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UNDERSEA WARFARE COMBAT SYSTEMS

USW
Combat Systems

Code 25 Industry Day Brief

26 October 2022



DISTRIBUTION STATEMENT A. Approved for public release.

USW Combat Systems Department



OUR MISSION:

We will exceed customer expectations by providing high quality, affordable products and services while helping to shape the next generation of USW systems.

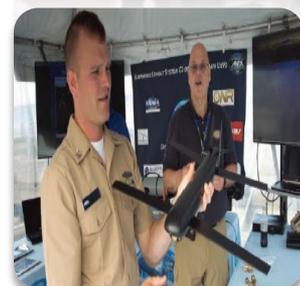
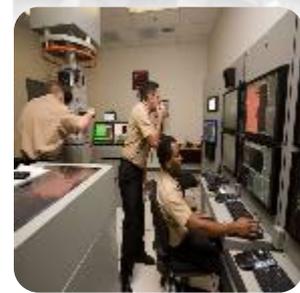
Our workforce is focused on innovation, agility and collaboration to provide effective, best value solutions for our customers.

OUR VISION:

Ensure Warfighter Command of the Undersea Battlespace.

OUR PRINCIPAL ROLES:

- *Technical Direction Agent*
- *In-Service Engineering Agent*
- *Design Agent*
- *Central Design Authority*

