

Mobile Virtualized Operator Trainer Bringing a self-contained and tailored training capability to where sailors need it most

Mobile Virtualized Operator Trainer (M-VOT) is a transportable, self-contained training solution built from commercial off-the-shelf components, designed to bring highly effective training to where it is needed most. It has the functionality to be placed at any location the customer requests, including shipyards, base installations, or other facilities, provided that the site meets minimum access, power, and physical security requirements. The M-VOT was developed to overcome gaps in training and support infrastructure available for AN/SQQ-89A(V)15, an undersea warfare combat system; however, the same virtualization approach can be applied to any customer software set.

OUR APPROACH

Leidos developed M-VOT by expanding on proven technology from the Surface Training Advanced Virtual Environment– Combat Systems (STAVE-CS) Anti-Submarine Warfare (ASW) Virtualized Operator Trainer (VOT) program and the existing AN/SQQ-89A(V)15 Surface ASW synthetic training functional segment, which are both currently in use today to provide cutting-edge integrated undersea warfare operational and training capabilities. M-VOT can deploy to any site where a customer has a training requirement without long-term financial commitments or permanent installation.

OUR CAPABILITIES

Leidos can tailor support events to audience needs, whether for operational training or other tactical or technical support, such as:

- Team training
- Operator training (reps & sets)
- Raw acoustic data screening
- Mission rehearsal
- Operational data rapid review and initial post analysis
- Tactics, Techniques, and Procedures (TTPs) development and validation



Through hardware virtualization, the initial version of the M-VOT is capable of running any of the three primary AN/SQQ-89A(V)15 variants currently used by the U.S. Navy's Guided Missile Cruisers (CG) and U.S. Navy's and Japanese Navy's Destroyers (DDG):

AN/SQQ-89A(V)15 TI-12+/ACB-11

AN/SQQ-89A(V)15 TI-14/ACB-13

AN/SQQ-89A(V)15 TI-14/ACB-15

The M-VOT can easily be reconfigured from one software package to another during the training day for different audiences and needs, only requiring 20–30 minutes to shift configuration, allowing for maximum reconfigurability without the burden of additional hardware costs. Later versions of the software will be routinely added to this library as they become relevant, ensuring that the training is ready to support the latest software configuration being utilized while maintaining training for legacy baselines.

Once configured, the M-VOT provides an immersive environment based on the actual roles found in the users operating environment. For AN/SQQ-89A(V)15, M-VOT mimics the watch standing environment on a U.S. Navy DDG/CG, from the most junior Acoustic Sensor Operator (ASO) to the Anti-Submarine Warfare Evaluator (ASWE) leading a team. Instructors have a full suite of scenario controls available and require minimal retraining because the M-VOT uses the same Embedded Training System (ETS) as ships and permanent training sites.

To facilitate mobility, flexibility, security, and management of the training environment, the M-VOT is located in a single 40'x8'x8' International Organization for Standardization (ISO) container-type shelter. The shelter can be transported by road, rail, or sea to a customer-specified location. The customer can choose from a variety of support options for the M-VOT, ranging from a minimal turnkey delivery to full technical and instructor support from Leidos' ASW subject matter experts.

FEATURES	BENEFITS
Interim solution until a permanent solution is available	Mitigates temporary shortfalls in training infrastructure
Temporary training capability	Provides a solution when a permanent solution may not be required or desired
Tailored training solutions for specific events or exercises	Eliminates strain on the local training infrastructure
Adaptable to emerging technologies	Incorporates multiple virtualized hardware images and incorporates future ones
Delivery by truck or container ship worldwide to any destination	Provides the capability to support just-in-time training (JITT) as well as mission rehearsal capability

PROVEN SUCCESS

M-VOT mirrors the configuration of STAVE-CS ASW VOT, program of record shore-based training system both in its hardware and software architecture.

WHY PARTNER WITH LEIDOS

We are the worldwide leader in developing and fielding training solutions for AN/SQQ-89 systems. Leidos' ASW training specialists and network engineers, possessing decades of tactical, technical, and training experience and a deep understanding of the latest AN/SQQ-89A(V)15 capabilities, led the effort to provide a stable, reliable training platform to meet a variety of training needs worldwide.

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