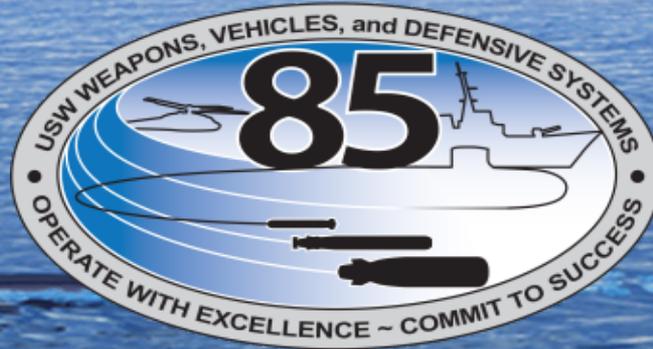




Undersea Warfare Weapons, Vehicles, and Defensive Systems Department



*Code 85 Deputy Department Head
&
Technical Dept. Acquisition Advocate*
Presenting to:

***NCMA RI Chapter Industry Day
25 October 2022***

Department Leadership Overview

Mission & Vision

Products

Organization / Department Resources

Customers & Funding Projections

Leadership Thoughts & Outlook

Code 85 Projected Contract Details

Contracts Details

Questions

Department Mission & Vision



Mission

“Provide integrated full spectrum undersea Weapon, Autonomous, and Defensive System solutions to the warfighter through technical expertise, cooperative innovation, engineering, and life cycle stewardship.”

Vision

“Undersea Dominance through superior Autonomous and Defensive Systems”

Philosophy

“Operate with Excellence; Commit to Success”

Science and Technology for:

- Torpedoes / Targets
- Autonomous Undersea Vehicles (AUVs)
- Countermeasures/Counterweapons

System Development, Integration & Test

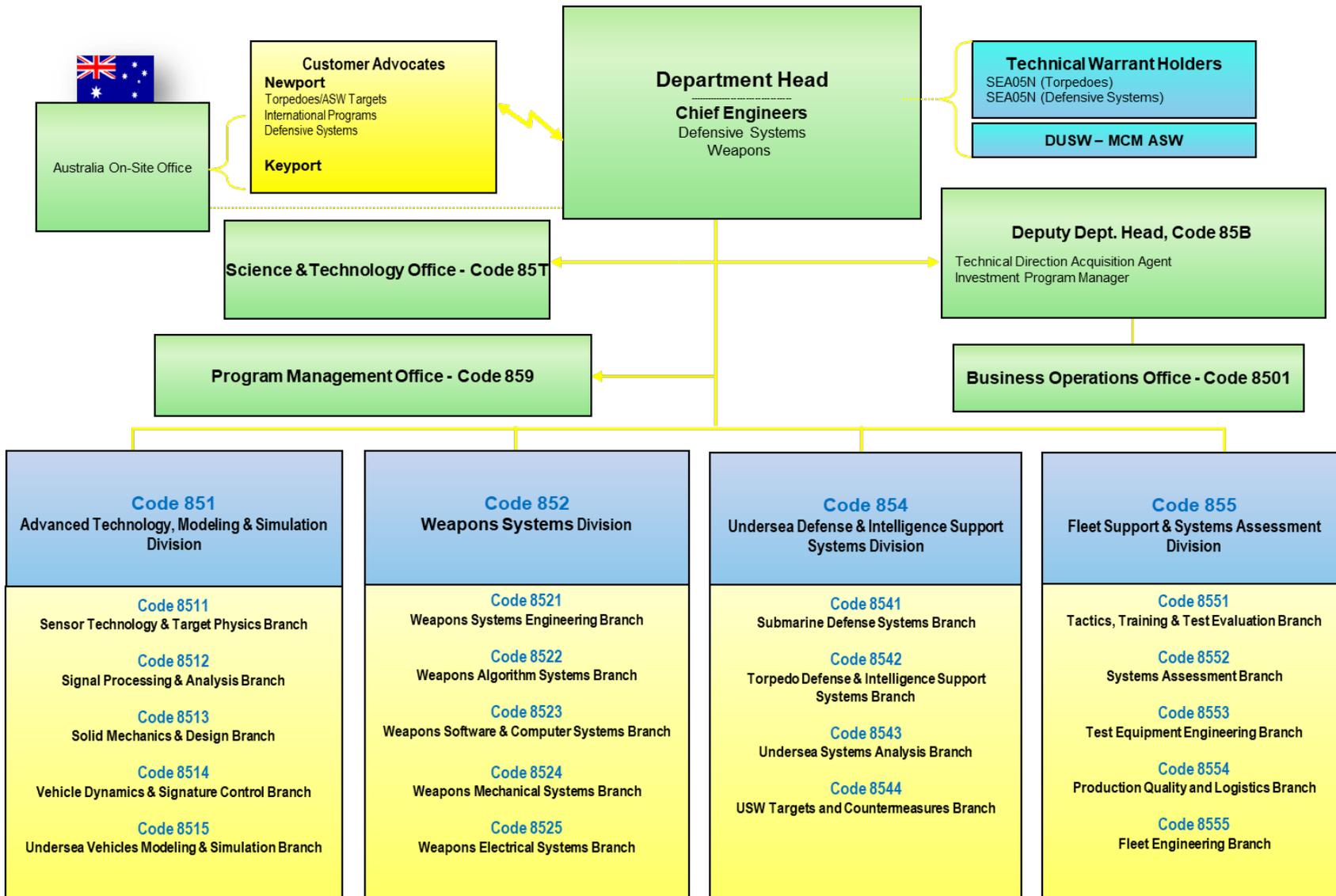
- AUVs
- Mobile ASW Targets and Torpedoes
- Undersea Defensive Systems
- T&E, assessments, and M&S

