

SPECIAL ENFORCEMENT BUREAU

DIVE OPERATIONS

The Los Angeles County Sheriff Department (LASD)-Special Enforcement Bureau's Dive program is one of the most diverse Public Safety Dive programs in the world. They are responsible for coordinating and supervising all LASD underwater operations throughout Los Angeles County.

Los Angeles County is a geographically diverse area. Los Angeles County remains one of the nation's largest counties with 4,084 square miles. Its population is 10,347,437, which is the largest population of any county in the nation. It includes the islands of San Clemente and Santa Catalina with a mainland coastline of 75 miles. The highest point is Mt. San Antonio (Old Baldy Peak) at 10,064'. The highest body of water is Crystal Lake at 5500' above sea level. There are 29 major lakes and reservoirs, 4 major rivers, over 90 miles of the L.A. Aqueduct consisting of the East & West branches, open ocean between the mainland and the two islands and countless other bodies of water including quarries, ponds, wash basins, and streams. With such a geographically diverse area it's necessary to have a diverse, well trained, well equipped dive team. The Special Enforcement Bureau (SEB) dive team fulfills that need.

SEB Dive Responsibilities

- Search and recovery for items of evidentiary value
- Search and recovery of bodies
- Underwater photography & video documentation
- Vehicle and plane recoveries
- Ship hull searches for narcotics and explosives
- Pier searches for explosives
- Homeland Security Critical Facilities inspections
- SCUBA diving death investigations within Los Angeles County

Special Enforcement Bureau Emergency Services Detail (ESD) members also serve as paramedics for maritime operations. Special Enforcement Bureau divers are available to respond to underwater operations 24 hours a day, seven days a week.



Diver hoisted from water in Air 5

Equipment

Individual SEB dive members are equipped with a full assortment of SCUBA gear, full-face masks, drysuits, and underwater communications equipment. Team gear consists of additional underwater communications equipment, search tools and equipment, underwater navigation equipment, underwater metal detectors, salvage equipment and tools, scanning sonar, side scanning sonar, ROVs (Remote Operated Vehicles) and DPVs (Diver Propulsion Vehicles). Additionally, the Unit regularly uses LASD Sikorsky H-3 helicopter for dive deployments and extractions.

DIVE OPERATIONS (Continued)

Training

All SEB divers begin their training with an in-house 320 hour Public Safety Dive course. The course is California POST (Peace Officer Standards & Training) approved and certified by NAUI. This course is an Advanced Public Safety Diving class. It provides the student diver with the skills and knowledge needed to gain experience and minimize risks in Public Safety Diving. It incorporates classroom academics, confined water and open water diving. The course includes instruction in all the following categories: gear requirements & readiness, call-out & response procedures, dive planning, US Navy Dive table review, basic SCUBA skills review, rescue techniques, search techniques, salvage theory & techniques, river and canal searches, surf searches, ship hull searches, navigation, night, low visibility, zero visibility, deep diving, full face mask, underwater communications, dry suit, contaminated water, altitude & cold water diving. The greatest possible variety of diving situations is used. Training dives include confined water (pool), lake, shore, boat, ocean, surf, kelp, current, reef, rock, mud, sand and aqueduct diving. All SEB divers are trained and certified to 165fsw (feet sea water). Beyond the initial training, SEB divers receive training in the following specialties: Dry suit, Full Face Mask, Nitrox, Rescue, Ice, Underwater Post Blast Investigations, Emergency Dive Accident Management (EDAM), Anti-Terrorism, Divator MKII Technician and Surface Supplied Air (SSA). Dive operations range from the simple to the complex. The Marine Dive Company is a unit of reserves assigned to SEB ESD. The Dive Company is made up of boat handlers, technicians, and underwater specialists who can assist with dive operations. Additionally, there are 15 SEB SWAT divers who have completed the Public Safety Diver Course who routinely assist SEB-ESD members in on-going maritime operations.

