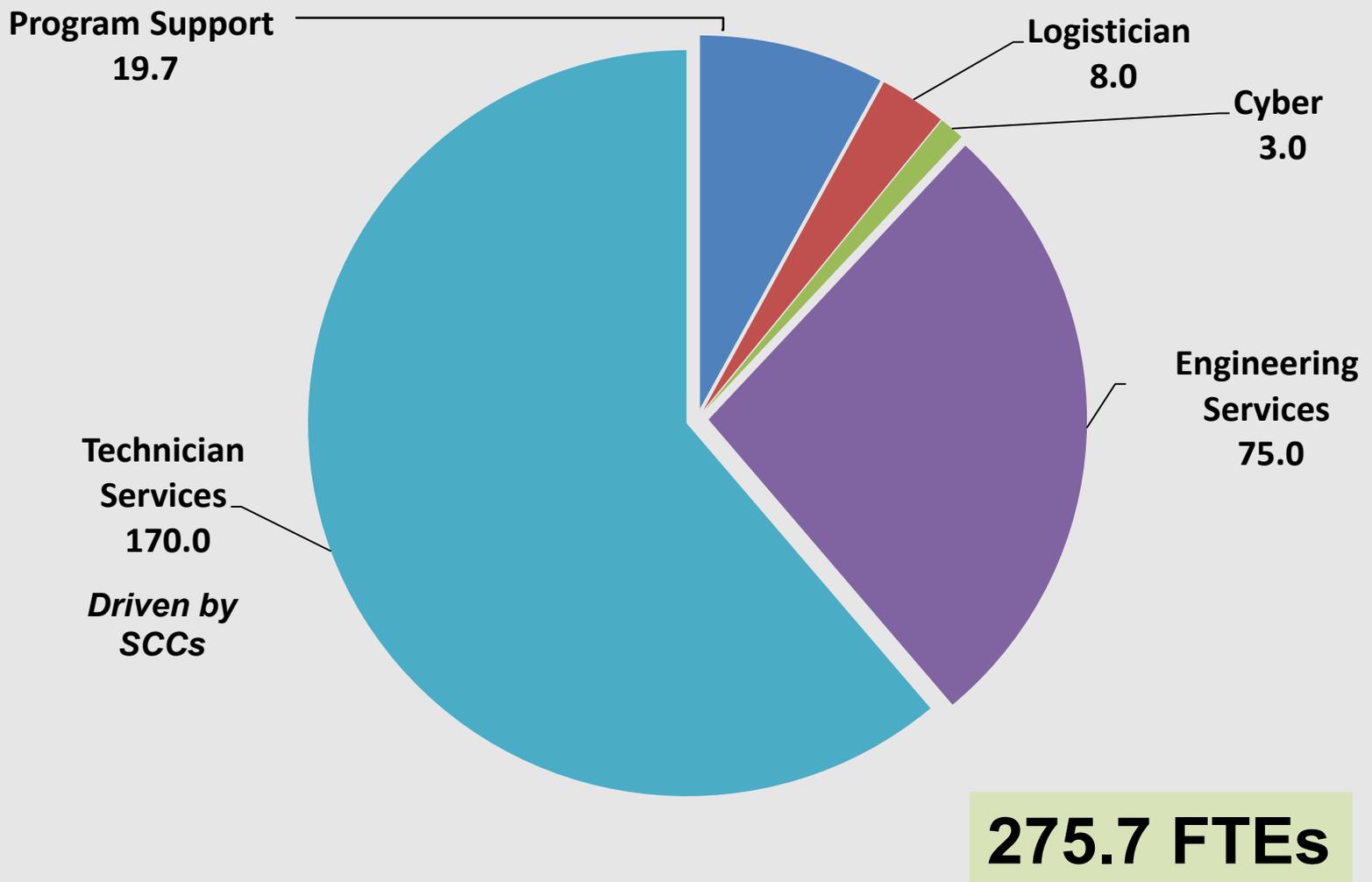
- Senior Leader to facilitate planning, execution, follow-on's and collaboration across C15
- Planning at project level and responsibility to enter & monitor plans in Acquisition Management System (AMS)
- Certified Data Manager(s) (CDMs) in each team to approve CDRL packages
- CDRL Owners and Project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

