

Naval Undersea Warfare Center

Division Newport



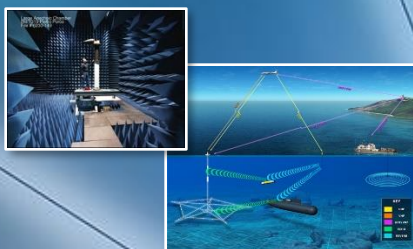
Captain Chad F. Hennings, USN
Commanding Officer
NUWC Division Newport



Ronald A. Vien, SES
Technical Director
NUWC Division Newport

Naval Undersea Warfare Center Division Newport

USW ELECTROMAGNETIC SYSTEMS



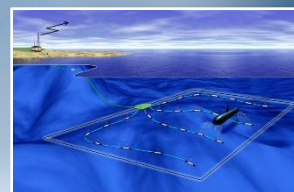
USW PLATFORMS & PAYLOAD INTEGRATION



USW MISSION ENGINEERING AND ANALYSIS



RANGES, ENGINEERING, & ANALYSIS



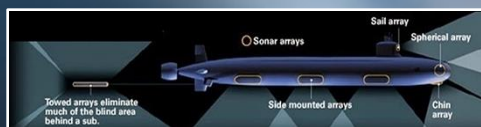
USW WEAPONS, VEHICLES, AND DEFENSIVE SYSTEMS



USW COMBAT SYSTEMS



SENSORS AND SONAR SYSTEMS



Science & Technology Development Acquisition Support Fleet Support





Undersea Superiority Today and Tomorrow

We research, develop, engineer, integrate, analyze, test, evaluate and deliver undersea warfare capabilities to expand United States Navy readiness