Acquisition, Fleet Support, & In-Service Engineering

- HW and LW Torpedoes
- Mobile ASW Targets
- Undersea Defensive Systems

Organization

USW Weapons, Vehicles, and Defensive Systems Dept. ~ Code 85



Resources



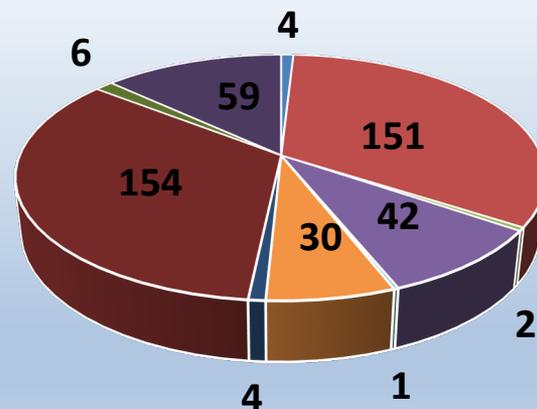
Code 85 On Board Count - 541

Code 85 Overview

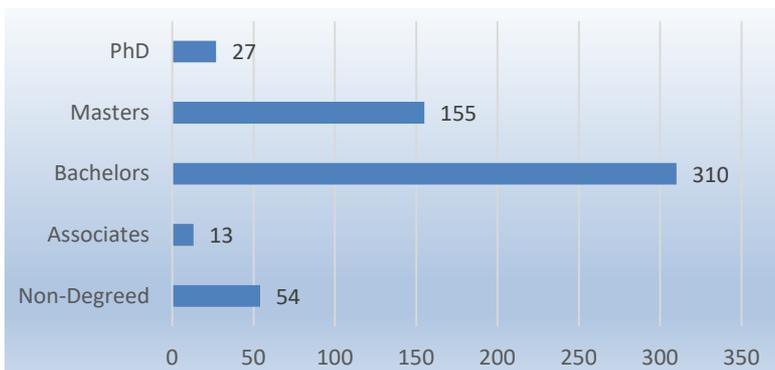


Engineers & Scientists (453)

