

# All On Board



## Fleet Training

July 2011 Vol. 3

### Welcome

Welcome to this edition of the SOBT Quarterly Newsletter. As I take over command of the Submarine Learning Center, I want you to know that Submarine On Board Training products will be a priority for SLC. This year we are reviewing all SOBT training products to ensure they are engaging and of a content quality that promotes use. As the Submarine Force issues in the new Continuing Training and Qualification Manual, SOBT products will become a part of watch station qualification.

The goal of SOBT is to not only provide basic submarine and engineering qualification training, but to also present the training our Sailors need to quickly understand and perform their watchstation tasks. You should be noticing that as we update existing products and develop new products, the level of quality for both the appearance and interactivity is increasing. While content accuracy is our primary concern, we want the products to be enjoyable to use.

One of the methods that SOBT uses to ensure the quality of these products is to solicit feedback from the Sailors that use these training products, and from the commands that recommend their use. We request feedback on the quality and accuracy of these training products. If we are missing a system or topic, let us know so that we can get that onto our priority list. Feedback can be provided via the SOBT website at <https://www.netc.navy.mil/sobt/web/index.html> or by contacting the SOBT office directly using the contact information on the last page of this newsletter. To make con-

tacting SOBT from your ship easier, we are currently setting up a SIPRNET web site. The SOBT training products are designed for just-in-time training, easily accessible from your ship's LAN. I look forward to hearing from you on how SOBT can be improved.

Commanding Officer  
Submarine Learning Center



### Director's Note

#### SEAWARE

Since its beginning in 1986, the Submarine On Board Training (SOBT) program has developed quality training materials for Submariners. The quantity and quality of the training products has improved over time as the Navy works to integrate the latest advances in technology. Despite improvements in the quality of training, SOBT has struggled in several key areas to better support the Sailors afloat, including integration with the ship's training program, improved access to the many training products, and better feedback. SEAWARE is the

Continued on Page 2

#### Inside this issue:

Captain's Call	1
Director's Note	1
Wardroom Training	2
Sonar	3
Auxiliary Division	3
AN/BRR-6 Virtual Trainer	4
Fire Control	5
Mental TMA	5
Points Of Contact	6



Continued from Page 1

Navy's solution to these important problems.

SEAWARE is a Learning Management System (LMS) developed by Naval Undersea Warfare Center (NUWC) for use on our submarines. SEAWARE's intuitive design provides Sailors with the ability to easily locate the SOBT products they need for training or qualification. The LMS tracks the Sailor's progress while completing a SOBT product, allowing the Sailor to stop a training session and resume it at that point later, if needed. When the Sailor is done, SEAWARE will record and report completion to the Fleet Training and Management Planning System (FLTMPS) for incorporation into the Sailor's electronic training jacket<sup>1</sup>. This feature will become more and more important as SOBT products become integrated into submarine training curriculums.

SEAWARE also provides the Navy with the ability to collect feedback on the quality of SOBT's products, as well as monitoring which products are the most and least popular. Collecting this information will enable the Navy to invest its resources in the products that are most beneficial to meeting the needs of our Sailors. The SOBT feedback form is easy to use and integrated into SEAWARE, making it more convenient and accessible.

After several years of development, SEAWARE is ready to pilot. Four submarines have been selected for installation in the summer of 2011 and will be able to take advantage of SEAWARE's advanced features during the pilot. Feedback from these submarines will be instrumental in finalizing the initial version of the software that will be distributed to the fleet.

SOBT Director

*1This function is currently not available for all SOBT courses.*



**On the Cover:**  
**USS San Juan (SSN-751)**  
alongside at Groton.  
Photo by Ken Hart

## Wardroom Training

As qualifying Junior Officers, you have it tough. You have to learn how your division operates, stand under instruction watches, go to night work meetings that make little sense to you, finish a battery charging line-up, figure out what a CAS-REP is, finish a zone inspection before the XO finds you, and the only people that care about how late you stay completing all these tasks is your loved ones at home with a cold dinner. Somewhere in all of that, you need to get qualified.

Submarine On-Board Training was built specifically with you in mind. You need one stop shopping with current and easy to understand information. Each boat is different for a qualifying JO; you may have arrived on a boat with a schedule anywhere from an extended shipyard stay to the highest operational tempo in the fleet. Somewhere in there you may not find a chance to get hands on experience in every aspect of your qualifications. SOBT products help bridge that gap.

SOBT has a product linked right to your Ship's website for skills directly related to surfaced and submerged officer watch stations, as well as in port duty. Besides engineering watches, you are expected to learn contact management early in your qualifications. Products such as Mental TMA Techniques (DODUSNSLCSOBT\_96079), Radar Navigation and Contact Management (DODUSNSLCSOBT\_04029), and PC Periscope (DODUSNSLCSOBT\_05038) will help you learn essential contact management techniques.

