

All On Board



Basic Submarine Qualifications Issue

Fleet Training

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Welcome

Welcome to this edition of the SOBT Newsletter "All On Board." This quarter the newsletter focuses on basic submarine qualification. SOBT plays an important role in providing training for the junior Sailor or Officer reporting aboard. SOBT basic qualification training products are developed at a level that assumes little or no prior knowledge of a system or process.

Use of the SOBT catalog is one tool that can be used as a part of your ship's qualification program. Each individual Sailor is responsible for his qualification progress, and will normally have a "Sea Daddy" assigned to him for help. The

SOBT product is then that part of this blended learning approach that will take him from a non-qual to wearing dolphins. The training that SOBT provides is consistent and repeatable. They can provide more visual training than most documents can provide. The SOBT products can also be used during "School of the Boat" training sessions, where graphics and animations readily convey operational concepts.

SOBT basic qualification training comes in two flavors; Submarine qualifications (BSQ) and Engineering qualifications (BEQ). These training products are submarine class specific, to ensure accurate information. Keep in mind that there are also numerous products for Junior Officer qualifications, for example SS Contact Coordinator, DODUSNSLCSOBT_98115, and SS Mental TMA Techniques, DODUSNSLCSOBT_96079. These products help the Junior Officer make the transition from the school environment to being a contributing crew member on-board the boat.

SOBT training products help to make a firm qualification foundation for the junior crew members, and can be used for individual training and for training events. The use of SOBT training materials helps to make a more efficient crew.

SOBT products are checked for relevancy and currency, so that they provide accurate information. However, if any questionable content is found, be sure to report that back to SOBT.

Director's Note

"Dolphins" is the common name for the submarine warfare insignia. The pin's design is of the bow view of a submarine, with bow planes rigged out for diving, flanked by a pair of dolphins. To qualify in submarines, a Sailor must show a working knowledge of damage control, navigation, propulsion, combat systems, electronics, and auxiliary systems. They must complete the qualification card, pass a test, and pass a qualification board.

The primary purpose of submarine qualification is to provide for the training of all personnel assigned to a ship in the handling of any emergency that may arise. In order to fulfill this objective, each Sailor serving on a submarine must gain a thorough knowledge of that ship's systems, be able to rig all compartments for all operating conditions including emergencies, and be pro-

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Weapons

ficient in the use of damage control equipment kept on board. These requirements are mandatory for all personnel because it is impossible to ensure that the best man for a particular function will be available on the scene at the time his services are needed. Each Sailor aboard must be able to initiate immediate corrective action for any emergency in any part of the ship and continue corrective action until assistance arrives.

SOBT has developed over 250 basic submarine qualification training products that specifically target each class of submarine to assist the new Sailor aboard in their qualification process. SOBT courseware teaches the knowledge factors of all major ship systems, functions, operations and much more. Using these training products will help prepare the unqualified individual for their system checkouts and practical factor items and ultimately the Qualification Board. If you're not sure how to access SOBT products on your submarine, contact your LAN Coordinator or call us directly.

SOBT is always interested in hearing from you. We want to know what your learning experience was like. Do you have recommendations for improving the quality of SOBT courseware? Did you experience problems with the course? Give us a call or e-mail us, and send us your feedback. Our goal is to deliver the highest quality training products to support the best Sailors in the fleet.

Submarine Learning Center NOTE

You will notice in this issue a handy matrix that lists all SOBT Basic Engineering Qualifications (BEQ) and Basic Submarine Qualifications (BSQ) products. This list also provides a matrix of ship classes for which the product is available, indicated by an "X." To take the course go to the SOBT Web page on your ship's LAN. To find the course just type the course title into the search box. When the course comes up, just select it and start training.

Fellow Weaponeers,

SOBT creates numerous products to cover a wide range of topics, Within the topics themselves, the products are developed for a beginner's approach, and all the way up to the more advanced Sailor. The courses that are developed for the weapons area of interest are no exception.

Each class of Submarine has its own Basic Submarine Qualifications (BSQ) products. The topics can range from the Torpedo Tube systems, to the Weapons that the ships employ, and also any means that the weapons are loaded or transferred to the ship. A highlight of the weapons handling courses is the SSBN Mk 48 ADCAP Weapons Handling Procedures. This product covers the process of a weapons shipping system setup, operational test, the shipping evolution and tube loading. For a more basic look at the weapons system and the weapons themselves, there are the BSQ line of products that will give the learner an introduction to the torpedo tube systems and how they apply to the Sailor. These products are great for the newly reporting junior personnel to get the required information. The training, along with the actual hand-over-hand walking of the system, prepares the Sailor prior to obtaining the required system checkout. Even a senior Sailor that is rolling back to sea, these products help to provide good refresher training to you.