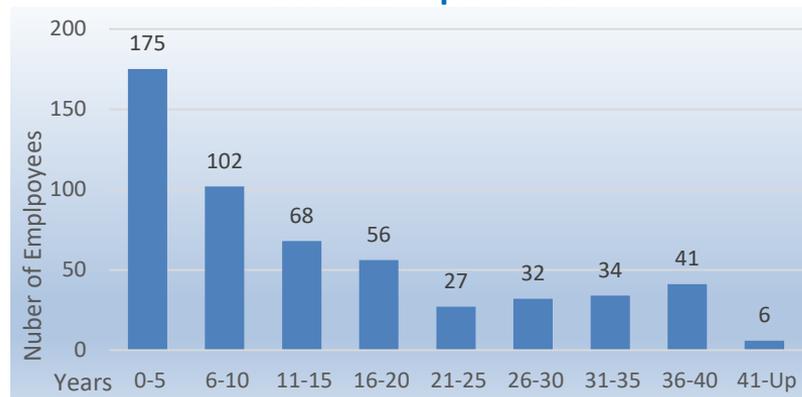
- General Engineer (4)
- Mechanical Engineer (151)
- Electrical Engineer (2)
- Computer Engineer (42)
- Chemical Engineer (1)
- Mathematician/Data Science (30)
- Physicist/Natural Sciences (4)
- Electronics Engineer (154)
- Oceanography/Ocean Science (6)
- Computer Scientist (59)



Code 85 Education



Code 85 Experience



Continuously Managing The Balance of People, Training, Knowledge, and Right Work

Customers



DARPA, SCO, ONR, Internal Investment, ILIR/IAR, NELO, & Private Partnerships

PMS 404, 406, 415, 495, NELO, ONI, RDSA, International Sales

PMS 404, 406, 415, NELO International Sales

PMS 404, 406, 415, NELO, International Sales, Fleet



- Biometrics
- Advanced Propulsion
- Non-Acoustic Technologies
- Supercavitation Technologies
- Advanced Sensor Technologies
- Next Generation CM/CCM
- G&C Technology
- Vehicle Array technologies
- Propulsion, Silencing & Hydrodynamics
- Broad band
- Fiber Optics
- Stealth
- Tactical oceanography
- Next Gen M&S/Live Virtual Constructive

TOTAL: 16%

- AN-SLQ-25E
- Torpedo Modular Upgrade Program (TI/APB).
- Next Generation CM
- Vehicle Array Technologies
- Advanced Navigation
- Advanced Autonomy
- System Requirements/Specs
- Non-Acoustic Technology
- Tactical Software Development
- System Integration / T&E
- Performance M&S
- **Technical Direction Agent (HWT/LWT and CMs)**

TOTAL: 27%

- AN-SLQ-25
- MK30 Mod 1/2
- Technology Refresh Engineering
- Signal Analysis System
- HWT/LWT Sonar Tech Insertion
- ADC MK5
- MK 39 EMATT
- Systems integration
- Production Restart
- Production Engineering Support
- System Evaluation and Acceptance Testing Support
- Fleet Introduction Planning
- Contractor Performance Assessment and Risk reduction

TOTAL: 29%

- AN/SLQ-25
- Countermeasures ADC 2/3/4
- Signal Analysis System
- MK30 Mod 1/2
- MK 39 EMATT
- Weapon performance assessment
- Fleet T&E support
- Fleet Failure Analysis / CA
- Reliability Management
- SCC training
- SW Downloads
- Fleet Procedures
- IMA Certifications
- ORDALT Development
- **In Service Engineering Agent for HWT and CMs)**

