



# CARDEROCK

## JOIN OUR TEAM







Naval Surface Warfare Center (NSWC), Carderock Division offers innovative, exciting and meaningful work in supporting U.S. Navy ships and submarines. The Department of the Navy provides competitive salaries, benefits, and extensive professional development and training. The careers and opportunities to make a difference at Carderock are endless.

Carderock is the Navy's trusted partner for identifying and providing world-class, cost-effective, and innovative technical solutions for advanced ships and ship systems, enabling the warfighter to execute their missions and maintain their technical edge.









## *About Carderock Division*

NSWC Carderock Division – headquartered in West Bethesda, Maryland, with seven detachment locations across the country – consists of more than 2,800 scientists, engineers and support personnel working in disciplines ranging from fundamental science to applied / in-service engineering. Our command is part of the Naval Sea Systems Command (NAVSEA) Warfare Centers, and is the Navy's center of excellence for ships and ship systems.

For more than 100 years, NSWC Carderock Division has helped preserve and enhance the nation's presence on and under the seas.

NSWC Carderock Division is the full-spectrum research and development, test and evaluation, engineering, and fleet support organization for the Navy's ships, submarines, military watercraft, and unmanned vehicles with insight into new concepts and diverse technologies for the Navy fleet of the 21st Century. NSWC Carderock Division's expertise spans from naval architecture

and marine engineering, to electrical and mechanical engineering, to computer engineering and physics. NSWC Carderock Division specializes in ship design and integration; environmental quality systems; hull forms and propulsors; structures and materials; signatures, silencing systems, and susceptibility; and vulnerability and survivability systems.

NSWC Carderock Division's unique laboratories, modeling and simulation facilities, at-sea-assets, and large-scale, land-based engineering and test contribute to the full-spectrum nature of our mission.

Navy and maritime communities have come to depend on our expertise and innovative spirit in developing advanced platforms and systems, enhancing naval performance, integrating new technologies, and reducing operating costs. NSWC Carderock Division will continue to solve challenging engineering problems to meet future fleet needs.



Our mission is to provide full-spectrum research and development, test and evaluation, analyses, acquisition, and fleet support for the Navy's ships, ship systems, and associated Navy logistics systems. Specific emphasis is to provide the core technical capabilities required for the integration of surface and undersea vehicles and associated systems, to develop and apply science and technology associated with naval architecture and marine engineering, and to provide support to the maritime industry.

- NSWC Carderock Division is one of 10 Warfare Center Divisions within the Naval Sea Systems Command (NAVSEA).
- NSWC Carderock Division is the largest, most comprehensive establishment of its kind in the world, serving a dual role in support of both our U.S. naval forces and the maritime industry.

## CORE COMPETENCIES:

- Ship Integration and Design
- Environmental Quality Systems
- Naval Architecture, including Hull Forms and Propulsors
- Structures and Materials
- Signatures and Silencing Systems
- Vulnerability and Survivability Systems

## FACILITIES & LABORATORIES:

- Acoustic Research Detachment
- Anechoic Flow Facility
- Center for Innovation in Ship Design
- Circulating Water Channel
- Combatant Craft Division
- Compressed Air System Facility
- David W. Taylor Model Basin
- Environmental Protection Laboratories
- Large Cavitation Channel (LCC)
- Magnetic Fields Laboratory
- Magnetic Materials Laboratory
- Maneuvering and Seakeeping Basin (MASK)
- Rotating Arm Facility
- Subsonic Wind Tunnel
- Welding Process and Consumable Development Laboratories

*For a full list of NSWC Carderock Division facilities and laboratories, visit:*

<https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Carderock/What-We-Do/Laboratories-and-Research-Facilities/>