Specialized Diving



Recovering plane crash debris

Surface Supplied Air Diving is a specialty regularly used by ESD. Divers receive their initial training at the National Polytechnic College of Engineering and Oceanengineering-Wilmington. Surface Supplied Air diving is utilized in special circumstances when one or more of the following conditions are met; contaminated water, extremely low or zero visibility, risk of structural or natural collapse, risk of entrapment and potential for extended bottom times leading to decompression diving. Surface Supplied Air diving dramatically increases diver safety. Surface personnel maintain “positive” control over diver and are capable of monitoring the diver’s depth, bottom time, air consumption and stress levels. In addition, surface personnel maintain constant communications with the diver. There is a safer resolution of entanglement or collapse and virtually an unlimited air supply for the diver. Surface Supplied Air diving allows for increased bottom times at deeper depths utilizing in water decompression. ESD owns modern, state of the art equipment including Kirby Morgan KM-57 helmets, Kirby Morgan KMACS Air Control Consoles, Aquaflo 3-Member Umbilical's and Viking HD Dry suits.

DIVE OPERATIONS (Continued)

SEB-ESD additionally maintains divers trained and certified in Technical Diving as Extended Range-Advanced Trimix Divers. These divers are capable of dives to 300fsw (feet sea water). This capability enhances the Unit's ability to execute dives in the ocean and inland lakes which exceeds their traditional maximum depths of 165fsw.

BOAT OPERATIONS



As part of the Homeland Security Division, the Special Enforcement Bureau has been deeply involved in the planning and implementation of maritime homeland security measures for the County of Los Angeles. A program was designed to provide a tactical maritime LASD homeland security presence covering the 80 miles of Los Angeles County coast and the over 800 square miles of open-ocean within Los Angeles County, including the islands of Catalina and San Clemente.

The Special Enforcement Bureau maintains and utilizes a fleet of boats ranging from a 56' diesel powered jet for ocean operations to 11 meter RIBs. SEB homeland security boats are capable of providing tactical, emergency medical services, disaster, chemical/biological detection and mitigation and dive operations. The boats have comprehensive communications systems that allow the crew interoperable communications with the Los Angeles Police and Fire Departments along with all other police and fire departments that border the coastal areas of Los Angeles County. They have federal, state, and military communications capability and can communicate with the Los Angeles County Medical Alert Center and all Los Angeles County-based trauma hospitals.

The boats have a range of several hundred miles and have the capability of staying on scene at an incident for up to one week. They generate their own electricity and have cooking, fresh water and refrigeration capabilities in addition to sleeping quarters. Another unique aspect of the boats is that they are Los Angeles County Department of Health Services certified Advanced Life Support ambulances. As such, they have the equipment available for the crew to provide medical treatment ranging from minor injuries to severe cardiac and/or trauma injuries. The boats are equipped to transport injured persons in a climate controlled environment.



Air 5 hovering over Ocean Rescue 2

BOAT OPERATIONS (Continued)



Ocean Rescue 1 patrolling around cruise ship

The homeland security boats are designed as dive platforms, capable of supporting up to 15 divers. They have large dive tank storage capacity and hot and cold water decontamination systems that can be used for divers or accident victims exiting contaminated waters. The boats support surface supplied hard hat diving and sonar scanning to help locate victims or objects under water.

Various intelligence agencies have indicated that the port and coastal areas are prime terrorist targets. It is the largest port in the United States and is surrounded by heavily populated areas. In addition to the human toll that an incident could cause, it is estimated that a terrorist incident occurring at the entrance to the port or in the port itself, would cost the United States economy one billion dollars a day.

To counter this threat the SEB, along with Arson/Explosives Detail, Emergency Operations Bureau and HAZMAT detail, have combined efforts with the United States Coast Guard to implement a very robust, proactive port and coastal security program that includes searching high interest vessels before they enter the heavily populated ports.

The addition of the Los Angeles County Sheriff's Department homeland security boat program has increased the port and coastal security of the County of Los Angeles for the residents of Los Angeles County and the entire region.

Using sophisticated radiation detection equipment and trained explosive dogs an LASD team checks ships for conventional explosives, weapons, nuclear devices and dirty bombs. SEB divers will also periodically conduct hull searches. The ship is then cleared to continue into the port where additional security measures are in place and enforced by the U.S. Coast Guard, L.A. Port Police and Long Beach Police.



SWAT Deputies repelling from Air 5 onto cargo ship

Additional missions being conducted by the SEB Ocean Rescue crews include counter-panga operations, LAX flight path and coastline patrols, Catalina cruise ship and Catalina Express security checks and dives on coastal critical infrastructure.