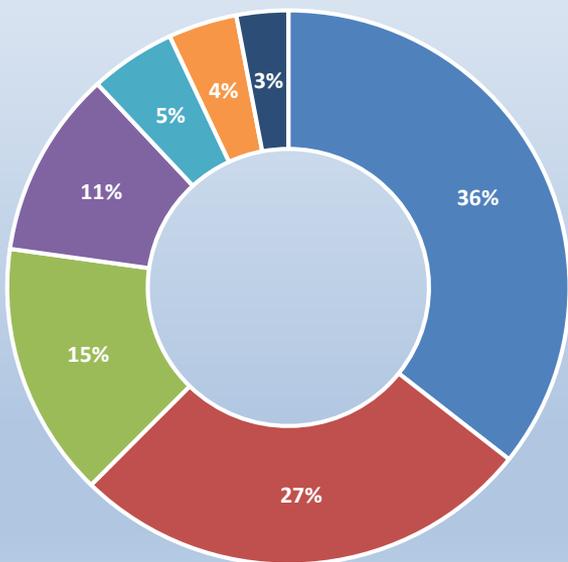
TOTAL: 28%

FY23 Funding Projections



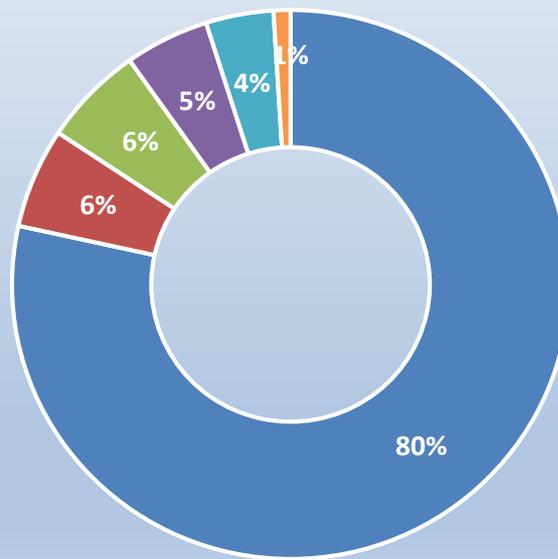
FUNDING BY APPROPRIATION

- RDT&E
- FMS
- SPDP & Private Party
- Other
- WPN
- OMN
- OPN



FUNDING BY SPONSOR

- PEO SUB*
- NELO
- Other (Fleet, SCO, etc)
- ONR
- SPDP/PP
- ONI



* "PEO SUB" includes PMS404/PMS415 domestic and FMS funding

Total LRE for FY23 estimated at \$210-225M

Leadership Outlook (1)



CHALLENGE:

Increased need to deter adversaries within very challenging timeline.

Importance of Make/Buy decisions

- Prioritize work the Government must do
- Increase contracting footprint; surge (“more of the same”) or additional responsibilities (“new work”)
- Divest (goes to another organization NPT no longer responsible)

Where are the priorities?

- Undersea Weapons
 - New capabilities (Long Range, SSW/Deep)
 - Scalable effects
 - Need more bullets
 - Increased Production
 - Cheaper Munitions
 - Bring Back Mod 4?
 - Foreign Partnerships (interoperability)
- Defensive Systems
 - Essential capability for platform survivability
 - Incremental capability to existing systems
 - New/more capable systems

Leadership Outlook (2)



Where are the priorities? (cont'd)

- Decoy and Deception
 - Offensive and Defensive needs
 - Multiple effects

What Industry must bring to the table

- Reliably build/manufacture what you are contracted to deliver
- Manage/challenge the supply chain/suppliers
 - Government willing to share risk; risk solutions not desired
- Put together the RIGHT team
 - Self reliance within the contractor team
 - Build coalitions to meet ALL requirements
 - One belly button/accountable organization
 - Limits need for Government to be in the middle to assemble the team and/or require multiple contracts.

- Design of strengthened, single mode fiber optic cabling for underwater applications
- Large scale production of fiber optic cabling
- Precision winding of optical fiber to accommodate unique space constraints, deployment methods, or very long lengths
- Fiber optic connectors or simple interconnect methods to connect two packs serially
- U.S. produced electro-optical media converter

PMS404 requests vendors with relevant expertise and experience submit a white paper describing specific details of vendors' subject matter expertise. Point of contact for further discussion is Katherine Stankus, PMS404, (202) 781-5008, katherine.f.stankus.civ@us.navy.mil