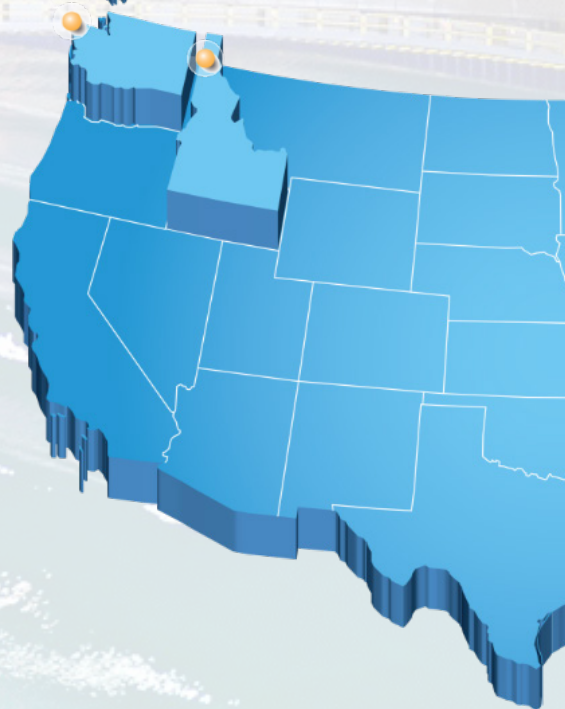
# Carderock: Where We Work



**Southeast Alaska Acoustic  
Measurement Facility  
Ketchikan, AK**



**Puget Sound  
Detachment at  
Naval Submarine  
Base Bangor  
Bangor, WA**



**Acoustic  
Research  
Detachment  
Bayview, ID**



**Memphis Detachment  
Dr. William B. Morgan  
Large Cavitation Channel  
Memphis, TN**





**Carderock Division  
HEADQUARTERS  
West Bethesda, MD**

**Norfolk Detachment  
Combatant Craft Division  
Norfolk, VA**



**Acoustic Trials  
Detachment  
Titusville, FL**

**South Florida Ocean  
Measurement Facility  
Dania Beach, FL**







## ***Career Opportunities***

NSWC Carderock Division addresses the full spectrum of applied maritime science and technology, from the theoretical and conceptual beginnings, through design and acquisition, to implementation and follow-on engineering. The Division houses world-class facilities and laboratories and employs scientists, engineers, and support personnel working in more than 40 disciplines.





## ***Civilian Technical and Business Opportunities***

As a major component and field activity of NAVSEA, NSWC Carderock Division provides cradle-to-grave support for its technical products over an enormous range of scientific areas related to surface and undersea platforms. This includes all technical aspects of improving the performance of ships, submarines, military watercraft and unmanned vehicles, as well as research for military logistics systems.



# ***Scientists and Engineers***

Hiring scientists and engineers (from bachelor to doctoral) in a variety of disciplines:

## **NAVAL ARCHITECTURE**

Naval Architects – and engineers in related technical fields – provide quality naval architectural and ship design services to Navy and non-Navy customers by developing and maintaining ship design tools; researching, developing, and assessing ship concepts and related technologies; and supplying ship design products. Specialty areas include weight and stability, ship arrangements, human systems integration, RMA, habitability and systems safety.

## **MECHANICAL ENGINEERING**

Mechanical Engineers apply math and science skills to plan, design, build, operate and maintain navy systems and ships. They improve and modernize ship and submarine capability including testing ship systems and manage technician teams.

## **MATERIALS**

Materials Engineers cover the full spectrum from research, concepts, development, and testing to application of metallic and non-metallic materials for Navy ships, submarines, and Marine Corps ground vehicle and weapon systems. Materials Engineers work on projects involving materials and fabrication processes, advanced manufacturing technology, engineering mechanics and fitness for purpose analysis, chemical formulation, testing and characterization of metallic and nonmetallic materials, and prototype fabrication and testing of ship systems and components. This includes

alloy development, forming, joining, mechanical property testing and prediction, optical and electron microscopy, polymer matrix composite materials and processing, corrosion, signature control materials, ceramic and magnetic materials, coatings and corrosion control, additive manufacturing, integrated computational materials engineering, digital design, and power system materials.