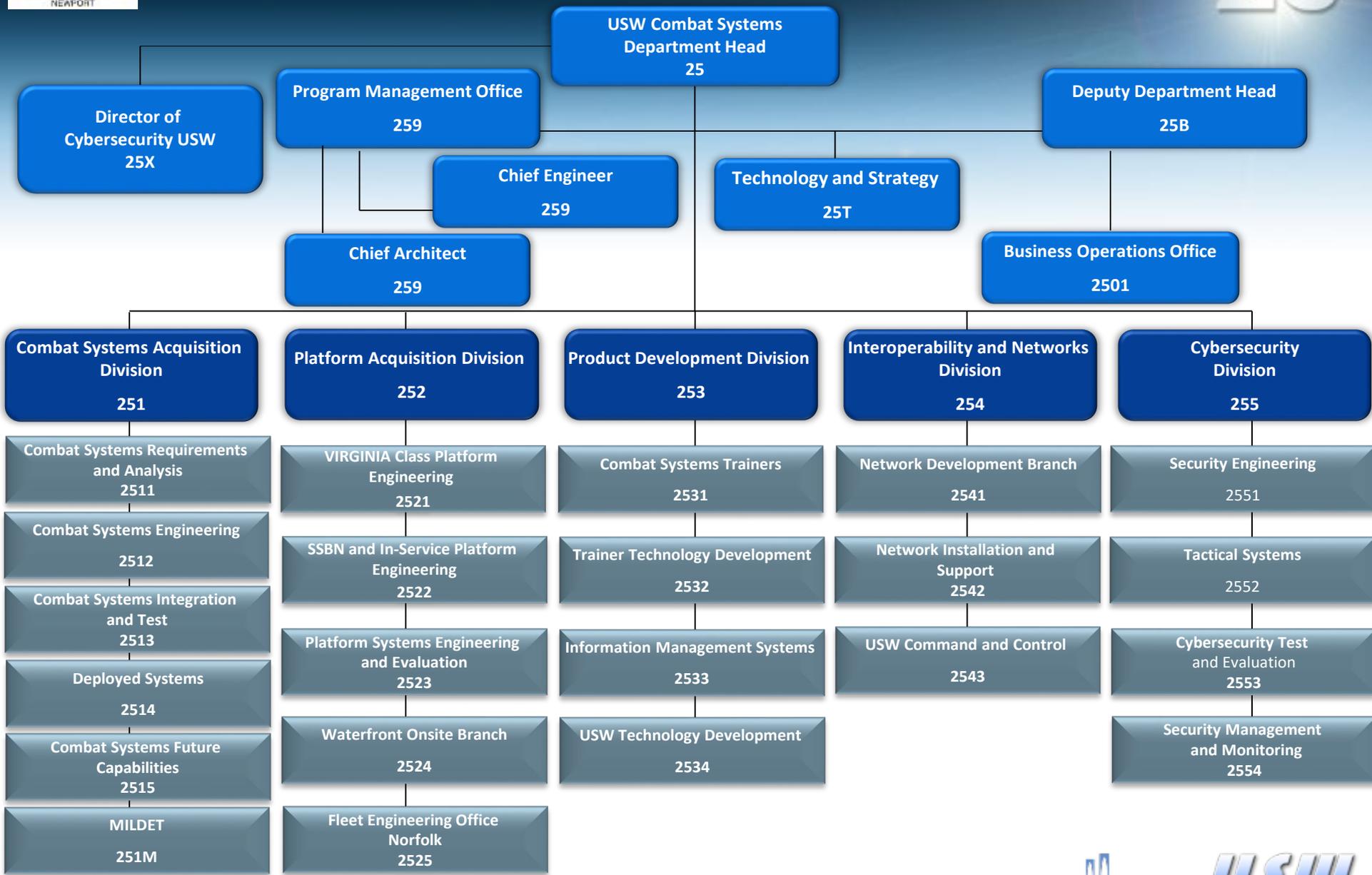


Stewardship of USW Combat Systems Technical Health



USW Combat Systems Department

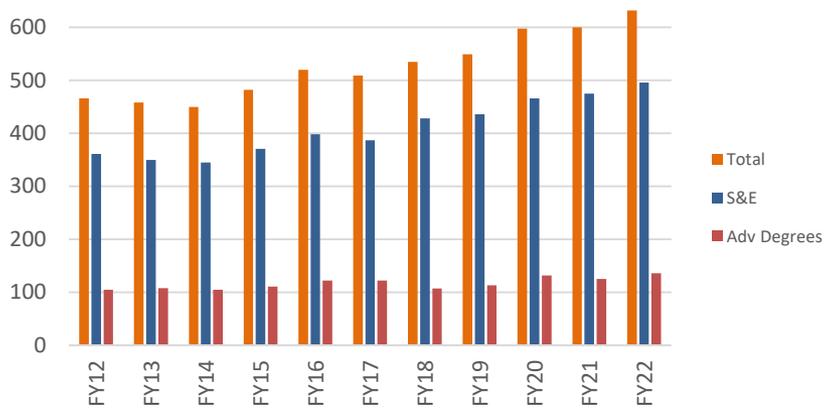
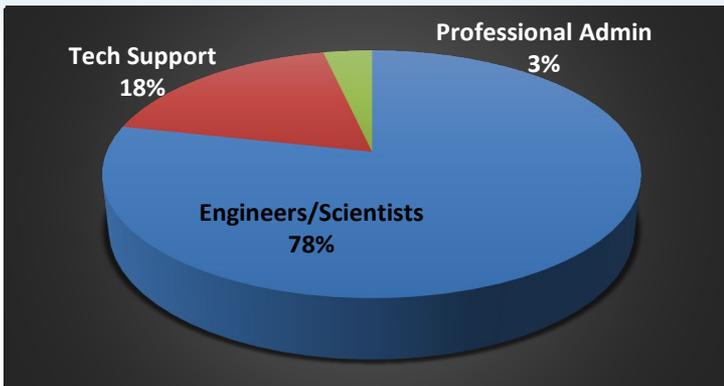
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Our People

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Our Highly Skilled Workforce is Among the Most Qualified in the Field (9 PhDs and 146 Masters)



Staffing: 632 Government and 492 Contractor as of 30 September 2022



USW Combat Systems Programs

Bridge to the Fleet



- Naval Tactical Cloud
- Unmanned Undersea/Air Vehicle (UxV) Common Control
- Unmanned Systems (UxS) Experimentation
- Human Factors Engineering
- Virtual Worlds
- Combat Systems Hardware/Software/Network Architectures

