

NAVAL SURFACE WARFARE CENTER PANAMA CITY DIVISION

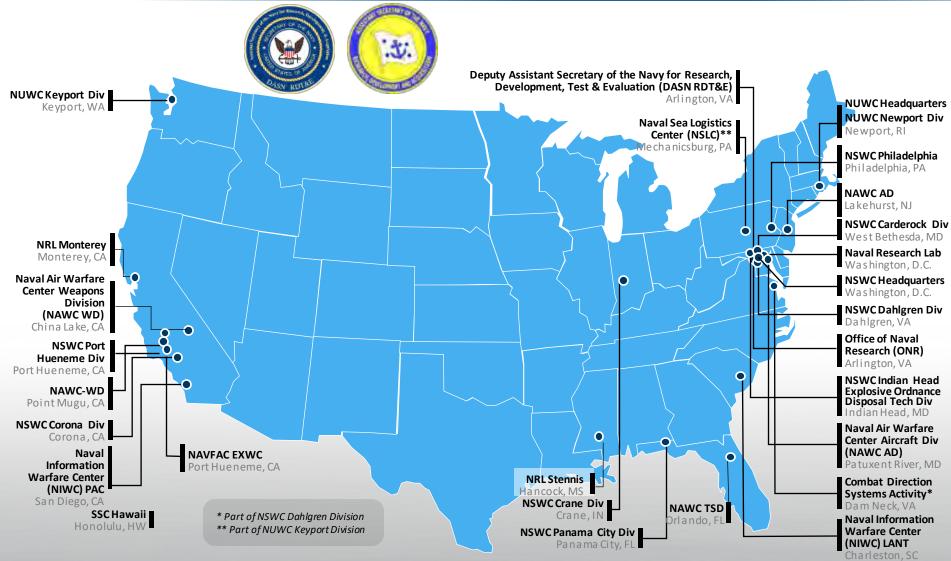




Who Makes Up Our Workforce

Naval Research & Development Establishment (NR&DE)





Quick Facts

- ✓ Diverse and highly educated workforce with over 36,000 scientists, engineers, and technicians (more than 2,000 Ph.D.s); 50,000 employees; annual budget greater than \$20B
- √17 S&T Reinvention Laboratories (STRLs) spanning NAVAIR, NAVSEA, NAVFAC, SPAWAR, NRL and ONR
- ✓ Conducts RDT&E for the DoN to discover, develop, transition and field technologically superior naval warfighting capabilities.
 - ✓ Examples: prototype development, demonstrations and experimentation to accelerate the fielding of new operational concepts, technology and systems innovations.
- ✓ Unique RDT&E facilities and test ranges
- ✓ Infrastructure has combined Plant Replacement Value greater than \$15B
- ✓ All designated as S&T Reinvention Laboratories (STRL)



NSWC PANAMA CITY DIVISION LEADERSHIP



CAPT David Back



Dr. Peter Adair, SES





Steve Grant, SSTM **Deputy Technical Director** (Technical Excellence)





Commanding Officer



Ivan Pereira **Chief Engineer** (CHENG)





Andrea Perles, SSTM Director, Mine Warfare



John Webster **Deputy Littoral Warfare** Systems Engineer (SEA 05)



Kimberly Ten Broeck **Business Director**





VACANT **Distinguished Scientist** for Mine Warfare Prototyping



Dr. Dan Sternlicht, SSTM **Distinguished Scientist for Littoral Sensing Technologies**



Dr. Kerry Commander, SSTM **Technology Office**

DEPARTMENTS



Stacy Gibson Comptroller





Corporate Operations



Kevin Oakes, SSTM Littoral & Mine Warfare Systems



E Steve Hunt, SSTM Expeditionary & Maritime Systems

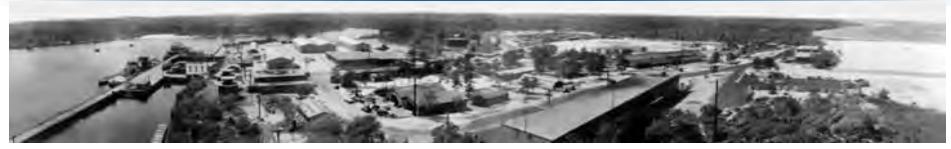


Dr. Todd Holland, SSTM Science & Technology



Enduring Mission





U.S. Navy Mine Countermeasures Station - circa 1945

1945: Established by SECNAV James Forrestal, the Station was used for development and testing of allied and enemymines. Capitalizing on the existing amphibious base, the Station was established with the following mission: "To perform research, development test and evaluation in mine defense, acoustic and torpedo countermeasures, inshore undersea warfare, swimmer-diver equipment and techniques and in related fields of science and engineering."