## **ENVIRONMENTAL**

Environmental engineers work in programs supporting the design, development, and testing of state-of-the-art equipment and systems for efficient and effective use within the constraints of the unique shipboard operating environment; integrating the latest in chemical and physical processes for the management and treatment of wastes and materials technology and fabrication methods. Environmental engineers work both ashore and at-sea in program technical areas to include solid waste, medical waste, oily wastewater, blackwater, graywater, ballast water, and hazardous materials control and management.

## **PHYSICS**

Physicists apply fundamentals of physics, including mechanics, sound, optics, heat, electricity, and magnetism toward the design, development, and evaluation of naval and systems and the solutions of Navy, industrial, and maritime problems.





## ELECTRICAL

Electrical engineers develop and evaluate power and energy technologies to be used in applications requiring portable power, and coordination of and expertise with battery safety and power generation technologies for Navy systems. The individual would work in programs supporting the design, development, and testing of state-of-the-art equipment and systems for efficient and effective use within the constraints of the unique shipboard and marine expeditionary operating environments; integrating the latest technologies.

## SOFTWARE DEVELOPERS

Software Developers combine real-world physics modeling, real-time high-performance computing, leading edge software design, and sophisticated simulations to produce immersive training and tactical systems for the U.S. Navy.

- Computer Science
- Computer Engineering
- Systems Engineering
- Applied Mathematics
- Applied Physics

## OTHER CARDEROCK ENGINEERING FIELDS

- Industrial Engineering
- Ocean Engineering
- Civil Engineering
- Aerospace
- Chemical Engineering
- Systems Engineering



# Professionals

## BUSINESS OFFICES

In addition to three technical departments, NSW Carderock Division has three business and finance departments: Comptroller, Contracting and Acquisition, and Corporate Operations that provide a wide variety of support functions and services.

### Comptroller Department

The Comptroller Department provides fiduciary oversight for fiscal operations; fiscal advice and consultation to the command leadership, department heads, and managers; and a full spectrum of financial management and fiscal services. Typical career specialists sought include:

- Budget Formulation / Execution
- Accounting
- Employee Services (Travel, Timekeeping, Payroll)
- Financial Improvement Audit Readiness (FIAR)
- Fiscal Policy

### Contracting & Acquisition Department

The Contracting and Acquisition Department provides acquisition products and services to the Division while satisfying public policy objectives. With the Department, there are a variety of career opportunities, with focuses in the following areas:

- Contract Award and Administration
- Purchase Card Oversight
- Policy and Self-Assessment
- Contracting Office Representative Oversight

### Corporate Operations Department

The Corporate Operations Department provides timely and cost-efficient business, tactical and strategic services to the Division and its technical departments. Typical skilled trade workers and career specialists sought include:

- Human Resources
- Information Assurance / Information Technology
- Compliance
- Cybersecurity
- Security
- Safety
- Environmental Safety
- Facilities Support

### Cybersecurity

Cybersecurity professionals design and build secure systems as well as identify, analyze, and mitigate threats to information technology (IT) systems and tactical systems. Individuals in this field work on state-of-the-art integrated systems, data analysis systems, data archiving and retrieval systems, immersive training systems, and research and development networks.





## SKILLED TRADES

The work at NSW Carderock Division requires all levels of skilled workers in specific trades:

- Metal Workers
- Machinists
- Technicians

## COMMAND STAFF

NSWC Carderock Division command staff includes Strategic Planning office; Technology and Innovation office; Quality Management; Office of Counsel; Small Business Office; and others. Typical career specialists sought include:

- Legal
- Quality Assurance
- Customer Advocates
- STEM and Outreach Support
- Administrative Officers





# Internships

## NAVAL RESEARCH ENTERPRISE INTERNSHIP PROGRAM (NREIP)

NREIP is a 10 week paid summer internship program that provides an opportunity for undergraduate and graduate students to participate in research at a DoN laboratory during the summer.