- Virginia Block VI/VII/SSN(X)
- Combat Systems Virtualization
- Submarine Warfare Federated Tactical System (SWFTS) Seamless Rearchitecture
- Live/Virtual/Constructive (LVC)
- Unmanned Systems (UxS) Experimentation
- Unmanned Aerial Systems
- Payload Prototyping
- AN/BYG-1 Virtual Twin
- Cyber Security Systems Engineering

- AN/BYG-1
- Tactical Tomahawk Weapons Control System (TTWCS)
- Virginia
- Columbia
- Trainers (Submarine Multi Mission Team Trainer (SMMTT), Submarine Bridge Trainer (SBT))
- SWFTS
- Submarine Local Area Network (SubLAN)
- Submarine Consolidated Afloat Network and Enterprise Services (CANES)
- USW Strike
- International Programs
- Cybersecurity

- Submarine Combat Systems In-Service Engineering Agent (ISEA)
- Ohio/Seawolf ISEA
- Tomahawk Logistics and Fleet Support
- SSGN Attack Weapon Control System
- Operational Documentation
- Trainer On Site Agents
- Global Command & Control System-Maritime (GCCS-M)
- Navy Training Management Planning System (NTMPS)
- SEAWARE-Learning Management System (LMS)/Submarine On-Board Trainer (SOBT)
- Nosis
- Cyber Accreditation

Diverse Set of Customers Across SYSCOMs, ONR and the Fleet



SSN 688i



SSN 774 (Virginia)



SSN 688i (Los Angeles)



SSBN 730 (Ohio)



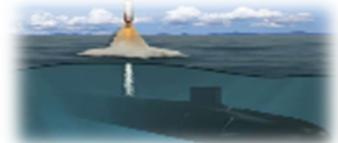
SSGN 726 (Ohio)



SSN 784-801 (Virginia Block III/IV)



SSN 802 (Virginia Block V+)



COLUMBIA



SSN 21 (Seawolf)



Collins

- PEO SUB
- PEO IWS
- PEO C4I
- ONI
- PEO SUB (PMS 450)
- NAVAIR
- PEO LCS

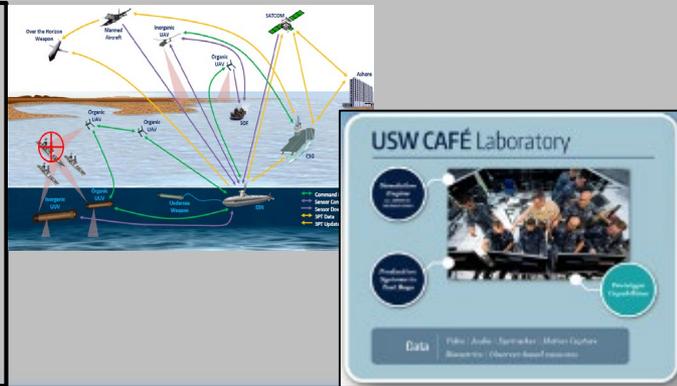
Executing Technical Authority Across Programs, Platforms, and System of Systems

Major Programs

Program	Sponsor
USW Combat Systems Trainers	PEO UWS TR
AN/BYG-1 Combat Control System	PEO SUB PMS425
Virginia/COLUMBIA Class Submarine <ul style="list-style-type: none"> • Platform Engineering • Test & Evaluation (T&E) • Combat Systems 	PEO SUB PMS450/PMS397
Tomahawk Weapon Control System (TWCS)	PEO (U&W) PMA-280
Ohio Non-Propulsion Electronic System (NPES) Engineering	NAVSEA PMS392
Submarine Warfare Federated Tactical System (SWFTS)	PEO SUB-S
Submarine Networks	PEO C4I PMW160
Cyber Security	PEO SUB (PMS 425/397/450), SSP, SEA 05, Fleet, PHD NSWC
Strategic Systems Programs	SSP 2012, 23, 208, 24, 27, C