Naval Surface Warfare Center Panama City Division - circa 2022

Present Day: The mission of NSWC, Panama City Division is to conduct research, development, test and evaluation, and in-service support of both manned and unmanned mine warfare systems, subsea/seabed warfare systems, naval special warfare systems, diving and life support systems, amphibio us/expeditionary warfare systems, other mission missions that occur primarily in coastal (littoral) regions and to executive other responsibilities as assigned by Commander, Naval Surface Warfare Center.

















Vision, Mission, Capabilities



Vision

Delivering relevant solutions in the littorals from seabed to space: For Today, Tomorrow, and the Navy after Next.

Mission

The mission of the Naval Surface Warfare Center Panama City Division is to conduct research, development, test and evaluation, and In-Service support of these areas:





Strategic Campaign Plan





What Makes NSWC PCD Unique

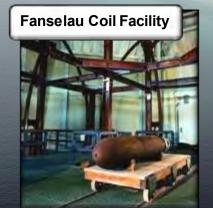


- Full Spectrum Mine Warfare to include Tactics
- Expeditionary Maneuver Warfare
- Ship to Shore Maneuver to include Air Cushion Vehicles
- Full Spectrum Diving and Life Support Systems
- Special Warfare Maritime Mobility
- Littoral Mission Systems Integration to include UxS
- Joint Gulf Test Range: open ocean, bays, estuaries, rivers, & harbors



















1600+

Civilian Employees **1200**+

Contractor Support Employees ~40

Military Personnel

- **Active Duty Sailors**
- PFIs
- PEP Officer



FY23 Total Annual Funded Budget



PCD Relationships



The Impact

Guiding Principles

- · Serving the Nation, Warfighter and the Mission
- · Operating as a Unified Team
- · Caring for our People
- · Learning and Growing
- · Working Smarter, Not Harder

Worldwide Reach

NSWC PCD directly supports Navy Fleets and warfighters throughout the world

Sponsor Summary Percent of Total Funding:

2%

- NAVY 91%USMC 3%
- USAF 2%

• DoD

- •
- ARMY 19
- Non-DoD 1%

91% Navy Funding



NAVAL SUPPLY SYSTEMS COMMAND









Diverse Customer Base

Work spans from basic research to in-service engineering (ISEA)

Areas of Excellence

- Mine Warfare
- Expeditionary & Amphibious Warfare
- Subsea & Seabed Warfare
- Unmanned Systems
- Diving & Life Support
- Naval Special Warfare
- Science & Technology
- Other Coastal Missions

Innovation Ecosystem

Partners







Industry

Active Cooperative
Research and
Development
Agreements
(CRADAs)



Academia

1 4 Active
Educational
Partnership
Agreements
(EPAs)





Regional Partners











About Our Employees: *Alumni*





TOP FIVE

Schools Represented

- 1. Florida State University
- 2. University of Florida
- 3. Auburn University
- 4. University of West Florida
- 5. University of Central Florida

We celebrate that our **diverse workforce** comes from all over the nation, with a wide variety of backgrounds and **education**. #NSWCPCD

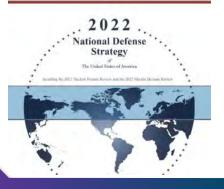
1,600+ Civilians

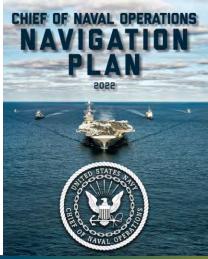
70+ Ph.Ds 400+ Master's degrees 47
U.S. states represented