Projected Contracting (\$M)



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

Services Outsourced By Skill (FY 22)



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

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.
L-3 Chesapeake Sciences Corp		Towed Array Integrated Product Team Telemetry (TAIPT)
Canadian Rolls Royce		OK-410

Code 15 Projected Contracts



	Summary of Contract Scope	Contracting Method: (SeaPort, IDIQ, etc)	Anticipated Period of Performance	Acquisition Strategy	Expected RFP release	Follow On?
CW-1147 & CW-1181D/E Domes Production	Establish a 5-year FFP IDIQ contract for CW-1147 & CW-1181D/E Domes Production	FFP IDIQ	6 years (5 years ordering, additional year to complete orders).	TBD	FY23 QTR 01	N66604-17-D-A701: Globe Composite Solutions, Ltd
TR-302/TR-355 Transducer Production	Establish a 5-year FFP IDIQ contract for TR-302/TR-355 transducer production.	FFP IDIQ	6 years (5 years ordering, additional year to complete orders).		FY23 QTR 04	N66604-18-D-D800: Massa Products Corporation
OK-410 Production Contract	OK-410 Surface Ship Towed Array Handler	IDIQ	6/5/2023- 6/4/2028	Full and Open Competition	FY23 Qtr 1 or 2	N6660418DB800: Canadian Rolls Royce
HFSA Windows Production Contract	Establish a 5-year FFP IDIQ contract for HFSA Windows Production	FFP IDIQ	6+ years (5 years ordering, additional years to complete orders depending on how many on order).	TBD	FY23 QTR 01	N6660415D0449: Collins Aerospace (formally Goodrich)
Hybrid Underwater SONAR Cables per PRO 20 Certification	Establish a 5-year FFP IDIQ contract for Hybrid Underwater SONAR Cables per PRO 20 Certification	FFP IDIQ	6 years (5 years ordering, additional year to complete orders).	TBD	FY23 QTR 02	N/A
TR-364A HFSA Projector Production	Establish a 5-year FFP IDIQ contract for TR-364A HFSA Projectors	FFP IDIQ	6 years (5 years ordering, additional year to complete orders).	TBD	FY23 QTR 01	N6660417DB700: Ultra Electronics Ocean System

Code 15 Projected Contracts

	Summary of Contract Scope	Contracting Method: (SeaPort, IDIQ, etc)	Anticipated Period of Performance	Acquisition Strategy	Expected RFP release	Follow On?
TR-338D Transducer Production	Establish a 5-year FFP IDIQ contract for TR-338D Transducers	FFP IDIQ	6 years (5 years ordering, additional year to complete orders).	TBD	FY23 QTR 02	N6660418D0023: Massa Products Corporation
TR-232C Transducer Production Contract	Establish a 5-year FFP IDIQ contract for TR-232C Transducers	FFP IDIQ	6 years (5 years ordering, additional year to complete orders).	TBD	FY23 QTR 02	N6660418DE800: Massa Products Corporation
NATSC Follow On	Naval Array Technical Support Center Follow On	TBD	3/31/2025 - 3/30/2030	Full and Open Competition	FY24 Q1	N6660421DA000: Leidos
DT-100 HOUSINGS	Establish a 5-year FFP IDIQ contract for DT-100 Housings	FFP IDIQ	6 years (5 years ordering, additional year to complete orders).	TBD	FY23 QTR 03	N6660420DP000: Government & Industrial Supply, Inc. (GIS)
OB-122/U WAA OBE, TD-1479/U LSA OBE	Establish a 5-year FFP IDIQ contract for WAA & LSA OBEs	FFP IDIQ	6 years (5 years ordering, additional year to complete orders).	TBD	FY23 QTR 03	N6660422DB200: SyQwest, Inc.

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?



TEAM 15

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED

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

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