

## SHORE-BASED SONAR TRAINING SYSTEM

Simulation technology to accelerate and maintain sonar operator proficiency for maximum fleet readiness

Successful naval operations require an investment in warfighter training. L3Harris' shore-based training system (SBTS) replicates the signal processing of the hull-mounted sonar (HMS) or the variable-depth towed array sonar (VD TAS). This enables sonar operators to perform comprehensive training against active and passive undersea targets in simulated scenarios without ever needing to leave shore.

### FLEET READINESS BEGINS WITH ONSHORE TRAINING

L3Harris' SBTS is a flexible, PC-based sonar training system that provides realistic and valuable training opportunities for apprentice, journeyman and advanced sonar operators. All training is conducted using the same user interfaces found aboard ship to ensure operators take their situational awareness with them when they join or return to the fleet – and feedback is immediately available after each training session.

L3Harris' SBTS leverages shipboard data recorders, enabling all trainees to benefit from real-world data gathered during at-sea operations. The system's data recorder storage facility (DRSF) allows for storage of 800 hours of recorded data.

The SBTS is a cost-effective tool that maximizes sonar operators' ability to detect, track and classify enemy threats at sea.



Photo by Petty Officer 2nd Class Aaron Chase



U.S. Navy photo by Mass Communication Specialist 2nd Class Jacob D. Moore

### BENEFITS

- > Improves fleet readiness
- > Enables operators to practice essential sonar operation and communication skills onshore
- > Optimizes sonar operators' ability to effectively use shipboard sonar systems for successful naval operations
- > Equips sonar operators with the tools and knowledge to successfully identify and track threats at sea
- > Adapts to accommodate varying customer needs and mission requirements

## MAKING THE OCEAN TRANSPARENT

L3Harris' SBTS makes it possible for training facilities to recreate the complex at-sea environment in a controlled setting. The system enables realistic operator training by providing the following:

- > Stimulation and synthesis of background noise, reverberation noise and underwater acoustic signatures
- > Simulation of acoustic propagation paths and attenuation
- > Emulation of individual hydrophone element arrival time differences



## LEVERAGING DECADES OF MARITIME EXPERIENCE

The SBTS leverages L3Harris' 70-year legacy of designing, manufacturing and deploying the most advanced surface-ship sonars, command and control systems, and tactical data links for navies worldwide.

The SBTS is scalable, expandable and capable of simulating watch stations on multiple platforms. Additionally, it enables operators to draw from a repository of actual at-sea data to efficiently and effectively simulate real-world, single- or multi-ship operating environments. Operators can act independently or together with other simulated systems to replicate coordinated anti-submarine warfare (ASW) operations.

### Shore-based Training System

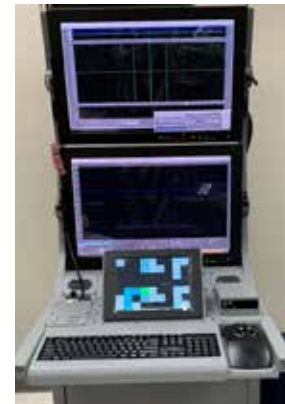
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Nonexport-Controlled Information

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## FLEXIBLE ARCHITECTURE PROVIDES BEST FIT FOR DIVERSE NEEDS

The L3Harris SBTS supports sonar consoles with the same hardware and software modules found aboard ship or other simulated options that reduce overall cost. Laptops can be used to practice learned techniques prior to entering the SBTS.



Shipboard console



Console simulator



Laptop-based sonar simulator



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1025 W. NASA Boulevard  
Melbourne, FL 32919