

**Mission.** Completed in 2011, this facility provides a centralized location for weapons support equipment (WSE), test measurement and diagnostic equipment (TMDE), and general purpose electrical / electronic test equipment (GPETE) and delivers world-wide support for the Navy, Air Force, and FMS customers.



**Unique Features.** The high-tech paint booth allows quick and safe conformal coating to be performed in-house, saving time and expense.

**Combat Support.** The Information Operations (IO) Team provided IO electronic warfare systems, including more than 50 deliverable payloads, ground stations, and data links, to forward-deployed forces in both U.S. Central Command and U.S. Africa Command theaters. These systems provided crucial in-theater capabilities for tactical operations. Working under difficult and compressed timelines and schedules, the team developed and supplied hardware at a significantly reduced cost when compared to commercially available solutions.

**Cost / Time Savings Examples.** The HARM, Sparrow, and Sidewinder Weapons Support Equipment Teams routinely replicate and solve many software and hardware failures found in the field without ever having to leave the laboratory. With adequate customer supplied data via phone calls, photographs, and e-mails, many issues are quickly resolved, and replacement parts can be acquired without the time and expense of personnel travel.

The Navy Common Munitions Built-In Test [BIT] Reprogramming Equipment (CMBRE) Team managed a cross-competency and joint service (Navy / Air Force) effort reclaiming and repairing 148 missiles (ADU-891 / Sidewinder mid-body interface). The team used "just-in-time" practices, permitting the warfighter to maintain 100 percent readiness during the process. By using innovative technical methodologies, and effective inventory management, the team achieved a reproducible cost savings of \$523,000 and completed the project in nearly seven months, under schedule and under budget!

**RDT&E.** WATL provides weapon support equipment for HARM, Sparrow, and Sidewinder missiles, to name a few, and performs CMBRE and missile simulations, providing support for customers worldwide.

- **Weapon / Target Programs Supported.** AARGM, AMRAAM, Dual-Mode Laser-Guided Bomb (DMLGB), HARM, Joint Air-to-Ground Missile (JAGM), JDAM / Laser JDAM (LJDAM) / Direct Attack Moving Target Capability (DAMTC), JSOW, Multi-Stage Supersonic Target (MSST), Small-Diameter Bomb (SDB) II, Sidewinder, SLAM-ER, and Sparrow
- **Future programs.** P-8 / High-Altitude Antisubmarine Warfare Capability (HAAWC), Counter-Mine System, AEAE (MALD-J)
- **CMBRE.** Products and services include prototype development, efficiency and modernization RDT&E, and electrical systems
- **Design Agent Role.** NAWCWD serves as the design agent for the SeaSparrow and the ESSM missile simulators
- **Documentation.** Engineering change proposals (ECPs), notice of revisions (NORs), software change notices (SCNs), technical manuals, support equipment changes (SECs), software description documents, reports, and plans in support of specific weapon IPTs
- **GPETE.** Electronic test equipment is used during ship construction, fleet modernization, and determination of obsolescence
- **Sidewinder**
  - World-wide support on a wide variety of test and support equipment for FMS, U.S. Navy, and U.S. Air Force
  - AIM-9M -TS-4044 series, TS-3860 series, and AN/DSM-152 series test sets
  - AIM-9P - AN/ASM-447 test set
  - AIM-9M infrared target simulation (IRTS) calibration station
- **AMRAAM.** Support launcher power supply test set (LPSTS) and TS-4108 missile bit test set (MBTS)
- **Laser-Guided Bomb.** Support TTU-373, TTU-394, and TTU-595 test sets
- **Gun Systems.** Provide depot support for TTU-433 test sets

**Program Description**

- Research and develop new equipment to meet customers' needs
- Provide technical support for Fleet, Air Force, and FMS customers
- Provide test equipment training for Fleet and FMS
- Manufacture and provide test equipment obsolete upgrades





**Persistent Ground Surveillance System (PGSS).** WATL is unique in that it has a large restricted access storage yard capable of storing and staging large items, such as the huge PGSS mini blimps (aerostats), which were staged in the WATL high-bay facilities. In only six months, NAVAIR engineers at the special surveillance program (SSP) at Patuxent River, Maryland, developed, tested, and fielded the PGSS, which was used to protect forward operating bases in Afghanistan by providing the ability to detect approaching combatants from long distances.

**Weapons Sustainment Support (WSS) Branch.** WSS transitioned from the Naval Surface Warfare Center (NSWC), Crane, Indiana, as part of the 2005 Base Realignment and Closure (BRAC). It is unique in that it continually monitors the status of all naval weapons and components and keeps current and accurate inventory and procurement data. Data are used to plan maintenance requirements, detect possible vulnerabilities in support, contract procurement to replace shortfalls and make budgetary recommendations for maintenance and repair. The team assists warfighters anywhere in the world by providing repair instructions or parts replacement.

- **1-800 Help for Weapons Related Issues.** WSS investigates fleet issues related to weapons inspection, packaging handling, testing, storage, and containerization and responds quickly. WSS assists with replacements of defective or nonoperational parts and responds within 48 hours to any U.S. facility and within 96 hours anywhere in the world.
- **Programs Currently Supported**
  - **PMA-201:** Responsible for general- and special-purpose bombs, components, laser-guided bombs, JDAMs, cluster weapons, associated containers, packaging, and hardware
  - **PMA-242:** Responsible for HARM, AARGM, Hellfire, Maverick, Tube-launched Optically-tracked Wire-guided (TOW) missiles, pyrotechnics, machine gun ammunition, rockets, Jet-Assisted Takeoff (JATO) / Rocket-Assisted Takeoff (RATO), and associated containers, packaging, and hardware
  - **PMA-272:** Responsible for chaff, decoy devices, airborne expendable countermeasures, and associated containers, packaging, and hardware

**WATL Products and Services** (in alphabetical order)

- Automated test equipment (ATE)
- Data analysis
- Design, in-service, reverse, software, and systems engineering
- Documentation
- Engineering investigations and solutions
- Field support and training
- Maintenance and repair
- Obsolescence analysis
- Systems verification and validation
- Technical directives
- Upgrades and modifications



**Size / Description / Scope.** Over 75,000 SF. Includes 2 large and 16 small high-bay laboratories, HARM, Sidewinder, CMBRE, electrical laboratory, paint booth. **Plant Value:** \$32M+.

**Main Facilities.** WATL was built on China Lake's main campus and completed in 2011; it helps to facilitate China Lake as the Naval Integrated Weapons and Armaments RDAT&E Center of Excellence.

The larger bays are equipped with 15,000-pound rated bridge cranes with a minimum of 25-foot clearance. The smaller laboratory bays each have 1,000-pound bridge cranes for lifting missile and weapons components. The Sparrow Missile Laboratory and "Build-up Area" are supplied with 2,000-pound bridge cranes for lifting heavier components. The WATL facilities also include electrical laboratories with raised flooring, HARM Missile Laboratory, a Sidewinder Missile Laboratory, and additional specialized areas including a CMBRE Laboratory, fabrication and repair laboratory, paint booth, and large outdoor storage area.

Open office areas with modular furniture cubicles are provided for technicians, scientists, and engineers. The remainder of the facility is comprised of a reception / lobby, six private offices, a conference room, restrooms, shower rooms, a break / lunch area, a communication room, and a SIPRNET communication room.