Unmanned Systems

- Submarine Launched Unmanned Aerial Systems (SLUAS) integration and advanced development
- Combat Systems prototyping to enable integration of Unmanned Undersea Vehicles (UUVs) on Submarines
- Implementing the vision for UxS C2 via experimentation (ANTX) and advanced development (ONR)

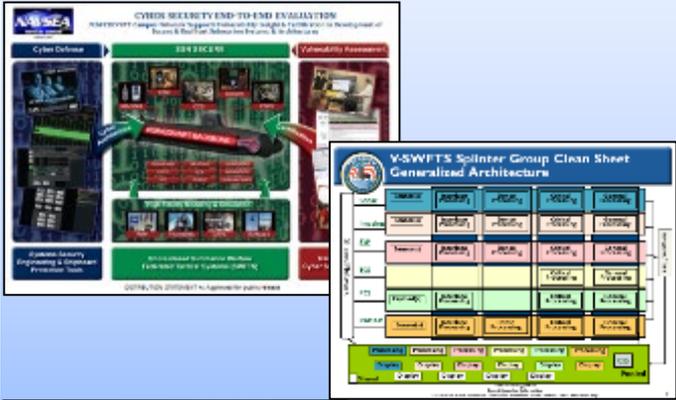


Payload Integration

- Advanced prototyping and Concept of Operations (CONOPs) for platforms (VA, VPM, CLB, and SSGN)
- Emerging payloads requirements definition, interface development documents and risk reduction activities
- Supporting Program of Record (Tomahawk, ADCAP, CPS) and future payload evolution plans

Cybersecurity

- USW Enterprise Policy Development
- VA/CLB Cyber DT
- Fleet Exercise Technical Lead
- SWFTS and BYG-1 Cybersecurity Engineering
- SSP Cybersecurity Policy and A&A
- SSN(X) Cyber Capability Vector Lead
- SYSCOM/PEO Program Support (Development, Accreditation)
- Development of Cyber Security Workforce



Architecture

- Defining the next generation of systems architecture
- Leveraging state of the practice technology across SWFTS, USW Trainer and Network systems
- Technical leadership for SWFTS Seamless Rearchitecture and vTwin OTA
- Technical Direction Agent for SWFTS Common Infrastructure and AN/BYG-1 Payload Control Systems
- Development of UK Tomahawk Architecture leveraging AN/BYG-1 Strike implementation

Platform Engineering

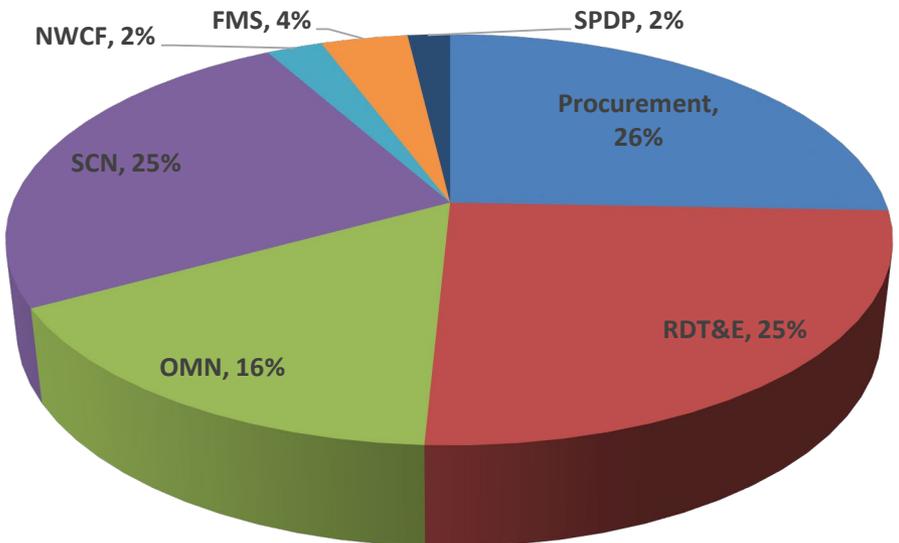
- Ohio SWFTS Modernization
- Columbia Class Block I/II, Virginia Class (VCS) Block V/VI and SSN(X)
- VCS/Columbia (CLB) Non-Propulsion Electronics System (NPES) team consolidation
- SSGN Attack Weapon Control System Upgrade