PEOPLE

Empower our diverse team of world-class professionals

PROCESS

Optimize speed, agility, and rigor of our technical and business processes

RESULTS

Ensure fleet readiness today and innovate for next generation systems tomorrow

Warfare Center Strategic Plan

Workforce and Leadership Development

Mission-Aligned Strategies at the Division Level

Technical Innovation and Excellence

Business Excellence and Improvement

Right Culture / Values

NAVSEA - Expand the Advantage 3.0

Deliver Combat Power

Transform Digital Capability

Build a Team to Compete and Win

CNO Navigation Plan

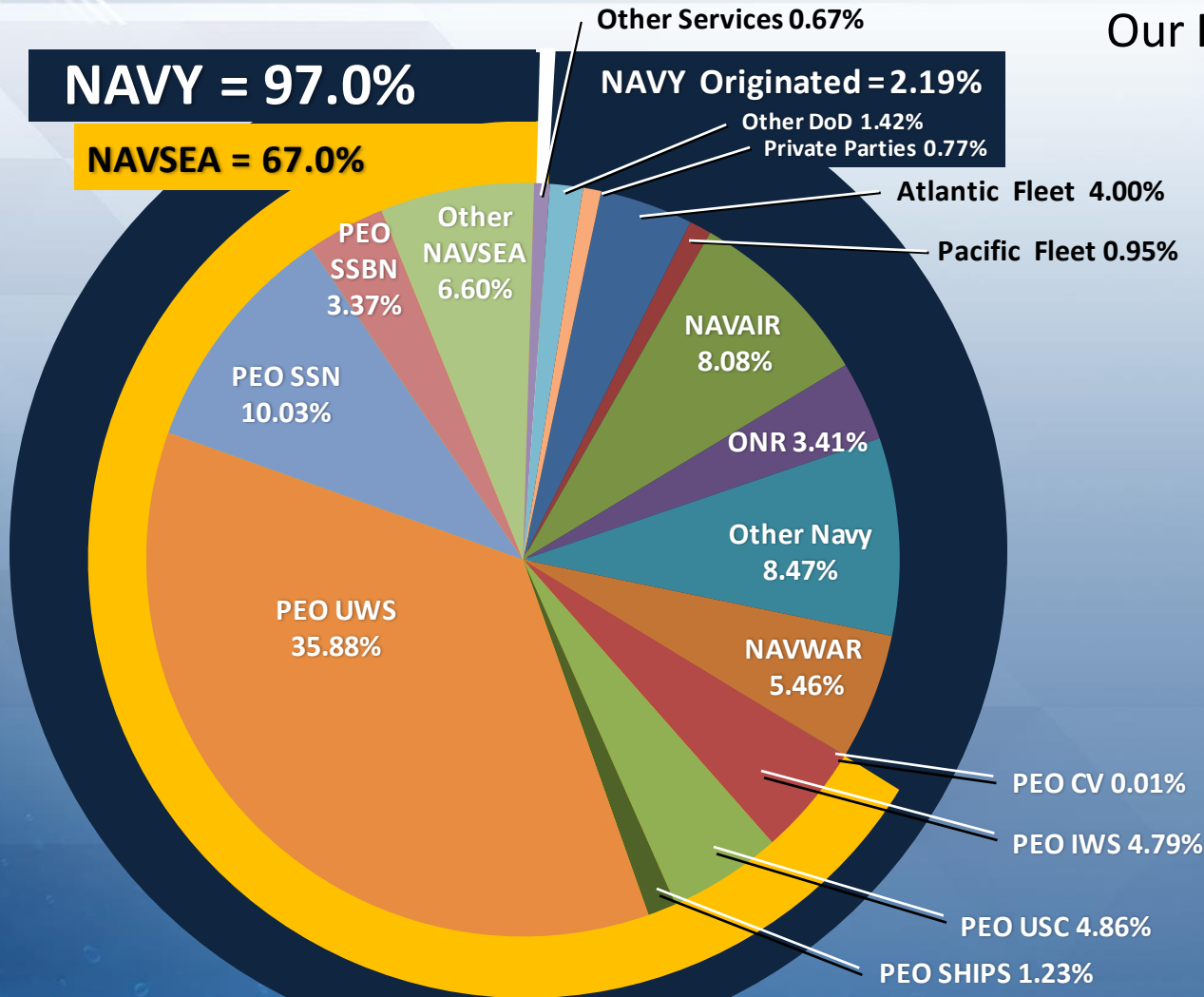
Readiness

Capabilities

Capacity

Sailors

NUWCDIVNPT Customers – All Funding



Our FY21 Customers

\$1,423M

Navy Working Capital Fund Activity

- Not a congressional line item
- Customers choose the Warfare Centers
- NUWC is accountable for efficient delivery of products and services