### Eligibility

- Enrolled at a four-year U.S. college or university accredited by the U.S. Department of Education; students attending two-year colleges who meet the credit hour requirements may be eligible at the laboratory's discretion.
- University sophomores, juniors, seniors or graduate students; freshman who have reached the credit level of a sophomore before the starting the internship are also eligible.
- Applicants should have demonstrated interest in subjects of study that are relevant to the research conducted by one or more of the laboratories in the program.
- U.S. citizenship is required.

### Program Highlights

- NREIP offers a competitive stipend for its interns
- New undergraduate student participants: \$7,500
- Returning undergraduate students (students must have completed a full 10-week program in a prior year to receive this level): \$9,000
- Graduate students (students must currently be in graduate school and taking graduate school courses to receive this level): \$11,500

Application Period:

August 1-November 1

Additional information for NREIP can be found at:  
[navalsteminterns.us/nreip/](https://navalsteminterns.us/nreip/)



## STEM Student Employment Program (SSEP)

### Eligibility

- Be enrolled or accepted for enrollment in a program of undergraduate or graduate instruction leading to a bachelor's or advanced degree in a Science, Technology, Engineering and Math (STEM) course of study at an institution of higher learning. (Must meet OPM Qualifications for Professional & Scientific positions)
- Students must be enrolled at least half time, as defined by the institution, to be appointed and to remain in the program.
- Must be a U.S. citizen.
- Must be at least 18 years of age.
- Students must maintain a 2.5 cumulative GPA.

### Program Administration

- Interns may be hired on an indefinite period to complete the educational requirement.
- Interns may work either part- or full-time.
- Each agency must sign a Participant Agreement with the Intern that sets forth the expectations for the internship.
- All Intern positions will be related to the Intern's academic career goals or field of study.
- Salary based on completion of academic semester hours.

### Program Completion and Conversion

Interns may be converted to a permanent position (or, in some limited circumstances, to a term position lasting 1-4 years) within 120 days of successful completion of the program.

### To be eligible for conversion, term appointment Interns must:

- Complete at least 640 hours of work experience acquired through the Internship Program (may be waived under certain circumstances)
- Complete their degree requirements
- Meet the qualification standards for the position to which the Intern will be converted.
- Meet agency-specific requirements as specified in the Participant's Agreement.
- Perform their job successfully.
- Time spent under previous Federal Internship Program appointments may count towards required work experience hours.

### Program Highlights

- Paid internship.
- Provides an opportunity to gain work experience directly related to an academic field of study.
- May be eligible for benefits (Annual Leave and Sick Leave, 401k, Life and Health Insurance).
- Students who successfully complete the program may be eligible for conversion to a permanent job in the civil service.



# ***Internships (continued)***

## **PROFESSIONAL, ADMINISTRATIVE, ASSISTANT, CLERICAL AND TECHNICIAN STUDENT EMPLOYMENT PROGRAM (PAACTSEP)**

### **Eligibility**

- Be enrolled in a program of secondary or postsecondary instruction leading to a high school diploma, bachelor's degree, advanced degree, or certificate (equivalent to at least one academic year of full-time study) at a qualifying educational institution in accordance with 5 CFR 362.102.
- Students must be enrolled at least half time, as defined by the institution, pursuing a degree or certificate.
- Must be a U.S. Citizen.
- Students must maintain a 2.5 GPA.

### **Program Administration**

- Interns may work either part- or full-time.
- Salary based on completion of academic semester hours.

### **Program Completion and Conversion**

Interns may be converted to a permanent position after completion of the degree program within 120 days of successful completion of the program.

### **To be eligible for conversion, term appointment Interns must:**

- Complete at least 640 hours prior to graduation.
- Complete their degree requirements.
- Meet the qualification standards for the position to which the Intern will be converted.
- Meet agency-specific requirements as specified in the Participant's Agreement.
- Perform their job successfully.
- Time spent under previous Federal Internship Program appointments may count towards required work experience hours.

### **Program Highlights:**

- Paid Internship.
- Provides an opportunity to gain work experience directly related to an academic field of study.
- May be eligible for benefits (Annual Leave and Sick Leave, 401k, Life and Health Insurance)
- Students who successfully complete the program may be eligible for conversion to a permanent job.