In closing, remember that fleet input is the greatest way to ensure that the SOBT process is developing current and relevant material.

Thank you for your time and have a great Navy Day!

On the Front Cover:



Souda Bay, Crete, Greece (Apr. 12, 2004) - The Los Angeles-class attack submarine USS Dallas (SSN 700) arrives in Souda Bay's harbor for a brief port visit. U.S. Navy photo by Paul Farley



Sonar Systems

Hello again shipmates! Here are some of the courses that can be used to help your Sailors with basic Sonar qualifications and ships qualifications. Instead of trying to stay awake with your nose in a book, try out one of these fun, interactive multi-media courses:

- ◆ SSBN BSQ SONAR DODUSNSLCSOBT_03129
- ◆ SSGN BSQ INTRODUCTION TO SONAR DODUSNSLCSOBT_04330
- ◆ SSN 688 BSQ SONAR SYSTEMS DODUSNSLCSOBT_97049

These courses provide a basic overview and understanding of the sonar systems including functional description, location of the major components, displays, controls and indicators, as well as interfaces with other ships systems. They also discuss basic principles of Sonar and the ocean environment.

Working on fathometer qualifications? Take a look at:

- ◆ SSN 688 AN/BQN-17 FATHOMETER OPERATOR DODUSNSLCSOBT_07046
- ◆ SSN AN/BQN-17A FATHOMETER DODUSNSLCSOBT_96033
- ◆ SSN 688I AN/BSY-1 BOTTOM SOUNDER OPERATOR DODUSNSLCSOBT_00039

These courses are designed to provide training on the operation and employment of the fathometer. They will give the students knowledge on specific fathometer operations including the displays, controls and indicators; modes of operation; chart recorder interpretation; and emergency situations. Also, using SS SUBSKILLSNET 6.0 DODUSNSLCSOBT_05040 and SS SBOT SUITE DODUSNSLCSOBT_06044, you can run your own sonar system simulator and make the scenarios as basic or as complicated as you like. This is an excellent tool for working on qualifications especially while inport when you need at sea experience.

As always, we are looking for suggestions on updates for existing courses and ideas for new ones as well. Send me an email or give me a call with your ideas.

Nuclear Training

Basic Engineering Qualifications (BEQ): Having just reported on board you have probably heard this familiar phrase "YOU'RE DINK." Reporting aboard a submarine can be a stressful time with engineering qualifications, watch qualifications, submarine qualifications, and the overall learning of the daily grind. SOBT's Basic Engineering Qualification training products can show you the way to a faster qualification process and a much easier life onboard. You too can be the hot runner in the engineering department by utilizing the vast array of SOBT products to get the necessary information you need to quickly move through the qualification process. Our products have specifically tailored learning objectives so you get the most out of your learning experience to quickly prepare you for the qualification signature on the BEQ card. All BEQ courses are designed utilizing the qualification guides for the various nuclear ratings to ensure the learner is taught all required information for obtaining a qualification signature. Successfully completing a SOBT course does not replace the checkout process; it is merely a tool for the learner to prepare for a checkout on the qualification card. We currently have over 70 courses devoted to Basic Engineering Qualification to assist newly reporting personnel in their qualification process. These courses currently span the Virginia Class, Ohio Class (including SSGN), and Los Angeles Class. To date there are no plans for starting a Seawolf BEQ program at SOBT. All of the products for your specific class of ship are available today via your ships LAN. Contact your LAN administrator if you require assistance accessing any SOBT courseware.





Fire Control

Qualifying Fire Control Technician of the Watch?

I'm certain most all of you have used CBOT in combination with SubSkillsNet for practicing various tracking exercises. However, my questions are, how many of you use CBOT for training newly reported members of your division? Or to train the junior officer, who needs to develop an understanding of Fire Control operations?

Consideration should also be given to SS FUSION PLOT EMPLOYMENT, DODUSNSLCSOBT_05103 for junior personnel as a prerequisite to the trainers. This course provides the knowledge of plot basics such as function and employment. Having your junior Sailors take this SOBT course prior to lab time will allow more time in the lab to be used for intermediate to advanced TMA fundamentals.

Use of a "level one user" on the ADCAP Post Launch Trainer, DODUSNSLCSOBT_02018, allows for this simulator to guide the individual from entry basics to advanced post launch commands. Each scenario provides instruction on what command to use and its reference.

Finally, all SOBT products can aid you in meeting your CTM requirements! Please feel free to email me with any product ideas that might assist you in meeting your training needs!