Customer Base

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

Full Spectrum Provider: Science & Technology to In-Service Engineers

NUWC Division, Newport



COMMANDING OFFICER

CAPT Chad F. Hennings
USN 00



TECHNICAL DIRECTOR

Ronald A. Vien, SES
TD

CHIEF STAFF OFFICER *Executive Officer*

CDR Jason Patton CSO

OFFICER IN CHARGE *Detach AUTC*

CDR Michael Fasano 05

COMPTROLLER

Adam Macksoud 01

SMALL BUSINESS DIR

Sarah Heard 00K

OFFICE OF COUNSEL

Richard Dale 00L

CONTRACTS

Stephen Lamb 02

CORPORATE OPERATIONS

Vicki Comeau 10

COMMAND REVIEW & INVESTIGATIONS

Daniel Benson 00N

DEPUTY/TECHNICAL OPERATIONS

Vacant TDB

CUSTOMER ADVOCATE

Jay Melillo 0CA

STRATEGIC PLANNING

Dawn Vaillancourt 00X

DEPUTY/TECHNICAL EXCELLENCE

John Babb, SSTM TDB

RDT&E DIGITAL TRANSFORMATION EXECUTIVE

Marie Bussiere, SSTM TDB

CHIEF ENGINEER

Dr. Joseph Gabriel 00E

CHIEF TECHNOLOGY OFFICER

Dr. Jason Gomez, SSTM 00T

USW PROTOTYPING

Dr. Denise Crimmins, SSTM 00T

DATA SCIENCE

Vacant, SSTM 00T

Senior Technical Reps Aligned to Departments

NON-TRADITIONAL SENSORS & PROCESSING SYSTEMS

Brad Doyle, SSTM 00T

UNDERSEA SENSORS TECHNOLOGY

Vacant, SSTM 15T

CYBERSECURITY USW COMBAT SYS INTEGRATION

Vacant, SSTM 25

USW ELECTROMAGNETIC MANEUVER SYSTEMS