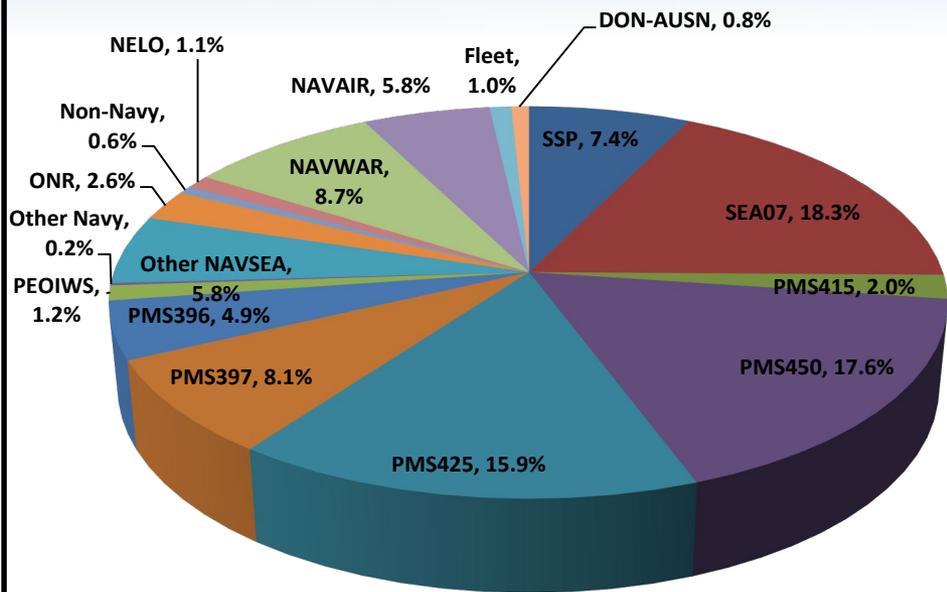
Virtual Environment

- Expanding on sim/stim capabilities for POR systems such as Submarine Bridge Trainer (SBT)
- Enhancing NUWC Virtual Sub constructs in support of new payload initiatives
- Building enterprise-level Live, Virtual, Constructive (LVC) capability

FUNDING BY APPROPRIATION



FUNDING BY Sponsor



\$351M* TCHA Plan FY23

Projected Code 25 Contracts

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Task Description	Estimated Level of Effort	Anticipated Strategy	Action Type	Current Contract #	Incumbent	Anticipated RFP Release FY QTR
Ohio/Columbia/Seawolf On-Site Support	240,000 hours & \$128,000 ODCs	Small Business Set-Aside	Seaport	N00178-16-D-8623-N66604-18-F-3008	CAMEO Professional Support Services LLC	2023 QTR 1
Risk Management Framework (RMF) Cybersecurity	274,400 hours & \$600,000 ODCs	TBD	Seaport	N00178-14-D-7795-N66604-18-F-3020	KMS Solutions, LLC	2023 QTR 2
Trainer Test & Evaluation and Development Support Services	247,475 hours & \$2,100,000 ODCs	TBD	Seaport	N00178-04-D-4122-N66604-19-F-3004	SEACORP	2023 QTR 3
Virginia/Columbia/SSN(X) Special Projects	240,000 hours & \$1,000,000 ODCs	TBD	Seaport	N00178-19-D-8623-N66604-20-F-3001	SEACORP	2023 QTR 3