Code 85 Projected Contract Details

Competitive Acquisition Forecast



Presented by
C/85 Technical Department Acquisition Advocate

Contract	Type	Scope	PoP w/ options	Projected RFP
Program and Financial Mgmt Svcs	SeaPort	\$8.9M	Five years	FY23 QTR 3
Torp Systems, Fleet Eng Sppt, & Admin Svcs	SeaPort	\$54.1M	Five years	FY23 QTR 3
UW/UD Family of Systems MAC	MAC IDIQ	\$720M	Eight years	FY23 QTR 4

Program & Financial Mgmt Services



- **Summary of Contract Scope:** Program and Financial Management Services for \$8,935,220
- **Contracting Method:** SeaPort Task Order
- **Anticipated Period of Performance:** 5 years (1 base year and 4 option years)
- **Acquisition Strategy:** TBD (previous order was full & open)
- **Level of Effort:** 96,450 hours
- **Anticipated work location:** 90% on-site/10% contractor site requirement
- **Contract Type:** both CPFF and FFP elements
- **Follow on?** Yes, N00178-04-D-4119/N66604-18-F-3016, awarded to SAIC
- **Does OCOI clause apply?** No
- **Expected RFP release:** FY23 QTR 3

Torp Systems, Fleet Eng Sppt, & Admin Svcs



- **Summary of Contract Scope:** Torpedo Systems, Fleet Engineering Support, and Administrative Services for \$54,105,000
- **Contracting Method:** SeaPort Task Order
- **Anticipated Period of Performance:** 5 years (1 base year and 4 option years)
- **Acquisition Strategy:** TBD (previous order was SB set-aside)
- **Level of Effort:** 802,700 hours
- **Anticipated work location:** 90% on-site/10% contractor site requirement
- **Contract Type:** both CPFF and FFP elements
- **Follow on?** Yes, N00178-04-D-4083/N66604-19-F-3002, awarded to MRC
- **Does OCOI clause apply?** No
- **Expected RFP release:** FY23 QTR 3

UW/UD Family of Systems MAC (1)



- **Summary of Contract Scope:** Much larger than current “Mini-MAC” Family of Systems, about \$720M of cost ceiling, but similar tasking scope to the Mini-MAC. Functional Areas are listed on the next slide.
- **Contracting Method:** MAC IDIQ “Family of Systems”
- **Anticipated Period of Performance:** 8 years (anticipating an on-ramp period halfway)
- **Acquisition Strategy:** Full & Open (with potential for set-asides at the order level)
- **Level of Effort:** 1,508,932 hours
- **Anticipated work location:** 10% on-site/90% contractor site requirement
- **Contract Type:** a range of CLIN options to include CPFF and FFP, as appropriate at the order level
- **Unique Characteristics**
 - Basic contracts awarded by Functional Area, which establishes eligibility to compete for orders in that Functional Area
- **Follow on?** Yes, the MAC constitutes basic contracts N66604-20-D-E001 through N66604-20-D-E017 with the following vendors: Barber Nichols Inc., Booz Allen Hamilton, L3Harris, Leidos, Leonard DRS, Lockheed Martin Sippican, MIKEL, Northrup Grumman Systems Corp, Progeny, QinetiQ, Raytheon, Rite Solutions, SAIC, SEACORP, SECHAN, Sonalysts, Systems Planning & Analysis
- **Does OCOI clause apply?** No
- **Expected RFP release:** FY23 QTR 4

UW/UD Family of Systems MAC (2)



Functional Areas

Services and supplies under this contract are for research, development, prototyping, operations, maintenance, upgrades and all life cycle phases for the UW/UD FoS and include the following Functional Areas:

1. Payloads
2. Hull and Structure
3. Propulsion
4. Energy Storage and Conversion
5. Electrical Power
6. Software
7. Non-Payload Sensors
8. Guidance and Control System
9. Launch Platform Interface and Shipboard Systems
10. Ancillary and Test Equipment
11. Modeling and Simulation
12. Data Analytics

So far, under the Mini-MAC, we've awarded 6 orders amongst 5 vendors, with orders touching on 8 different Functional Areas.

Questions?