



NAVAL SURFACE WARFARE CENTER, CORONA DIVISION

NSWC Corona Division has served as the Navy's independent assessment agent since 1964. With experience in gauging the Navy's warfighting capability, NSWC Corona is a leader in NAVSEA data analytics. Utilizing networked data environments, data analytics and visualization, and measurement technology to bridge the Navy's data silos, Corona enables informed decision making for the warfighter.

Mission

Provide transparency to warfighting readiness through data analytics and assessment, engineering the Fleet's Live-Virtual-Constructive training environment, and assuring the accuracy of measurements.

Vision

Optimize decision-making for warfighting and fleet readiness.

STRATEGIC GOALS



Who We Are

We are ~ 1,800 civilian personnel, a small contingent of Sailors and more than 2,000 contractors executing our mission.

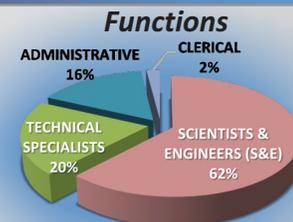
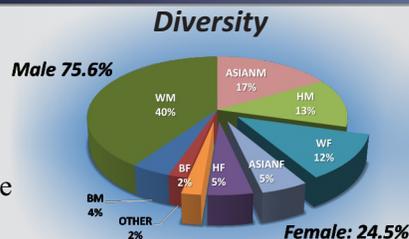
NSWC Corona is located in southern California between San Diego and L.A., 50 miles east of L.A. in Norco, Calif., with detachments in Fallbrook and Seal Beach. Employees work around the country and in Japan at 14 additional locations.



A catalyst for the region to develop as a national innovation hub with a focus on 1) Data Analytics and Visualization; 2) Networked Data Environments; and 3) Measurement Technology.

Trust, Transparency, Teamwork

Our recruitment goals reflect our commitment to expanding diversity across our full spectrum of support. Corona offers strong mentorship, training, and education programs designed to shape our current and future workforce to meet the Navy's needs.



Performance Assessment Department

The Performance Assessment Department (PA) delivers trusted data analysis in order to meet Fleet and Sponsor mission requirements with the underlying goal to help the US Navy maintain its competitive advantage over its adversaries. Understanding that the margins are razor thin, the department continues to push the envelope across both T&E and Fleet Analysis data lifespans. So whether in the accessibility of capturing data underway via SMART Data adaptive filtering with department developed shipboard systems like Real-time Extraction & Analysis Processor (REAP) and Portable Advanced Telemetry Acquisition System (PATAS) or transmitting from anywhere in the globe back to Corona via our Ku-Band SATCOM system, the department understands analytics cannot be started before data are obtained and delivered.



Though the genesis of PA was that of missile systems, over the decades the department has increased its analytical catalogue to include [the key warfighting elements within] Combat Systems, Interoperability across the Fleet, and more recently Cybersecurity. PA engineers, scientists, and mathematicians develop and utilize consistent evaluation criteria, processes, analysis software, and methodologies to determine and report performance capabilities, trends, and limitations of our warfighter systems. The department closes the gap between raw data and actionable data by leveraging data science methods and technologies in order to deliver analytics and insight at the speed of relevancy.

PA also believes in a collaborative solution for the Navy by optimizing capabilities from across the technical enterprise. To this end, the department develops and shares data management and analysis plans, technical methodologies and frameworks, and in-house developed analysis software. Moreover, the department enables collaborative test observation and data analysis with on-station laboratories (Cybersecurity (C-PRIME Lab), Live/Virtual/Constructive (TRON Lab), and Test Observation and Analysis (JWAL Lab)).

Today, PA focuses on refining capabilities that will facilitate automated shipboard data collection via the Enterprise Data Processing System (EDPS) and leverage data transmission globally utilizing a combination of the Mini-REAP system and the Navy Continuous Training Environment (NCTE) infrastructure. It's incorporating machine learning to raise the utilization of data by calculating comprehensive data-driven metrics and automation to deliver analytics faster.