Vacant, SSTM 34C

USW UNMANNED SYSTEMS & AUTONOMOUS BEHAVIOR

Christopher Egan, SSTM 85T

Technical Departments

SENSORS AND SONAR SYSTEMS

Patricia Eno, SSTM 15

USW COMBAT SYSTEMS

Rebecca Chhim, SSTM 25

USW ELECTRO- MAGNETIC SYSTEMS

Darlene Sullivan, SSTM 34

USW PLATFORMS AND PAYLOAD INTEGRATION

Christopher DelMastro, SSTM 45

USW MISSION ENGINEERING AND ANALYSIS

Denise Brown, SSTM 60

RANGES, ENGINEERING AND ANALYSIS

Eric Spigel, SSTM 70

USW WEAPONS, VEHICLES AND DEFENSIVE SYS

Hector Lopez, SSTM 85

Division Newport Providing Expertise in Submarine Technology

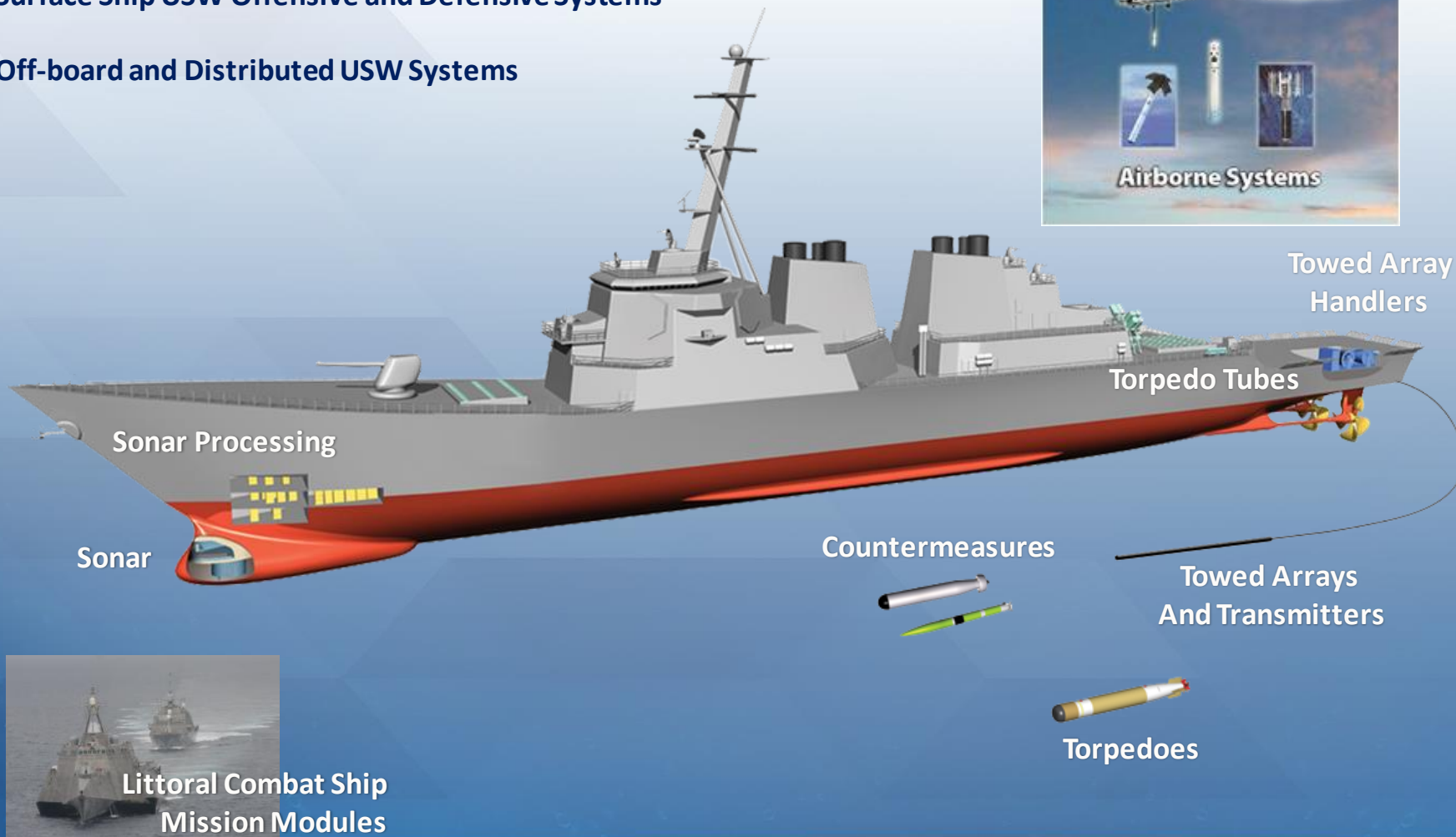


Division Newport Providing Expertise in Surface Ship Technology

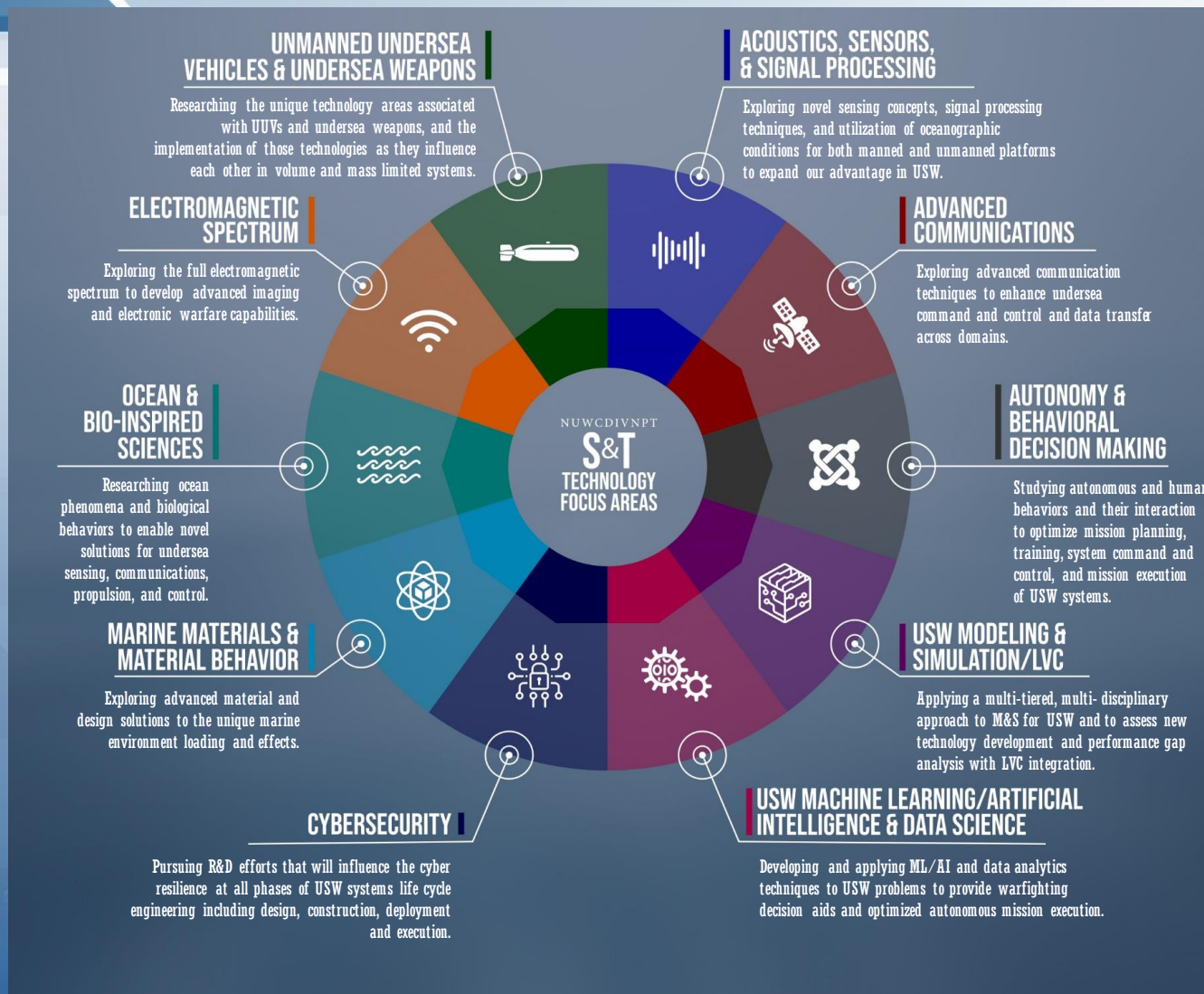


Surface Ship USW Offensive and Defensive Systems

Off-board and Distributed USW Systems



S&T Focus Areas



Division Newport: Contributing to the Navy After Next



Theater Based Undersea Warfare Capabilities

- Wargames
- Innovation Events



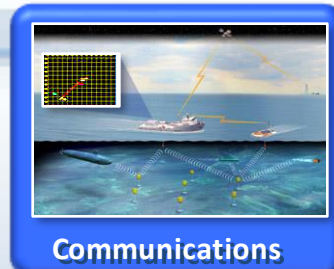
Sensors & Sonar

- Distributed and autonomous sensing for missions from under the sea



USW Platform & Payload Integration

- Transformational weapons integration to expand mission portfolio and use available volume most efficiently



