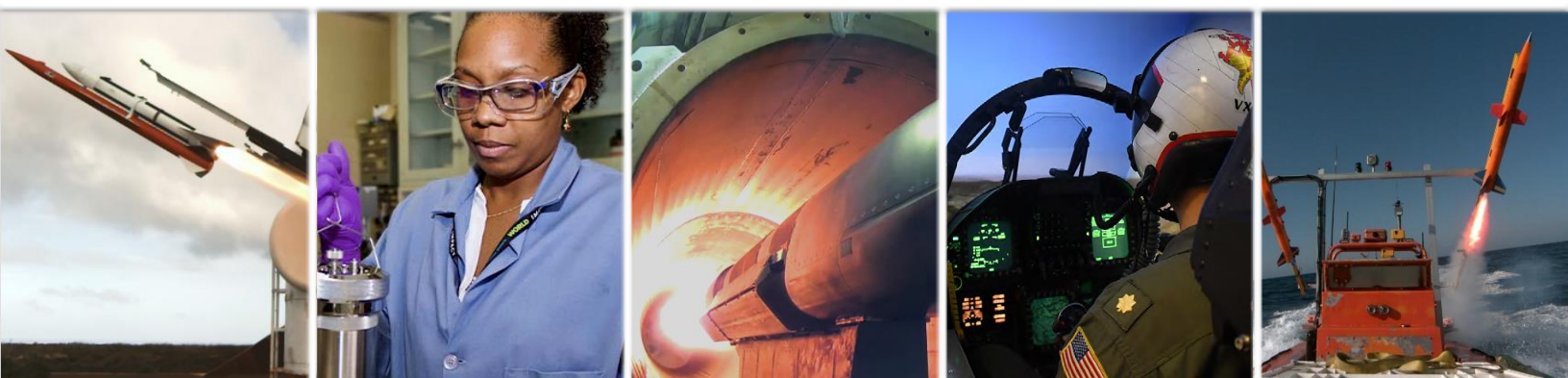


Naval Air Warfare Center Weapons Division (NAWCWD)

NAVAL AIR SYSTEMS COMMAND

2023 Highlights

- ▼ The Next-Generation Highly Loaded Grain project team has matured the technology and seeded the development of future mission-modular propulsion systems that can increase weapon ranges by up to 1.5x while maintaining inner boundaries for short-range and time-critical missions.
- ▼ The Tactical High-Speed Offensive Ramjet for Extended Range and ASU-54 programs further matured Solid Fuel Ramjet technology and are advancing this critical technology for the Warfighter while helping solve Navy-specific constraints.
- ▼ A Radio Frequency Boot Camp was developed to help bridge a gap for this necessary skillset and engineering specialty. It has been widely successful and is providing immediate benefit to current and future warfighting capabilities by equipping engineers with critical knowledge in a much faster-paced environment.
- ▼ NAWCWD established a high-temperature environmental furnace capability that can generate char up to 2,000°C, allowing for continued work in producing high-quality char and its role in long-range fires.
- ▼ Supported production and test of over 5,500 weapons and 316,000 components, release of 30 software updates and reprogramming of nearly 2,200 All Up Rounds, and repair/upgrade of over 9,300 weapons. The following firsts were achieved:
 - ▼ Ground launch of Maritime Strike Tomahawk
 - ▼ Flight Test using a shot corridor from the NTC Fort Irwin to NAWCWD, providing a 40% increase in overland flight test range
 - ▼ Flight Test using a shot corridor from the Nevada Test and Training Range to NAWCWD, providing a nearly 200% increase in overland flight test range
- ▼ Organically developed and released 29 domestic and FMS mission data threat files for multiple AOR and OFPs for multiple jammer systems.
- ▼ Delivered Joint Mission Planning Systems capability to warfighters, including 18 MPEs to support 7 different platforms and 11 asynchronous releases to support 9 different platforms. In total, NAWCWD actively sustains end-to-end mission planning lifecycle support for 22 different naval aviation and sea platforms for all U.S. services and 28 FMS partners