Range Systems Engineering Department

The Range Systems Engineering Department (RS) provides Naval surface and air range systems engineering and technology solutions to support Naval and Joint training and testing. RS engineers, integrate, and install instrumentation on test and training ranges, including shipboard systems and remote range areas, providing information assurance certification and accreditation for installed systems. For Fleet tactical training ranges, RS provides range systems engineering, maintenance, and operations to support Fleet training live, virtual, and constructive (LVCT) events, including the Fleet Synthetic Training at Sea (FST at Sea) capability. Under the LVCT technical engineering agent responsibility, RS engineers the Naval Enterprise Tactical Training Network (NETTN) and manages the Navy Continuous Training Environment (NCTE) integrating architecture. RS ensures that existing and future range systems meet the Fleet's demand for combat realism, live mission monitoring and replay, and information and data collection for analysis and assessment. As such, RS delivers participant tracking, communication systems and networks, electronic warfare, information operations, weapons scoring, and various other range systems to support squadrons, air wings, carrier strike groups, expeditionary strike groups, amphibious readiness groups, composite training unit exercises, Joint task force exercises, and other large force exercises.



Expeditionary Systems Engineering Division (ESED) within RS, located adjacent to Marine Corps Base Camp Pendleton aboard Naval Weapons Station Fallbrook, provides ground ammunition and weapons engineering expertise to USMC and the Joint community. ESED works directly with the acquisition community and warfighter, supporting fleet logistics, combat operations, and training by providing cradle to grave research and development, test and evaluation, lifecycle engineering, and acquisition expertise.

Measurement Science and Engineering Department

The Measurement Science and Engineering Department (MS) serves as the technical advisor for the Navy's Metrology and Calibration (METCAL) Program, ensuring measurement accuracy and traceability to the International System of Units (SI) to reduce the risk of wrong test decisions and improve Fleet lethality. In this role, MS is responsible for disseminating calibration guidance to over 2,750 personnel across the Naval enterprise. MS professionals author the detailed calibration procedures used to perform nearly 500,000 calibrations each year on the Navy's more than 1.6 million pieces of test equipment. MS collects the results from these calibrations and use this data to establish and optimize the calibration periodicities to ensure the proper risk vs. cost trade off specified by OPNAV. Early in the acquisition lifecycle, MS works with program offices to validate the measurement requirements of the systems to ensure that fielded systems are not over calibrated nor are they under calibrated. In measurement areas where the Navy/USMC are unable to find a suitable commercial solution, MS partners with the National Institute of Standards and Technology (NIST), the Army, and the Air Force to ensure that measurement technology is developed in a complimentary manner and that fielded solutions will interoperate across the services.



MS also conducts strategic systems testing and analysis, and surveillance assessment for Trident Reentry Systems Mk4, Mk4A and Mk5, providing assessment reports on reliability, stockpile retention, cost-effective maintenance, and disposal of suspect components or weapons.

Acquisition & Readiness Assessment Department

The Acquisition and Readiness Department (AR) provides two distinct capabilities: Acquisition Assurance and Readiness Assessment.

In Acquisition Assurance, AR provides program managers with confidence there is rigor in the development, production, and sustainment processes for complex systems. AR's primary sponsors are program managers for Strategic and Missile Defense systems that have a very low tolerance for failure, or other program managers when particular system problems arise. AR accomplishes this through 1) developing tailored Quality and Mission Assurance (Q&MA) requirements, which outline program office expectations for management and customer involvement in key technical processes during acquisition and sustainment such as: system engineering, test, configuration control, reliability, manufacturing; 2) training the contractor and government community on Q&MA requirements; and 3) conducting assessments and providing on-site technical experts to determine and improve the effectiveness of the Q&MA activities and rigor.



In Readiness Assessment, AR executes programs to provide the Fleet and Shore community with transparency into the material readiness of critical weapon, combat, C4I, and HM&E systems and the factors driving material readiness. AR developed and maintains the OPNAV-charted authoritative source for operational availability metrics, with over 600 systems and 2800 variant reliability models, and the ability to calculate material readiness metrics for over 45 system of system warfare area and platform configurations. AR's readiness business intelligence capability has broad utilization across Navy Program offices, In Service Engineering Agents, Regional Maintenance Centers, OPNAV, and the Fleet. This evolving data science capability is also providing data transparency, analytics, and visualization to address the Navy's increasing expectations for making data-driven decision. This includes leading the Ships Maintenance Data Improvement Initiative (SMDII), a CNO-directed initiative to COMNAVSEA for readiness and cost across Fleet maintenance availabilities.