Projected Code 25 Contracts (continued)

Task Description	Estimated Level of Effort	Anticipated Strategy	Action Type	Current Contract #	Incumbent	Anticipated RFP Release FY QTR
Electronic Warfare/Electronic Support (EW/ES) Trainer Support	225,000 hours & \$1,500,000 ODCs	TBD	Seaport	N00178-04-D-4115-N66604-19-F-3005	Rite-Solutions, Inc.	2024 QTR 1
Configuration Management / Integrated Logistics Systems (CM/ILS) Support	540,000 hours & \$4,500,000 ODCs	TBD	Seaport	N00178-14-D-7834-N66604-20-F-3902	MIKEL	2024 QTR 2
Tactical Support Project (TSP) Support	60,000 hours & \$20,000 ODCs	TBD	Seaport	N00178-14-D-7834-N66604-19-F-3009	MIKEL	2024 QTR 2
Code 25 Strike and Payloads Support	640,000 hours & \$10,000,000 ODCs	TBD	Seaport	N00178-19-D-8623-N66604-20-F-3002	SEACORP	2024 QTR 2
Code 25 Business Office Support	110,000 hours & \$100,000 ODCs	TBD	Seaport	N00178-11-D-6705-N66604-20-F-3900	Thor Solutions LLC	2024 QTR 3

- Summary of Contract Scope: Engineering and technical services to NUWCDIVNPT and the detachments at Bangor, WA and Kings Bay, GA supporting OHIO, COLUMBIA, and SEAWOLF Class submarines.
- Contracting Method: SeaPort NxG
- Anticipated Period of Performance: 04/02/2023 – 04/01/2028
- Acquisition Strategy: Small Business Set-Aside (SBSA)
- Level of Effort: Estimated 240,000 hours & \$128,000 ODCs
- Anticipated work location: 100% Government Site, 0% Contractor Site
- Contract Type: CPFF
- Unique Characteristics:
 - Key Personnel requirements: STR plus Minimum 3 Key Personnel Covering Areas of Expertise
 - Facility Security Clearance: Top Secret
 - Required Certifications/Designations: Certified Forklift Operator
 - If large ODCs provide any details: ODCs primarily for travel
- Follow on? Yes, follow-on to N00178-16-D-8623-N66604-18-F-3008, CAMEO Professional Support Services LLC, Acquisition Strategy was Small Business Set-Aside
- Does OCOI clause apply? Yes
- Expected RFP release: FY23 QTR 1

Risk Management Framework (RMF) Cybersecurity

- Summary of Contract Scope: Cybersecurity services in support of Code 25 projects, which include Assessment and Authorization (A&A) package creation, Authorization Maintenance, Test and Evaluation Environment Maintenance, Information Systems Security Support, Posture Transition Support, and In-Service Engineer Agent Support.
- Contracting Method: SeaPort NxG
- Anticipated Period of Performance: 09/17/2023 – 09/16/2028
- Acquisition Strategy: TBD
- Level of Effort: Estimated 274,400 hours & \$600,000 ODCs
- Anticipated work location: 75% Government Site, 25% Contractor Site
- Contract Type: CPFF
- Unique Characteristics:
 - Key Personnel requirements: STR plus Minimum 4 Key Personnel, including 2 Navy Qualified Validators and 2 Cybersecurity Workforce (CSWF)
 - Facility Security Clearance: Top Secret
 - Required Certifications/Designations: Navy Qualified Validators and Cybersecurity Workforce (CSWF)
 - If large ODCs provide any details: ODCs primarily for travel
- Follow on? Yes, follow-on to N00178-14-D-7795-N66604-18-F-3020, KMS Solutions, LLC, Acquisition Strategy was Small Business Set-Aside
- Does OCOI clause apply? Yes
- Expected RFP release: FY23 QTR 2