Communications

- Stealthy communications to support interoperability



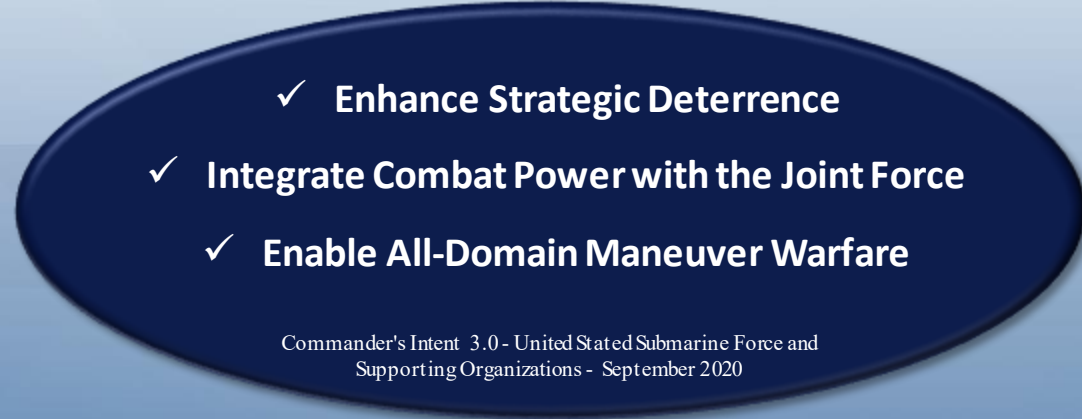
USW Imaging

- Multifunction masts combining communications, EW, and Imaging



USW Combat Systems

- Data driven decision making using advanced reasoning, modeling, and visualization
- Adaptable, CYBERSAFE systems



Undersea Distributed Networked Systems

- Multi-phenomenology sensor field
- Coatings: biofouling & anti-corrosion



Ranges

- Indiscriminate target tracking
- Remote support capabilities
- Non-traditional sensing
- Marine mammal behavior



USW Weapons & Autonomous Vehicles

- Autonomy
- Long endurance power systems
- Multi-vehicle collaboration
- Biomimetic vehicles



Electronic Warfare

- Modular masts
- Multi-spectral imaging
- Panoramic imaging and display
- Advanced human machine interface



Undersea Warfare Analysis

- Impactful and in-demand analysis for evolving National Maritime and Naval Strategies



Cooperative Force Torpedo Defense

- Shorten kill chain
- Adaptive systems and technologies to outpace the threat
- Virtual environment for M&S and training

NAVSEA Warfare Centers

Warfare Centers Board of Directors

Division Technical Directors



RDML Kevin P. Byrne
Commander, NUWC



Dr. Brett A. Seidle, SES
Executive Director Warfare Centers



Michael Slater (Acting)
NUWC Keyport



Dr. Angela Lewis, SES
NSWC Crane



Larry Tarasek, SES
NSWC Carderock



Nigel Thijs (Acting)
NSWC Philadelphia



Ronald A. Vien, SES
NUWC Newport



Ashley G. Johnson, SES
NSWC Indian Head



Jeffrey Koe, SES
NSWC Port Hueneme



Dianne M. Costlow-Owens,
SES, NSWC Corona

Keyport, WA



Bill Carlson (Acting)
CAPT Jon Moretti
2,437 employees FY19

Crane, IN



Dr. Angela Lewis, SES
CAPT Thomas (Duncan) McKay
3,721 employees FY19

Carderock, MD



Larry Tarasek, SES
CAPT Todd E. Hutchison
2,431 employees FY19

Philadelphia, PA



Nigel Thijs (Acting)
CAPT Dana Simon
2,748 employees FY19

Newport, RI



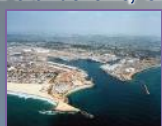
Ronald A. Vien, SES
CAPT Chad F. Hennings,
3,508 employees FY19

Indian Head, MD



Ashley G. Johnson, SES
CAPT Scott H. Kraft
2,286 employees FY19

Port Hueneme, CA



Jeffrey Koe, SES
CAPT Andrew J. Hoffman
2,561 employees FY19

Corona, CA



Dianne M. Costlow-Owens, SES
CAPT Khary Hembree-Boyd
1,747 employees FY19



Dahlgren, VA



Dale W. Sisson, Jr. SES
CAPT Stephen Plew
4,786 employees FY19

Panama City, FL



Dr. Peter Adair, SES
CAPT David N. Back
1,553 employees FY19



Dale W. Sisson, Jr. SES
NSWC Dahlgren



Dr. Peter Adair, SES
NSWC Panama City

Back-Ups



Birdseye View



- The Navy's only laboratory dedicated to full spectrum USW
- Both military and civilian leadership
- Navy Working Capital Fund activity
- Accountable for efficient delivery of products and services
- We are a Public Trust not a business



