



U.S. Navy Photo

**LOCKHEED MARTIN**   
*We never forget who we're working for®*

**SUBMATT®**  
Submarine Mobile Acoustic Training Target  
and Field Programmability System



# SUBMATT® Submarine Mobile Acoustic Training Target and Field Programmability System

Today's submarine forces face a period of dramatic change. They carry out an ever-widening range of mission tasks, yet threats like the Kilo and other modern submarines continue to proliferate and challenge core ASW skills. Increased demands on the submarine have made ASW training harder to coordinate affordably — until now.

Lockheed Martin's Submarine Mobile Acoustic Training Target, or SUBMATT®, can be deployed from an underway submarine to enhance fleet readiness in anti-submarine warfare. The vehicle provides the flexibility to train when and where the submarine desires.



## PTP™ Features

- Embedded controller
- Rechargeable NiCd battery packs
- Smart charging system
- Simple, one button operation
- Handles all AC power requirements

## Lockheed Martin Mission Systems & Sensors (MS2)

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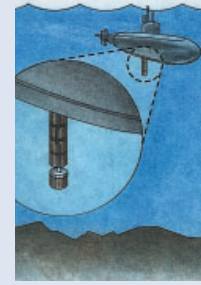
## The SUBMATT® Training Target is Customized for Submariners

The SUBMATT® training target is the only one that can provide organic training for a submarine without support craft. Using the expendable TDULK™ (TDU Launch Kit), it is deployed using adapted Standard Operating Procedures and with proven hardware. Safety, simplicity, and reliability are integral throughout the design.

- Lockheed Martin has integrated key technologies for a robust commercial product that is safe, flexible and easy to use.
- Plan and conduct your exercises any time to test sonar and fire control teams in deep or shallow water environments.
- Deploy your SUBMATT® target from the Trash Disposal Unit (TDU) or Gash Gun via the expendable TDULK™ sabot, without any ship modification.
- Watch the crew track course, depth and speed maneuvers, as the SUBMATT® target emits passive tonals.
- Engage the target with active sonar and fire approved weapons to complete the scenario.

U.S. Patent No. 5,487,350  
U.S. Patent No. 5,490,473  
U.S. Patent No. 5,600,087  
U.S. Patent No. 5,666,900  
Other Patents Pending

## Launch Sequence



The submarine crew loads the SUBMATT®/TDULK into the TDU and deploys it on command while underway and submerged. TDULK allows the SUBMATT® to exit freely from the submarine without damage.

TDULK and the SUBMATT® target sink safely away from the sub, the protective sabot separates and a launch weight falls from SUBMATT® as it rotates.



The SUBMATT® sinks away from the submarine ensuring separation prior to motor startup.

When the startup logic is satisfied, the motor starts up and the vehicle begins its programmed run.



Program your SUBMATT® along your ship's Point of Intended Movement (PIM); save time and money. Add realism by programming your SUBMATT®'s course, depth, speed, time and passive tonal changes. Program your SUBMATT® to automatically maneuver in response to active sonar interrogations. This is a Windows® 95 and higher or Windows® NT based program for PC or laptop computer with at least an Intel® Pentium® processor or better with VGA capacity. Use your computer, our software, cables, training manuals and Portable Target Programmer™ (PTP) to create your target's run plans.