Trainer Test & Evaluation and Development Support Services

- Summary of Contract Scope: Maintain, modify, and upgrade software during all evolutions and deployments of trainer systems. Services shall include systems engineering and prototyping, certification and regression testing, verification and validation (V&V), software and hardware configuration management, system administration, system deployment, and program integration.
- Contracting Method: SeaPort NxG
- Anticipated Period of Performance: 02/01/2024 – 01/31/2029
- Acquisition Strategy: TBD
- Level of Effort: Estimated 247,475 hours & \$2,100,000 ODCs
- Anticipated work location: 90% Government Site, 10% Contractor Site
- Contract Type: CPFF
- Unique Characteristics:
 - Key Personnel requirements: STR plus Minimum 2 Key Personnel Covering Areas of Expertise
 - Facility Security Clearance: Secret
 - Required Certifications/Designations: Cybersecurity Workforce (CSWF)
 - If large ODCs provide any details: ODCs primarily for travel
- Follow on? Yes, follow-on to N00178-04-D-4122-N66604-19-F-3004, SEACORP, Acquisition Strategy was Unrestricted
- Does OCOI clause apply? Yes
- Expected RFP release: FY23 QTR 3

- Summary of Contract Scope: Conduct advanced system engineering to assess, recommend, develop and introduce improvements to system design and operation in VIRGINIA Class, COLUMBIA Class, and SSN(X) submarine NPES system performance, interoperability and integrity.
- Contracting Method: SeaPort NxG
- Anticipated Period of Performance: 03/02/2024 – 03/01/2029
- Acquisition Strategy: TBD
- Level of Effort: Estimated 240,000 hours & \$1,000,000 ODCs
- Anticipated work location: 90% Government Site, 10% Contractor Site
- Contract Type: CPFF
- Unique Characteristics:
 - Key Personnel requirements: STR plus Key Personnel to Cover Areas of Expertise
 - Facility Security Clearance: Top Secret
 - Required Certifications/Designations: N/A
 - If large ODCs provide any details: ODCs primarily for travel
- Follow on? Yes, follow-on to N00178-19-D-8623-N66604-20-F-3001, SEACORP, Acquisition Strategy was Unrestricted
- Does OCOI clause apply? Yes
- Expected RFP release: FY23 QTR 3

Trainer Support

- Summary of Contract Scope: System hardware and software development, integration, test and evaluation, program support, training and installation of products that comprise Early Warning (EW) and Electronic Support (ES) trainer evolution.
- Contracting Method: SeaPort NxG
- Anticipated Period of Performance: 06/01/2024 – 05/31/2029
- Acquisition Strategy: TBD
- Level of Effort: Estimated 225,000 hours & \$1,500,000 ODCs
- Anticipated work location: 90% Government Site, 10% Contractor Site
- Contract Type: CPFF
- Unique Characteristics:
 - Key Personnel requirements: STR plus Minimum 3 Key Personnel Covering Areas of Expertise
 - Facility Security Clearance: Secret
 - Required Certifications/Designations: N/A
 - If large ODCs provide any details: ODCs primarily for incidental materials for trainer support with some travel
- Follow on? Yes, follow-on to N00178-04-D-4115-N66604-19-F-3005, Rite-Solutions, Inc., Acquisition Strategy was Small Business Set-Aside
- Does OCOI clause apply? Yes
- Expected RFP release: FY24 QTR 1