Customers

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

Assets

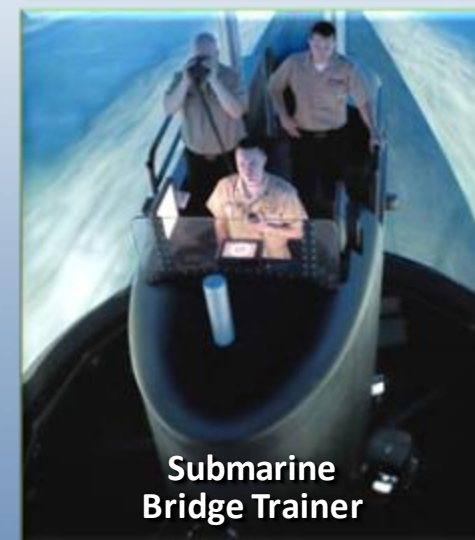
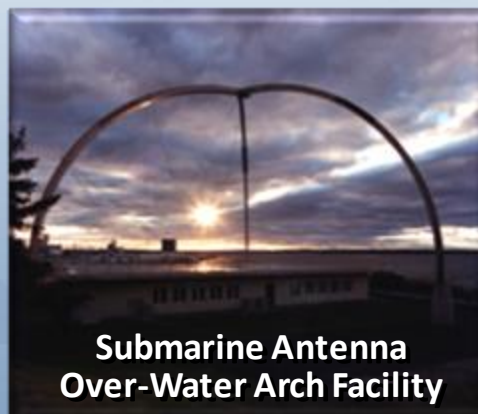
- 80 Buildings (253 AUTC / 31 Other Locations)
- 895 Acres (190 Newport / 541 AUTC / 174 Other)
- \$1325M Asset Value (\$725M Newport / \$572M AUTC / \$28M Other)
- Unique National Facilities

People

- 3,579 Civilian employees
- 12 Technical Warrant Holders
- The nation's Technical Stewards in Undersea Warfare
- Highly educated & dedicated to Fleet excellence
- 72% Scientists & Engineers; 36% have advanced degrees
- Dedicated to dominance in the Undersea Domain

\$1.4 Billion Organization that Produces Product not Profit

Unique Facilities



Focused on Innovative Solutions to USW Challenges Across the Spectrum

Unique Facilities



Advanced Submarine Launcher Facility



Survivability Test Facility



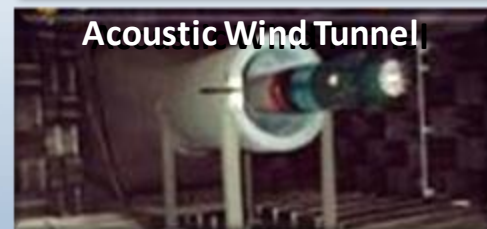
Undersea Warfare Analysis Laboratory



Virginia Payload Tube Facility



Narragansett Bay Shallow-Water Test Facility



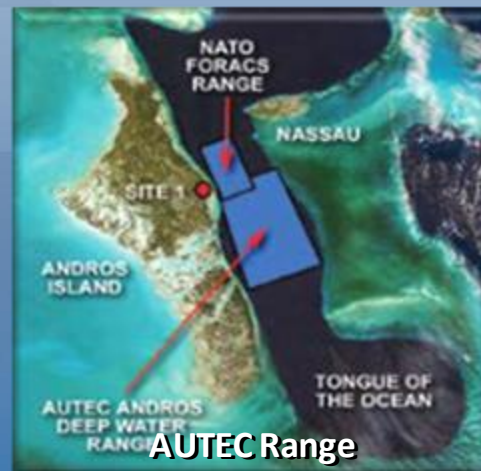
Acoustic Wind Tunnel



AUV Development Laboratory



Cruise Missiles Laboratory



AUTEC Range



Weapons Analysis Facility

Focused on Innovative Solutions to USW Challenges Across the Spectrum

Cybersecurity End-to-End Evaluation

Cyber Defense

SSN SECURE

Vulnerability Assessment



Cyber
Architecture



Certification



Systems Security
Engineering & Shipboard
Protection Tools

Shore-Based Submarine Warfare
Federated Tactical Systems (SWFTS)

Trained & Skilled
Cyber Security Workforce