You will also need to learn how to drive the submarine on the surface. Surfaced under instruction watches are not always easy to come by. Although time spent in the bridge can never be replaced, SOBT products are a valuable tool in qualifying Surfaced OOD. Some of these products are Surfaced Ship Handling (DODUSNSLCSOBT\_05073), piloting briefs for over 30 frequented ports, and Rules of the Road (DODUSNSLCSOBT\_03171). Also, you will proba-

Continued on Page 3



Continued from Page 2

bly be qualifying Duty Officer around this time as well. Take a look at the Duty Officer SOBT product (DODUSNSLCSOBT\_07022) to find out how to conduct daily routines, control maintenance, and handle common in port operations.

Finally, it is time to qualify Submerged OOD and get your fish. SOBT is there to help. Besides the SOBT product Submerged OOD (DODUSNSLCSOBT\_08033), there are other helpful products like OOD Navigation OPORD 2000 (DODUSNSLCSOBT\_01052), ASW Tracking (DODUSNSLCSOBT\_05081) and Approach and Attach Training (DODUSNSLCSOBT\_06034). Also, look for upcoming updates to our SUBIS/ISR and Diesel Submarine products. If your CO asks you how STDA helps the OOD carryout the Ship's mission and you give him a "deer-in-the-headlights" look, check out our STDA product (DODUSNSLCSOBT\_06032). When you get bored with that, just search the catalog for things like "JO." You will find JO Rules of Engagement (DODUSNSLCSOBT\_98053, 01021), JO Sonar (DODUSNSLCSOBT\_00021), and JO Missile (DODUSNSLCSOBT\_05102). Other helpful products are Voice Communications (DODUSNSLCSOBT\_97075), Tomahawk Strike Planning (DODUSNSLCSOBT\_00038), AN/BQQ-10 Operations for the OOD (DODUSNSLCSOBT\_07048), and many more. Also, do not forget that there is a SOBT product for every system onboard the ship.

SOBT is a key component to getting your Gold Dolphins in addition to standing those important under instruction watches and getting your head in the books. Take a look at the products above on your Ship's website. SOBT is always being updated, and we go to your boat once a year to make sure you have everything you need. If you cannot find what you need, find your boat's SOBT coordinator.

SLC N71, Officer Training  
Wardroom Training

## Sonar Systems

Long in port periods can have negative effects on Sonar Operators. Sonar Basic Operator Trainer (SBOT) Suite (DODUSNSLCSOBT\_06044) with SUBSKILLS-NET (DODUSNSLCSOBT\_05040) can keep your team sharp and ready for the next underway period. It simulates most of the functions that are available to an operator on AN/BQQ-10 SAWS and TAWS including SAWS PBB APB 03/04, TAWS PBB APB 03/04, TAWS PNB APB 03/04, MSD APB 03, AND MAD APB 05. It can be used for both individual and team training. Ideas for divisional training would be utilizing SBOT to practice going to periscope depth or talk about various operator actions. If you haven't checked out our other products lately, you should. All of our products are on your boat just waiting to be utilized, located on SUBLAN on the SOBT web page. As always, we are looking for feedback on existing products or ideas for new products to enhance fleet readiness.

Acting Sonar Project Manager

## Auxiliary Division Fleet Training Issues

There are two Oxygen Generator training products for use by the fleet prior to formal school house training. One is the 6L16E Automated Electrolytic Oxygen Generator (AEOG) ICW-AX-03173, for use by SSN 688 Class Sailors. The second SOBT course is the 6L16D Electrolytic Oxygen Generator (EOG) ICW-AX-05018, this product supports the SSBN726 Class and also 688 Class boats that don't have the AEOG unit.

Due to the age of these products and courseware technology updates, they are difficult to use on a Shipboard LAN. SOBT is currently updating the AEOG courseware to the current technology standards, while at the same time addressing the errors reported in this training product. When this effort is completed, the product will be easily run



Continued from Page 3  
from the Ship's LAN.

The EOG product faces the same problems. In a recent site visit to TTF Bangor the SOBT rep was able to get the courseware to work at the Training Facility. We are seeking funding to update this courseware to the current technology standard. When this is funded and the update completed, the courseware will operate from the Ship's LAN.

SOBT MHM&E/Safety/Seawolf Qual Program Manager

## **AN/BRR-6/6B Towed Buoy Virtual Equipment Trainer**

How does your ship train on AN/BRR-6/6B Towed Buoy operations while on patrol? How well do your Radiomen and Officers know the capabilities and expected indications after the AN/BRR-6/6B Towed Buoy is launched? An often overlooked training solution is the AN/BRR-6/6B Towed Buoy Virtual Equipment Trainer.

SOBT, alongside Subject Matter Experts from SLC, are in the process of updating the AN/BRR-6/6B Towed Buoy Virtual Equipment Trainer (DODUSNSLCSOBT\_99016).