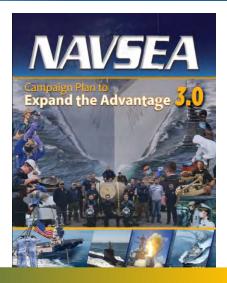


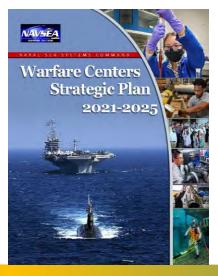
Strategic Campaign Plan Alignment

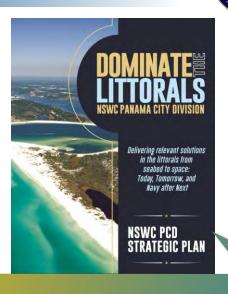












NDS STRATEGIC APPROACH

- Defending the homeland, paced to the growing multi-domain threat posed by the PRC
- Deterring strategic attacks against the U.S., her Allies, and partners
- Deterring aggression, while being prepared to prevail in conflict when necessary, prioritizing the PRC challenge in the Indo-Pacific, then the Russia challenge in Europe
- Building a resilient Joint Force and defense ecosystem

FOUR PRIORITIES

- Sailors: Recruit and Retain Technically Skilled Naval Warriors
- Readiness: Deliver a Force to Fight and Win
- Capabilities: Deliver a Lethal, Modernized Full Spectrum Fleet
- Capacity: Deliver a Combat-Credible Hybrid Fleet
 Continuum

EXPAND THE ADVANTAGE 3.0

- Deliver Combat Power: On-Time Delivery Of Combat-Ready Ships, Submarines and Systems
- Transform Digital Capability
- Build a Team to Compete and Win

ENABLING MARITIME SUPERORITY

- Workforce and Leadership Development
- Mission-aligned strategies at the Division Level
- Technical Innovation and Excellence
- Business Excellence and Improvement
- · Right Culture/Values

DOMINATE THE LITTORALS

- Serving the Nation, Warfighter and the Mission
- · Operating as a Unified Team
- Caring for our People
- · Learning and Growing
- Working Smarter, Not Harder



FY24 Division Technology Focus Areas





Business Departments



Code 01

Comptroller

Responsible for all financial management functions:

- Fiscal policy & regulations
- Budget
- Accounting
- · Financial services

Provide command management with technical advice and guidance in:

- Budget formulation & execution
- · Managerial accounting
- Financial review & management analysis
- Program analysis
- · Internal control systems
- Integrated financial systems

The Comptroller:

- Reports directly to Commanding Officer
- Serves as the Chief Financial Advisor to the Division
- Is delegated fiduciary authority under Title 31 USC 1517

Code 02

Contracts

Responsible for the end-to-end management and execution of the procurement process

- 1. Solicitation
- 2. Proposal
- 3. Evaluation
- 4. Award through contract closeout

Manages and directs the procurement functions, which support the Warfare Center's technical programs and missions.

Organized around three Contract Divisions and an Engineering Liaison Office:

- 1. Littoral and Mine Systems Contracts Division
- 2. Expeditionary and Maritime Systems Contracts Division
- 3. Small Purchase Division

Code 10

Corporate Operations

Manages and direct business functions that support the Warfare Center's technical programs and missions.



10E

EEO, Diversity & Inclusion



101

Human Resources Management



102

Infrastructure



103

Corporate Communication



104

Information Technology



105

Security



106

Corporate Business Office



107

Property Management



Littoral and Mine Warfare - A Department

- NAVSEA Mine Warfare Technical Warrant Holder
- **Birthplace of Airborne Mine Countermeasures**
- Force Behind Mine Warfare Fleet
- Mine Countermeasures & Mine In-Service Engineering
- Research & Technology Development for Future **Capabilities**
- MIW Analysis, Tactics, and Simulation
- **NAVSEA Warfare Center for all Maritime Mining**
- Mines In-Service Engineering
- Mine Improvements Program Support
- Rapid Repurposing of Legacy
- Systems for Urgent Capabilities

Mining



Quickstrike MK62/63/65



Quickstrike MK62s



Quickstrike ModXJDAM **Extended Range**



Advanced Undersea Weapons System (AUWS)