Thank you,

Basic Submarine Qualification

Submarine Onboard Training provides Basic Submarine Qualification (BSQ) modules for all classes of submarines. There are numerous modules for all classes, covering all portions of the ship's basic qualification card. The areas covered start at First Aid and Indoctrination, and proceed through all major ship's systems and equipment, which include propulsion, electrical, and Trim and Drain to name a few. BSQ training products are stand alone modules that enable all qualifying personnel to have the same base line knowledge for the systems and equipment while in the qualification process.

Each module consists of the following areas: Introduction, Purpose, Characteristics and Capabilities, Major Components, Interfaces and Functional Descriptions. When these areas are completed there is a final exam that requires an 80% or higher score. Upon successful completion, the crewmember should be able to use this knowledge to locate the systems major components and equipment through out the ship. At this point, the qualifying person should have the required knowledge to ask questions and pursue the system or equipment check out.

Currently, SOBT is in the process of updating courses that have been unavailable for distribution. Most of these courses have security and programming issues being corrected.

As always, your inputs and feedback are welcome.



**BEQ Matrix Listing**

Title	SSN 688 (S6G)	SSBN/SSGN 726 (S8G)	SSN 774 (S9G)
Auxiliary Seawater System	X	X	FY10
Auxiliary Steam System	X	X	FY10
Condensate System	X	X	FY11
Data Logging System	N/A	N/A	FY10
Electrical Distribution System	X	X	FY11
Feed System	X	X	FY10
Main Seawater System	X	X	FY10
Main Steam System	X	X	FY10
Nuclear Instrumentation System	X	X	X
Nuclear Instrumentation System (Type II)	X	N/A	N/A
Primary Chemistry	X	X	X
Primary Plant Control System (Type II)	X	N/A	N/A
Primary Plant Instrumentation System	X	X	X
Primary Plant Instrumentation System (Type II)	X	N/A	N/A
Primary Shield Water System	X	X	X
Propulsion Plant Fresh Water System	N/A	N/A	X
Radiological Controls	X	X	X
Reactor Coolant Charging System	X	X	X
Reactor Coolant Discharge System	X	X	X
Reactor Coolant Pressure Relief System	X	X	X
Reactor Coolant Pressurizing System	X	X	X
Reactor Coolant Purification System	X	X	X
Reactor Coolant Sampling System	X	X	X
Reactor Coolant System	X	X	X
Reactor Core and Vessel Construction	X	X	X
Reactor Plant Air System	X	X	X
Reactor Plant Emergency Cooling System	X	X	X
Reactor Plant Fresh Water Cooling System	X	X	X
Reactor Plant Valve Operating System	X	X	X
Reactor Protection System	X	X	IP
Reactor Rod Control System (Type II)	X	N/A	N/A
Reactor Rod Control System	X	X	X
Reactor Theory and Reactor Protection Analysis	X	X	X
Salinity Indicating and Temperature Monitoring	X	X	X
Secondary Chemistry	X	X	X
Steam Generating System	X	X	FY10
Steam Generator Water Level Control (Type II)	X	N/A	N/A
Steam Generator Water Level Control System	X	X	FY10
Turbine Generator Lube Oil System	X	X	N/A
Turbine Throttle Control, EPM, SPM and PPAP	X	X	FY11



BSQ Matrix Listing

Title	21	688	688I	726 B	726 G	774
02/02 Generator/N2		X	X			
12K Evaporator and 3K Distilling Plant	X					
16K Distilling Plant and 10K Evaporator		X	X			
3-inch and 6-inch Launchers				X	X	X
3-inch Launchers		X	X			
400 HZ Distribution		X	X	X	X	X
AC Distribution	X					
Air Conditioning Plant				X	X	X
AN/BSY-1 Combat Control System		X	X			
AN/BSY-2 Combat Control System	X					
Anchor and Capstan	X	X	X			
Anchoring, Mooring, Towing and Drydocking				X	X	X
Arctic Blow System	X					
Atmosphere Analyzer		X	X			
Atmosphere Monitoring System	X					
Attack Weapon Control System					X	X
Auxiliary and Gravity Drain System	X			X	X	X
Auxiliary Sea Water System		X	X	X	X	X
Basic Primary Power Plant		X	X	X	X	X
Basic Secondary Power Plant	X	X	X	X		
Battery and DC Power Distribution System		X	X	X	X	X
BCP and SCP	X	X	X			
Bridge				X	X	X
Bridge and Topside	X					
Central Atmosphere Monitoring System				X	X	X
Central Computer Complex				X	X	
Chilled Water System				X	X	X
Circuit D	X					
CO2 Scrubber and COH2 Burner	X			X	X	X
Combat Control Subsystem		X	X			
Common Submarine Radio Room (CSRR)					X	X
Compartment Pressurization and Salvage Air				X	X	
Damage Control and Firefighting	X					
Damage Control Equipment				X	X	X
Data Processing and Monitoring System					X	X
DC Distribution	X					
DC Equipment	X	X	X	X	X	
Depth Control System		X	X			
Depth Sensing				X	X	X