The AN/BRR-6/6B Towed Buoy Virtual Equipment Trainer is an interactive product designed for use by not only the Communications Division personnel, but also by Control Room personnel to strengthen team operations. Make no mistake; operation of the AN/BRR-6/6B is a team endeavor.

It provides a detailed description and training on components, capabilities, normal and abnormal/casualty operations and Fleet Lessons Learned of the AN/BRR-6/6B Towed Buoy System.

This product will allow the user to operate the AN/BRR-6/6B system in a variety of modes. In its simplest form, the simulation can be used to train on normal launch and recovery of the AN/BRR-6/6B Towed Buoy in a non-operational setting. The more advanced form of the simulation allows

the user to insert faults such as:

- Buoy doors failing to open/shut
- High/low cable tension and adjusting for abnormal tow cable tensions
- Buoy retrieval during loss of electrical control of machinery valves
- Buoy jettison from the BCP or AMR2 on loss of electrical control
- Buoy jettison from AMR2 using the hydraulic hand pump
- Operating the buoy doors from AMR2 on loss of electrical control
- Operating the nest doors by hydraulic hand pump
- Buoy selection after cut or parted tow cable
- Alternate buoy selection without buoy seated indication for the selected buoy
- Stalled buoy during deployment or retrieval.

Communications Project Manager

## **Trident Launcher Simulator (ICW-TT-03160)**

This is a great simulator for the Missile Technicians to use when away from Trident Training Facility. It will run in stand-alone mode or via a hub with any number of players of 1 to 15. Each player can take different battle stations missile locations (except Fire Control), or they can be the BSM - MC troubleshooter and roam around the MC to troubleshoot and fix problems as they come up in the faulted countdowns. The program runs like a champ and everyone is able to see what is happening to the entire weapons system, in real time. You can run it in teams - one team performs the valve lineup, another energizes the equipment, while others can set 1SQ, arm the EBW firing units, pressurized tubes, etc.

This is not a new product, but in our tests this



Continued from Page 4

simulator worked just like the real thing on the boat or in the trainer. The realism in this program makes it a great asset for BSM skills training. This is the simulator that you want when training your junior team members. It is also perfect for refresher battle stations training for the entire team to keep you on top of your game. Oh, and the graphics are outstanding as well! Two thumbs up!

One thing to be aware of - this simulator is for standalone use ONLY or linked together via a hub,

It is not certified for use on SUBLAN!

SOBT Program Manager

## Going Mental

To quote Rockhound, played by Steve Buscemi in the movie *Armageddon*, "You know we're sitting on four million pounds of fuel, one nuclear weapon and a thing that has 270,000 moving parts. Makes you feel good, doesn't it?" He was describing a spaceship, but there are parallels to submarines. Submarines also have weapons, fuel, and a lot of moving parts. But unlike Steve Buscemi's spaceship, our submarines have to operate in high contact density areas. To make us feel good and to avoid an "incident" the Navy continues to provide a lot of money for advanced Fire Control and Sonar Systems that calculate Target Motion Analysis (TMA) for collision avoidance. However, these expensive high tech systems are useless without a well trained operator.

Submarine On Board Training offers several specific training products for Fire Control and Sonar Operators but the fundamentals of TMA remain essential to solution development, no matter how advanced the equipment gets. These fundamentals are covered in SS Mental TMA Techniques DODUSNSLCSOBT\_96079.

SS Mental TMA Techniques covers the formulas and thumb rules to quickly evaluate a contact's solution. The course starts out with target and own ship parameters which covers line of site dia-

grams and simplified sine tables. The next topic, bearing rate and range rate, introduces relative motion formulas. Various ranging techniques are also covered to include: Ekelund, visual, and cross bearing. Each topic has an interactive drill and practice section as well as an examination to assess the student's overall comprehension of the material presented.

Operators and supervisors need to know how to interpret all the data available to them, however, without the fundamental knowledge of TMA, the BGY 1 system is just pretty colors on expensive flat panels. The human brain cannot possibly process algorithms as fast as computers can, but we should be able to do some mental TMA to evaluate the plausibility of the system's solutions. Never blindly accept system solution for reality; common sense is still authorized.

Strategic Weapons/Wardroom Support

## Fire Control

ADCAP Post Launch Trainer (APLT) (DODUSNSLCSOBT\_02018) (or APLT BYG-1 BLK1C DODUSNSLCSOBT\_05188) fills the gap in post launch training! Its focus is centered on required knowledge and execution of milestone recognition and post launch commands. With two user levels, APLT provides initial training for junior personnel and evaluation of advanced operator skills. APLT Version 15 incorporates the updated ADCAP reference manual. It should be noted that the ADCAP working group had referenced exercises over the last year where delays created by poor operator skills caused weapons to miss. APLT is a stand-alone product and can be run directly on SUBLAN. FTCs, if there are specific scenarios that you want incorporated into APLT, let me know!

FT SOBT Project Manager