Submarine Launched Mobile Mine (SLMM) MK67





SLMM MK67



Mine MK67 Mod X



USV UISS



MCM Mission Packages



AN/AQS-20 **COBRA**

borne Mine Neutralization Syste AN/ASQ-235, AMNS



AN/AES-1, ALMDS



Knifefish

Airborne Mine Countermeasures



Surface Mine Countermeasures



MHU 1-4 **Unmanned Surface Mine** Hunting Vehicle



AN/SQQ-32 Minehunting Sonar



SEAFOX Underwater **Unmanned** Vehicle





Expeditionary and Maritime Systems – E Department

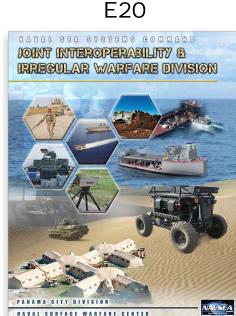
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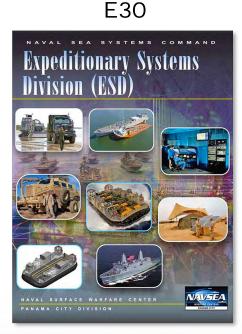
E10



- NSW Undersea Mobility (SEAL Delivery Vehicle [SDV], Dry Combat Submersible ([DCS])
- · Mk 18 UUV Family of Systems
- · Diving and Life Support Systems
- Damage Control Personal Protective Equipment (DC PPE)
- Chemical Biological Defense (CBD) & Ballistic Personal Protections
- Gas Analysis for Deep Submergence Systems

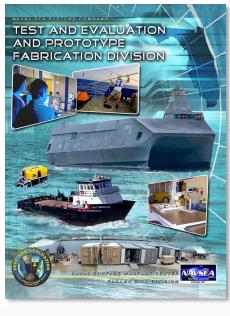


- · Joint and Naw Expeditionary C4I
- Network architecture, engineering & integration
- Cybersecurity
- · In-service engineering
- Over-the-Horizon Operational Maneuver from the Sea
- Navy Non-Lethal Effects
- Counter Unmanned Aerial Vehicle detect/track technology
- Persistent Awareness Systems

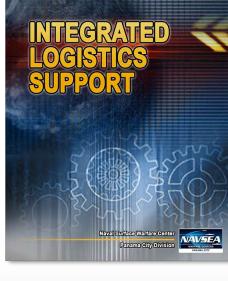


- · Air Cushion Vehicle Systems
- Expeditionary Platform C4N
- · Expeditionary Maneuver Warfare
- Amphibious Ship Interfaces, Integration, and Engineering
- Seabasing/Expeditionary Advanced Base Operations
- USMC Vehicle Support
- Mobility/Counter-mobility systems
- · Explosives Hazard Defeat
- Marine Corps Shipboard and Seabase Interfaces

E40



- Test & Evaluation
- Ranges & Facilities
- Oceanographic Support Office (OSO)
- Coastal Test Range (CTR)
- Boat House
- R/V Sea Fighter (FSF-1)
- Fabrication and Prototype Shops
- Non-Magnetic Testing Area (NMTA) & Ordnance Ranges
- Unmanned Aerial System (UAS) Program



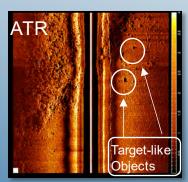
- Cradle-to-Grave Logistics Planning and Management
- · Configuration Management
- Provisioning
- PSD Planning
- · Reliability-Centered Maintenance
- Technical Manual Development (S1000D Expertise)
- Training & Curriculum Development



Science and Technology – X Department

- Unmanned Systems, Autonomy & Dynamics
- Magnetics, Optics & Data Fusion
- Marine Corps S&T
- Advanced Mining Technologies
- Physical Acoustics, Sensors & Processing
- Biotechnology
- Automatic Target Recognition (ATR)

ADVANCED MINING TECHNOLOGIES



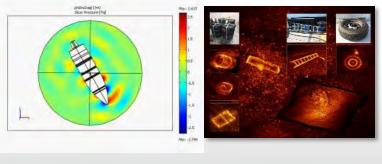


BIOTECHNOLOGY



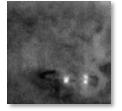
MARINE CORPS S&T

PHYSICAL ACOUSTICS, SENSORS & PROCESSING



MAGNETIC / ACOUSTIC / EO DATA PRODUCTS







MSTL SLS Image

EOI Image

Magnetic Time Series

Magnetic contact position displayed by a yellow circle overlaid on SSS images