**BSQ Matrix Listing** *continued*

Title	21	688	688I	726 B	726 G	774
Diesel Engine and Generator	X					
Diesel Generator and Snorkel System				X	X	X
Diesel, Fuel Oil and Associated Systems		X	X	X		
Distilling Plants				X	X	
Diver's Air System					X	X
EAFW	X	X	X			
Electronics and Auxiliary Fresh Water System				X	X	X
EMBT and LP Blow Systems	X					
Emergency Diesel and Generator						X
Emergency Flood Control	X	X	X	X	X	X
Engine Room Fresh Water		X	X	X	X	X
EPM and SPM		X	X	X	X	X
Escape and Survivability	X	X	X	X	X	X
Escape Procedures				X		
ESM	X					
External Hydraulic System	X	X	X	X	X	X
Fire Fighting and Damage Control Equipment	X					
Firefighting Techniques	X	X	X	X	X	X
Fuel Oil and Compensating Water System	X				X	X
Gas Management	X					
High Pressure Air				X	X	X
Hovering System				X	X	X
HP Air	X	X	X			
I VLS			X			
IC Communications	X			X	X	X
ICCP	X					
Internal Auxiliary Launcher	X					
Internal/External Salvage Air	X	X	X			
Introduction to Sonar					X	X
Introduction to Submarine Qualifications						X
Launcher and Missile Tubes				X	X	
Lighting and 120 VAC Distribution		X	X	X	X	X
Magazine Sprinkler System					X	X
Main and Auxiliary Drain System		X	X			
Main Ballast Tank Blow				X	X	X
Main Drain System				X	X	X
Main Propulsion System		X	X	X	X	X
Main Sea Water System		X	X	X	X	X
Main Storage Battery	X					
Mast and Antennas				X	X	X

**BSQ Matrix Listing** *continued*

Title	21	688	688I	726 B	726 G	774
MBT/LP/EMBT/Arctic Blow Systems		X	X			
Missile Compensation				X		
Missile Fire Control				X		
MSW and ASW	X					
Navigation	X					
Navigation, Radar and ESM				X	X	
Nitrogen, Oxygen and Scrubbers				X		
O2 Generator, O2 and N2	X					
Own Ship's Data Set		X	X			
Oxygen Generators and Candle Furnace				X	X	X
Plumbing	X					
Potable Water and Plumbing System	X	X	X			
PPFW and ASW	X	X				X
Primary Power Plant	X					
R-114 Air Conditioning and Chilled Water	X	X	X			
Radio	X			X	X	
Radio, ESM and Radar		X	X			
Refrigeration System	X			X	X	
Reverse Osmosis Unit						X
Salvage Air	X	X		X	X	X
Sanitation and Plumbing Systems				X	X	
Scrubbers and Burners		X	X			
Secondary Plant					X	
Self Contained Breathing Apparatus (SCBA)	X	X	X	X	X	X
Service Air System					X	
Ship Control Station				X	X	
Ship Security		X		X		X
Ship's Characteristics / Tanks and Compartments						X
Ship's Lighting and Battery Storage		X		X	X	X
Ship's Power Generation and Distribution						X
Ship's Service Air System		X	X	X		
Ship's Service and EAB Air Systems	X					
Ship's Service Hydraulic System	X	X	X	X	X	
Ship's Stores Refrigeration System		X	X			
Ship's Tag Out Procedures						X



BSQ Matrix Listing *continued*

Title	21	688	688I	726 B	726 G	774
SOF Support Systems and Equipment					X	
Sonar Operator (Module 1)						X
Sonar Systems		X	X	X		
Special Operations Forces (SOF) Support Nitrogen System					X	
SPM	X					
SSTG, SSMG and 440 VAC Distribution				X	X	
SSTG, SSMG, 450 VAC Distribution		X	X			
Steering and Diving Control System	X	X	X	X	X	
Stern Diving Hydraulic System				X	X	X
Submarine Escape, Survival and Rescue		X	X	X	X	X
Tactical Navigation and Passive RF Monitoring Subsystem					X	
Tanks and Compartments	X	X	X	X	X	X
TDU and Trash Compactor	X	X	X	X	X	X
Topside and Sail		X	X	X	X	X
Torpedo Fire Control System				X	X	X
Torpedo Tube System	X			X	X	X
Trim and Main Drain Systems	X	X	X	X	X	X
Ventilation and Snorkel Systems	X	X	X	X	X	X
Voice Communications	X	X	X	X	X	X
Weapons and Torpedo Tubes		X	X			
Weapons Shipping and Handling	X					