

Underwater Post Blast Investigations

by
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During the week of October 4 through 8, 2004, Bomb Technician Divers from the Federal Bureau of Investigation, the Los Angeles County Sheriff's Department Bomb Squad and the Los Angeles Police Department Bomb Squad hosted a course in Underwater Post Blast Investigations at Castaic Lake, California. The course was offered as a "pilot" for a newly developed curriculum designed by the FBI and LASD to train public safety divers in the specialized skills associated with underwater crime scenes, and is believed to be the first such course offered in the Nation taught both by and for law enforcement divers.

The 40 hour course was attended by public safety and military divers from agencies including the Los Angeles Police Department, the Los Angeles Sheriff's Department, Federal Bureau of Investigation, the Orange County Sheriff's Department, and the United States Coast Guard.



During the week long course, students were introduced to concepts related to underwater bomb scenes through both lectures and practical exercises. The lectures provided an introduction to basic underwater explosives theory, training on the recognition and identification of manufactured and improvised limpet and sea mines, an introduction to D.C. electronics as commonly employed in improvised explosive devices, an overview of skills used in post-blast fragmentation analysis, and underwater crime scene management. Lectures related to basic underwater search techniques, black-water diving, and evidence collection, logging and preservation techniques were reinforced by practical exercises conducted both in and out of the water.



Under the current curriculum, practical exercises make up over 20 hours of the course instruction and are designed to place students in the water to work actual bombing crime scenes and test each student's diving skills while locating, identifying, documenting, and recovering post blast evidence from an underwater environment after providing instruction on these topics.

Course coordinators Greg Rabinovitz, (SABT FBI - Los Angeles) and Greg Everett (Deputy, LASD Bomb Squad) developed the course to coordinate and train the public safety dive teams in the Los Angeles area. Input from Chris Christensen (LAPD Bomb Squad Officer) and Morgan Bodie (SABT FBI - Dallas) was used to test-run the curriculum prior to the pilot school,



FBI and LAPD Divers discuss using underwater video to document the crime scene

whose development was spurred by the increasing interaction between public safety divers and bomb squads at the Port of Los Angeles.



OCSD and LASD Bomb Technician Divers prepare to descend to the wreck in search of explosives seen during the ROV sweep

The Los Angeles office of the FBI and the Los Angeles Sheriff's Department bomb squad have, since 1996, provided joint training to first responders from local, state and federal agencies across the Nation through a series of Basic and Advanced Post Blast Courses which teach and exercise many of the skills emphasized in the new Underwater Post Blast Course. Everett and Rabinovitz treated the demand for a related course focused on the underwater crime scene environment as an extension of the training they had already been providing. "As we have long recognized, there are not enough bomb technicians in any region to provide for the potentially weeks or months-long demands of a major bombing crime scene. While bomb squads will remain the experts in Post Blast analysis, it is imperative that we leverage their knowledge and skills by providing for a cadre of trained bombing crime scene specialists who can be called upon to assist at major scenes." This statement becomes even more true in the underwater environment – There are few bomb squads in the Nation today which maintain operational dive teams capable of managing major underwater bombing crime scenes alone, and these resources are rapidly exhausted by preventive demands in areas with active port operations even before the impacts of a major crime scene are overlaid on top of these daily needs. This course is designed to help agencies meet those demands.



FBI and LASD Divers surfacing from a recovery dive



A de-brief at the scene

"When we first started thinking about this course, we met with Navy EOD at Point Mugu and requested they come on board to assist with the instruction. The Navy agreed, and provided outstanding instructors for portions of the course." Everett and Rabinovitz brought in SABT Bodie – one of only two FBI bomb technician divers to work at the scene of the USS Cole bombing in Yemen – from Dallas to teach at the course "to add further credibility to the instruction." "One of the traditional hallmarks of our Post Blast courses has been our ability to bring in the folks who have first-hand knowledge of some of the incidents which we discuss in the course" said Everett and Rabinovitz. "We felt that we needed to continue that tradition for this course to be equally successful."

The course's major crime scene practical exercise was arranged to force dive teams at a scene which required the implementation of a "Unified Command" under the Incident Command System structure. "The FBI Agents in the class fell right into one of the traditional roles of the FBI at such scenes - administering the Incident Command." SA George Carr, the Team Leader for FBI Los Angeles' Underwater Search and Evidence Recovery Team



FBI Diver watches from shore as FBI ROV searches the bottom for debris from the blast

(USERT) managed the administrative details of the overall scene, while LAPD Dive Team Sergeant Dan Bunch ran Dive Operations, employing the resources of numerous agencies, each with specific capabilities and responsibilities, in order to achieve the mission - the safe and efficient processing of a complex crime scene which extended over a stretch of beach, out into the water and through a murky section of lake bottom littered with evidence, unexploded IEDs and leftover explosives.



Divers eventually float the suspect's boat

Throughout the operation, bomb technicians and bomb technician divers lent both their expertise and their skills to others at the scene, at one point working with divers to deploy an underwater ROV capable of dragging an unexploded IED to the beach where it could be rendered safe without compromising the safety of divers in the water. "The ROV attached a cable to the device. The cable was used to remotely rig the IED ashore into the sights of a waiting PAN disruptor. Evidence from this device was collected and analyzed to give clues as to the items likely to be found on the bottom." "Both bomb technician and non-bomb technician divers realized the extensive skill set which they bring to bear when they join together. These relationships will carry us through a major underwater, or in-the-water, bombing incident here in LA."

"There are few bomb squads in the Nation today which maintain operational dive teams capable of managing major underwater bombing crime scenes."



Divers and Instructor examine recovered evidence in the lab

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"Overall, we believe this pilot of the course was a success and we are very happy with the level of instruction that was provided by each of the instructors." Everett and Rabinovitz have already begun with modifications to the existing curriculum in order to take into account the comments of students who attended the first course and expect to offer an "even better" version of the course during the week of March 28, 2005. If you have any questions about the course or are interested in attending, please contact SABT Greg Rabinovitz at 310-477-6565 or Deputy Greg Everett at 562-946-7222. ♦*

