Mission. Provides Warfighters with the ability to detect, analyze, attack, and defeat electronic threats through complete airborne electronic attack (AEA) and electronic support (ES) systems integration, test, and life cycle support.


RDT&E. Point Mugu has been the center of AEA research, design, and test since 1968. The EA-6B and the new EA-18G “Growler” provide an electronic cover for an entire strike group allowing fighter and attack aircraft to safely penetrate enemy defenses. Since 1990, most strike groups insist on the protection of an AEA force field. Since the early days of the Vietnam conflict, the EA-6B has been the Navy’s primary platform for suppressing enemy defenses through jamming of communication links and radars. AEA is the RF “black art” of scouting, recon correlation, deception, exploitation of enemy signals and suppression of enemy defenses, and opportunistic timing of assault.

New techniques include agile spot and deceptive jamming, overhead sensor correlation for real-time “order of battle” awareness, and electronic surveillance and correlation. Integrated assault theatre and topographical maps optimize offensive strikes. Staff performs exhaustive system and mission effectiveness testing prior to aircraft ground and flight tests. Laboratories provide time-critical information and correlated threat parametrics to mission planning and active combat missions. With an advanced electronically scanned array radar, digital data links, and air-to-air missiles, the new Growler will have self-protection capabilities and be effective for target identification and prosecution. In 2007, the Weapons Division received delivery of the first EF-18G.

Size / Description / Scope. The AEA and mission planning laboratories at Point Mugu are comprised of 32,000 SF of classified laboratory space including 8,300 SF of RF shielded facilities. EA-6B facilities opened in 1973.


Facilities

- **EA-6B Weapons System Support Laboratories (WSSL).** The laboratory operates 24/7 to effectively jam enemy radar, communications, and electronic data links. The laboratories bring new capabilities to the Warfighter in support of the Global War on Terror. The WSSL provides a realistic environment for developing and testing embedded software. Specialized simulations provide HWIL test capabilities for new and upgraded subsystems. The WSSL also provides a full suite of EA systems, including the ALQ-99 Tactical Jamming Pod, mission computer displays, and anti-radiation missiles.

- **USQ-113 Communication Jammers Laboratory.** Supports software development for controls and displays, plus integration and performance testing. Provides expanded frequency coverage and advanced jamming waveform technologies that are critical to defeating cell phones and other enemy communications devices.

- **Fleet Trainers.** Delivers full life cycle support by providing systems and software upgrades to fleet training devices, ensuring that training efforts are in sync with aircraft block upgrades.
EA-18G AEA Subsystem Laboratory. Connected via a secure network with the F/A-18 Advanced Weapons Laboratory at China Lake to ensure that current and future Prowler capabilities are successfully transitioned to the Growler during post-production upgrades.

Joint Forces Command (JFCOM) Information Operations (IO) Range. The laboratory has IO connectivity with the range and supports distributed testing.

- Delivers about 500 user data files (UDFs) (baseloads, transaction files, and rapid reaction files) annually
- Provides end-to-end integration, optimization, and simulation testing of EA components
- Supports military EA systems, such as tactical, target designation, reconnaissance, intelligence, mission planning, and network centric integration
- Provides around-the-clock threat analysis and technical support to keep the Warfighter effective against changing threats

Jammer Technique Optimization (JATO) Facility. Established in 1984 to coordinate testing of new jamming waveforms on the ALQ-99 Universal Exciter. Today, the team develops, validates, and provides optimal radar and communications jamming techniques, tactics, procedures, and strategies (TTPS) using software models; analysis; and laboratory, ground, field, flight, and foreign material exploitation (FME) testing. Using mobile test vehicles (MTVs), testing is inexpensive and accurate. The team improves EA-6B / EA-18G receiver / emitter interaction and reduces interference with blue forces.

EW Data Systems (EWDS) Laboratory. Since 1992, the EWDS team has provided the latest operational and intelligence data, including order of battle, performance and characteristics of each threat, electronic intelligence for threat identification, and targeting information to defeat the threat. The first EA-6B release occurred in 1992, and the team has been expanding its platform support.

EW Joint Mission Planning System (JMPS) Laboratory. Provides computer tools to aid in planning aircraft missions. It consists of computer hardware using common core software called the Joint Mission Planning Environment (JMPE) combined with Unique Planning Component (UPC) software that supports the particular aircraft or user. JMPS will support most DoD aircraft, weapon, and sensor assets.

- EW Tactical Information and Report Management System (ETIRMS) Unique Planning Component. Here, signals intelligence (SIGINT) data, sensor-engineered data, as well as data from actual systems, and data extrapolated from national intelligence sources and science and technology (S&T) centers are displayed graphically on a map and through intelligence windows. Operational squadrons using ETIRMS include EA-6B, F/A-18, EA-18G, E-2C, and MH-60R, training and operational Aviation Squadrons (Air Force, Navy, Marine Corps), Fleet Intelligence Centers, Advanced EW Schools, and National Analysis Centers.


- E-2C / MH-60R Hawk Tool UPC. This mission planning tool, under the JMPS, supports both the E-2C / D ALQ-210 and MH-60R ALQ-217 Electronic Support Measures (ESM). These subsystems are passive sensors that detect, identify, and locate sources of RF emissions. Advanced precision location techniques are employed to determine geographic locations of stationary and slow moving emitters.

- AN/ALQ-231(v) Intrepid Tiger Pod In-Service Support Facility. The Intrepid Tiger Spiral 2 Communications Jammer (AN/ALQ-231) addresses an expanded target set and is designed to adapt for tomorrow’s predicted target set. It is a critical element of the USMC’s effort to transition from a high demand, low-density EW capability provided by the EA-6B into a high-density integrated Marine-Air Ground Task Force (MAGTF) EW through a system of systems (SoS) approach. It fulfills Joint Urgent Operational Needs Statements (JUONS) and Unified Combatant Commander calls for additional airborne electronic attack capability.