Naval Air Warfare Center Weapons Division (NAWCWD)

NAVAL AIR SYSTEMS COMMAND

With more than 75 years of accelerated, game-changing weapons development, testing, and integration, NAWCWD delivers products and innovations that support our National Defense Strategy and provide a tactical advantage to the fleet. Navigated by its core values—Service, Trust, Accountability, and Respect—NAWCWD is uniquely positioned to help accelerate the delivery of capabilities that our warfighters need at a cost we can afford. To deliver on capabilities that are both integrated and interoperable, NAWCWD is focused on deliberately planning and executing across key enablers:

- A highly engaged and technically capable workforce
- A modernized and integrated technical infrastructure
- Efficient business practices that serve NAWCWD's mission
- Strong partnerships that promote productive competition

While NAWCWD continues to excel at ongoing core competencies such as energetics, electronic warfare, targets, integration, and sustainment, to focus efforts at the intersection of what we can expertly do and what best serves the Navy the following strategic focus areas have been identified:

- Weapon Systems Development Transformation
- Integrated Spectrum Warfare
- Air Wing of the Future Integration and Interoperability
- Advanced Live, Virtual, and Constructive Capabilities

Mission

We deliver integrated and interoperable warfighting capabilities through cutting-edge research, development, acquisition, test, evaluation, and sustainment to provide the warfighter the decisive advantage.

Vision

To give warfighters the very best to win today, tomorrow, and into the future.

Technical Capabilities

- Air-to-Air Weapons Development/Integration
- Air-to-Ground Weapons Development/Integration
- Missiles/Freefall Weapons Development / Integration
- Energetics RDT&E
- Electronic Warfare Systems RDT&E
- Land and Sea Range Development/Management
- Live Fire Testing
- Platform/Weapon Integration
- System of Systems Integration
- Developmental Test Squadrons: VX-30, VX-31

Major Facilities

Point Mugu

- Point Mugu Sea Range (36,000 sq.mi.)
- EA-18G Airborne Electronic Attack System Integration Laboratory
- Electronic Combat Simulation and Evaluation Laboratory
- High-Power Electronic Attack Technique Radiation Laboratory
- Jammer Technique Optimization Laboratory
- Laguna Peak Range Instrumentation
- Marine Corps Spectrum Integration Laboratory
- Radar Reflectivity Laboratories
- Sea Range Operations Center
- Threat Target Systems
- US-AUS Trans-Pacific Electronic Attack Research Laboratory
- Airfield

San Nicolas Island

- Range Instrumentation
- Theater warfare exercises and littoral warfare training
- Airfield

China Lake

- China Lake Ranges (1,829 sq. mi. Land /20,000 sq.mi. Airspace)
- Advanced Weapons Laboratory
- South Airfield Aircraft Integration Laboratory
- Dr. Marguerite "Peggy" Rogers System Integration Laboratory
- China Lake Propulsion Laboratory (Energetics Research)
- Ordnance Test Support and Technical Services Laboratory
- Motor Assembly Compound
- Salt Wells Pilot Plant and Carl Schaniel Laboratories
- Skytop – Trident and large rocket motor test facility
- T-Range (Air Breathing Test Facility)
- Integrated Battlespace Arena
- Lauritsen, McLean, Michelson, and Weapons and Armaments Technology Laboratories
- Supersonic Naval Ordnance Research Track
- Weapons Survivability Laboratory (Live Fire Test & Evaluation)
- Airfield

Workforce Profile for 2023

Total number of employees: 184 military and 6,027 civilian
Number of scientists/engineers: 2,828

Advanced Degrees – 2023

PhDs - 113
Masters – 966

Total Annual Funded Program-2023

Annual Revenue: \$2.13 billion
Contracts issued: \$7.2 billion

NAWCWD Leadership



RDML Keith A. Hash, USN
Commander



Daniel Carreño, SES
Executive Director

NAWCWD Sites