## SCIENCE, MATHEMATICS AND RESEARCH FOR TRANSFORMATION (SMART) SCHOLARSHIP

The SMART Scholarship for Service Program is an opportunity for students pursuing an undergraduate or graduate degree in science, technology, engineering, and mathematics disciplines to receive a full scholarship and be gainfully employed upon degree completion. Carderock selects several SMART applicants each year.

Scholarships are awarded for a minimum of 1 year and a maximum of 5 years of funding, depending on degree requirements. SMART is a one-for-one commitment; for every year of degree funding, the scholar commits to working for a year with the DoD as a civilian employee.

Additional information for the SMART Scholarship can be found at <http://www.smartscholarship.org/>

### Undergraduate applicants

- Must be currently enrolled at a regionally accredited U.S. college or university
- Must be able to produce a fall 2023 (or earlier) college transcript at the end of the term
- AP coursework is not considered college credit

### Graduate applicants

- Can be either currently enrolled in a regionally accredited U.S. college or university or awaiting notification of admission
- If awaiting admission, you must be accepted for entrance in the fall 2024 term.





## ***Diversity and Inclusion / other Employee Resource Group (ERG)***

The Division values and respects the strengths and differences among our employees. Because our employees are more diverse today than ever before, we must be positioned to understand and create work solutions to meet their needs. ERGs play an important role in supporting this effort. ERGs are open to all employees and provide an environment by which employees can share their experiences and expertise, network, and discuss long-term career-building skills. The ERGs also foster a mentoring environment.

# Employee Benefits

Make an impact and get more than just a paycheck. Our success starts with investing in a dedicated and talented workforce. That's why we're committed to helping you grow with advanced training, ongoing career opportunities, family-friendly flexibilities, and excellent pay and benefits.

Some of the advantages of working at NSWC Carderock Division are:

## COMPETITIVE COMPENSATION

The Naval Sea Systems Command's (NAVSEA) Naval Surface Warfare Center (NSWC) were designated as a Science and Technology Reinvention Laboratories (STRL). As a STRL Personnel Demonstration Project, compensation is based on broad banding also referred to pay banding which allows greater flexibility in setting pay. The overall goal of the Personnel Demonstration Project is to facilitate mission execution.

## WORK SCHEDULING / TELEWORK

- Employees who are telework eligible may discuss telework with their supervisor
- Flexible Work Schedule - Employees work all ten days during the pay period with flexible work hours
- Compressed Work Schedule - A compressed schedule included eight nine-hour days and one eight hour day with one day off every two weeks
- Job Rotations

## ADVANCEMENT OPPORTUNITIES

- Graduate Education Program
- Scientists and Engineering Development Programs

## FINANCIAL AND LIFE PLANNING

- Federal Government Pension
- Supplemental 401K equivalent with agency matching up to 5% through the Thrift Savings Plan (TSP)
- Eligible employer for Public Service Loan Forgiveness (PSLF) program. For more information [https://studentaid.gov/pslf/Life\\_insurance](https://studentaid.gov/pslf/Life_insurance)
- Flexible Spending Accounts

## LEADERSHIP DEVELOPMENT & EDUCATION

- Scientist and Engineer Development Program (SEDP)
- "Meet the Fleet" opportunities to visit shipyards and get onboard ships
- Internal project proposals – have a great idea? Get funding and resources to make it a reality
- Community Outreach - Multiple programs and events to help you give back to the community
- Internal and External DoD rotations
- Graduate education assistance



# Employee Benefits (Continued)

## LIFE INSURANCE

- Most civilian employees are eligible to participate in the Basic Life and other additional options
- Basic insurance premiums are shared by the employee and the government based on the insurance amount

## CIVILIAN NAVY BENEFITS

- Access to Navy Federal Credit Union
- Transportation subsidy - employees taking public transportation/carpools in some locations may be reimbursed for transportation costs
- Dependent care - the U.S. Navy has outstanding childcare programs and referrals to federal childcare centers and you're eligible for child care fee <https://public.militarychildcare.csd.disa.mil/mcc-central/mcchome/mccyn/navy> assistance
- Discounted tickets to your favorite places including: local events, museums, and attractions, as well as amusement parks such as Universal Orlando Resort and Walt Disney World.