Code 25 Configuration Management / Integrated Logistics Systems (CM/ILS) Support

- Summary of Contract Scope: Provide Configuration Management (CM), Integrated Logistics Support (ILS), In-Service Engineering Support (ISE), and Project Management Support services for Code 25 programs.
- Contracting Method: SeaPort NxG
- Anticipated Period of Performance: 07/27/2024 – 07/26/2029
- Acquisition Strategy: TBD
- Level of Effort: Estimated 540,000 hours & \$4,500,000 ODCs
- Anticipated work location: 60% Government Site, 40% Contractor Site
- Contract Type: CPFF
- Unique Characteristics:
 - Key Personnel requirements: STR plus Minimum 6 Key Personnel Covering Areas of Expertise
 - Facility Security Clearance: Top Secret
 - Required Certifications/Designations: N/A
 - If large ODCs provide any details: ODCs primarily for incidental materials for repair parts with some travel
- Follow on? Yes, follow-on to N00178-14-D-7834-N66604-20-F-3902, MIKEL, Acquisition Strategy was Small Business Set-Aside
- Does OCOI clause apply? Yes
- Expected RFP release: FY24 QTR 2

- Summary of Contract Scope: Provide engineering and technical services to the Tactical Support Project (TSP) to maintain, update and support A-TAS and SPORTS websites, and associated hardware and software.
- Contracting Method: SeaPort NxG
- Anticipated Period of Performance: 09/15/2024 – 09/14/2029
- Acquisition Strategy: TBD
- Level of Effort: Estimated 60,000 hours & \$20,000 ODCs
- Anticipated work location: 90% Government Site, 10% Contractor Site
- Contract Type: CPFF
- Unique Characteristics:
 - Key Personnel requirements: STR plus Key Personnel to Cover Areas of Expertise
 - Facility Security Clearance: Secret
 - Required Certifications/Designations: N/A
 - If large ODCs provide any details: ODCs primarily for travel
- Follow on? Yes, follow-on to N00178-14-D-7834-N66604-19-F-3009, MIKEL, Acquisition Strategy was Small Business Set-Aside
- Does OCOI clause apply? Yes
- Expected RFP release: FY24 QTR 2

Code 25 Strike and Payloads Support

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- Summary of Contract Scope: Engineering and technical services to NUWCDIVNPT Code 25 for current and future submarine strike systems, weapons, and payload control systems. This work shall include Systems Engineering, Integration and Test, Installation and Fleet Support, Software Engineering, Logistics, and Program Planning Support.
- Contracting Method: SeaPort NxG
- Anticipated Period of Performance: 09/21/2024 – 09/20/2029
- Acquisition Strategy: TBD
- Level of Effort: Estimated 640,000 hours & \$10,000,000 ODCs
- Anticipated work location: 90% Government Site, 10% Contractor Site
- Contract Type: CPFF
- Unique Characteristics:
 - Key Personnel requirements: STR plus Minimum 4 Key Personnel Covering Areas of Expertise
 - Facility Security Clearance: Top Secret
 - Required Certifications/Designations: Cybersecurity Workforce (CSWF)
 - If large ODCs provide any details: ODCs primarily for incidental materials required for tasking with some travel
- Follow on? Yes, follow-on to N00178-19-D-8623-N66604-20-F-3002, SEACORP, Acquisition Strategy was Unrestricted
- Does OCOI clause apply? Yes
- Expected RFP release: FY24 QTR 2

- Summary of Contract Scope: Support services to Code 25 planning and development efforts for all Code 25 projects. The support services include: Project Budget Management Support, Financial Management, Configuration and Logistic Management, and Preparation of Presentation Materials.
- Contracting Method: SeaPort NxG
- Anticipated Period of Performance: 01/01/2025 – 12/31/2029
- Acquisition Strategy: TBD
- Level of Effort: Estimated 110,000 hours & \$100,000 ODCs
- Anticipated work location: 99% Government Site, 1% Contractor Site
- Contract Type: CPFF
- Unique Characteristics:
 - Key Personnel requirements: STR plus Minimum 1 Key Person Covering Areas of Expertise
 - Facility Security Clearance: Secret
 - Required Certifications/Designations: N/A
 - If large ODCs provide any details: N/A
- Follow on? Yes, follow-on to N00178-11-D-6705-N66604-20-F-3900, Thor Solutions LLC, Acquisition Strategy was Small Business Set-Aside
- Does OCOI clause apply? Yes
- Expected RFP release: FY24 QTR 3