*\*Subject to position eligibility and supervisor approval*

*\*\*Depending on time in service, federal workers earn between 13 and 26 days per year*

*\*\*\* Earned at 4hrs a pay period*

### Length of Service Annual Leave Earned Annual Rate

**Up to 3 years** 4 hours/pay period 13 days/year

**3 to 15 years** 6 hours/pay period 20 days/year

**15 years** or more 8 hours/pay period 26 days/year

## HEALTH INSURANCE

- Nationally recognized model offering 200+ health plan options throughout the United States
- Most employees pay only one-fourth of total health benefit costs, depending on the plan selected
- Annual "open season" periods permit enrollment changes
- For more information on the Federal Employees Health Benefits Program visit: <https://www.opm.gov/healthcare-insurance/healthcare/>

## FLEXIBLE SPENDING ACCOUNTS

- Elect pre-tax salary dollars to save money on a variety of eligible health care and dependent care expenses
- Benefits based on length of service and salary
- For more information on Flexible Spending Accounts visit: <https://www.fsafeds.com>

## RETIREMENT COVERAGE

- Retirement pension for life beginning as early as age 55
- Benefits based on length of service and salary
- Military service may be credited toward retirement (deposit required)
- Vesting after 5 years of creditable civilian service
- Eligibility for survivor and disability benefits after 18 months of civilian service
- Earn Social Security Credit

## WORKLIFE AND WELLNESS

### Flexible Work Environment\*

- Compressed schedules
- Telework

### Paid Overtime

### Paid Holidays, Vacation & Sick Leave

- 11 Paid Holidays per year
- 13-26 days of vacation (annual leave) per year and carry-over up to 30 days into the next year\*\*
- 13 days Sick Leave per year – unlimited accrual\*\*\*
  - Federal workers can earn 13 days of sick leave per year at a rate of four hours every two weeks
  - Unused sick leave can be carried into subsequent years and accumulated during the entire year of employment
  - Portion of accumulated sick leave will be calculated into retirement as years or service
- Annual Leave
  - Depending on time in service, federal workers earn between 13 and 26 days of Annual Paid Leave per year
  - Carry up to 30 vacation days into the next calendar year
- Paid Parental Leave - 12 weeks of paid parental leave (PPL) to covered employees for the birth or placement of a child
  - Eligible after 1 year of federal service
- Family and Medical Leave Act (FMLA) allows up to 12 weeks per year of unpaid leave caring for a sick family member
- Leave sharing programs allow co-workers to transfer leave to others in need
- Nursing Mothers' Room
- Intermural/Team Sports: Volleyball, Ultimate Frisbee, Softball, Cycling, Climbing, Hiking, etc.
- On-site fitness centers

## CONTINUED EDUCATION SUPPORT

- Activities may pay all (or part) of the necessary expenses of training – including the costs of college tuition for training and education – to improve an employee's performance of his or her official duties

## PUBLIC SERVICE LOAN PROGRAM

- Carderock is an eligible employer for the Public Service Loan Forgiveness Program (PSLF)
- The PSLF Program forgives the remaining balance on your Direct Loans after you've made the equivalent of 120 qualifying monthly payments under an accepted repayment plan, and while working full-time.
- For more information visit: <https://studentaid.gov/manage-loans/forgiveness-cancellation/public-service>

## THRIFT SAVINGS PLAN (TSP)

- Tax-deferred retirement savings and investment plan
- Employees offered same type of savings and tax benefits that many private corporations offer employees under 401K plan
- By participating in the TSP, employees have the opportunity to save part of their income for retirement
- Receive matching agency contributions which reduces current taxes in TSP
- All federal employees covered by FERS are eligible to participate in the TSP when hired
- Once eligible to participate in TSP, there are three types of contributions that may be made to their account:
  - (1) agency Automatic 1% contributions
  - (2) employee contributions
  - (3) agency matching contributions

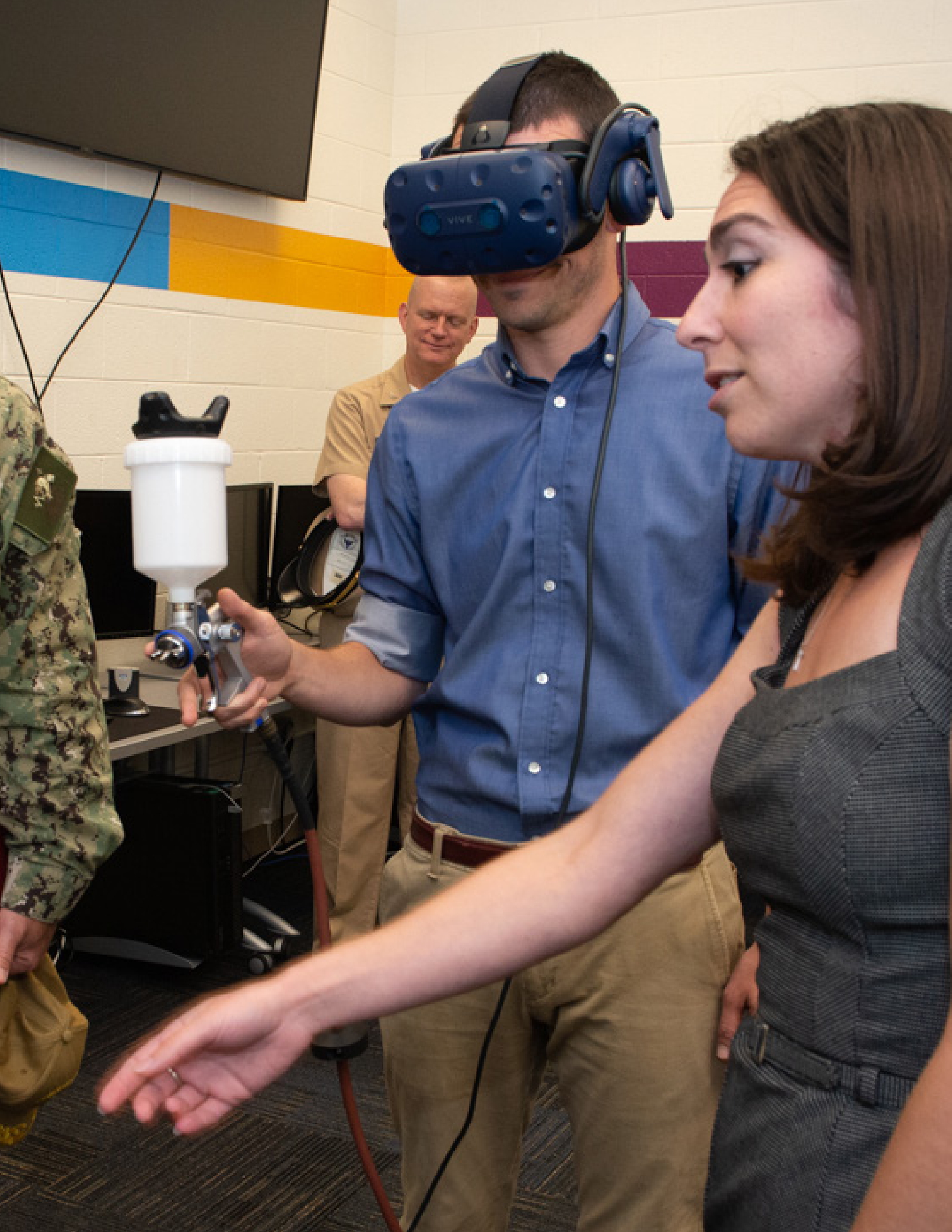


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WARFARE CENTERS  
Carderock

