AUV62-AT
TRAIN AS YOU FIGHT
AUTHENTIC OPERATIONS FOR ALL UNITS
The use of submarines in anti-submarine warfare (ASW) training is inefficient, expensive and places demands on high value assets. Saab’s highly flexible, modular target AUV62-AT is leading the evolution of ASW training, and is the perfect example of our thinking edge in action. The AUV62-AT can replace a live submarine in a wide range of training scenarios, thereby reducing cost without compromising authenticity.

The system is designed to simulate a variety of threats, and is compatible with torpedoes and sonar systems used by the majority of navies. It is intended to develop operator and command team training at all levels and also enable sonar and command system evaluation. The AUV62-AT can train and evaluate an entire ASW force.

**OPERATIONAL CONCEPT**

Naval conditions are harsh, unforgiving and change rapidly. Training exercises must be as realistic as possible to comprehensively prepare units for every eventuality. The AUV62-AT is designed to replicate a range of submarines, both friend and foe, so that all personnel can maximise their training opportunities.

The system has the flexibility to operate wherever the exercise is located, and can be launched and recovered from a ship, submarine or the shore. It can be recovered independent of its deployment method if desirable. When operated from a ship, a custom-designed docking device is used for launch and recovery.

**INCLUDE ALL UNITS**

The AUV62-AT ensures the entire ASW force can receive high quality training from start to finish. The target’s frequencies, signatures and ping repetition can be changed depending on the nature of the exercise and the level of training required. The system is designed for the complete ASW spectrum of activity: surveillance, detection, identification and classification, as well as target engagement.

The complete range of ASW units can be used in a combined training exercise with the AUV62-AT, including surface assets, helicopters, weapons and the Maritime Patrol Aircraft (MPA), delivering unprecedented levels of training.

**MINIMAL INPUT, MAXIMUM OUTPUT**

The exercise coordinator retains control over the AUV62-AT and is able to define the mission plan.

The plan consists of information about signature generation and route details, as well as covering the range of activities and characteristics of the target.

Extensive data recording capability ensures that post-mission assessments are timely, detailed and greatly enhance the overall value of the training exercise. Data is recorded during a drill and analysed using the mission evaluation computer. To save time, the mission evaluation tools are portable, so analysis and debrief can take place immediately after the exercise.

Both the command team and operators are able to analyse an ASW training session. Data recorded by other participating units, such as helicopters and torpedoes, can be imported and examined alongside all other information.

The AUV62-AT makes every exercise as unique as the naval challenges ahead.
AUV62-AT > THE VEHICLE

**TRANSDUCERS**
Low, medium and high frequency transducers for echo, noise and tonal transmission

**COMMUNICATION LINKS**
Communication can be conducted while on the surface as well as underwater

**HYDROPHONES**
Hydrophones are hull-mounted and in the towed tail for echo repetition

**TARGET ELONGATION CAPABILITY**
An extendable tail is an integral part of the system that allows the target to emulate the strength and size of a real submarine

**MAST**
The mast arrangement is for communication and data transfer
INTELLIGENT TRAINING

SYSTEM OVERVIEW

The AUV62-AT is a complete package: it includes all relevant aspects from communications software to mission evaluation. Each training program can be personalised to meet a range of demands. In addition to the vehicle is a command and control system and all the ancillary systems needed to operate and maintain the target. Mission planning, control and evaluation is conducted via a PC-based operator console.

The system allows training sessions to be longer and more intense, without having to factor in the use of submarines or exert extra resources. The AUV62-AT has fully customisable noise settings, where the sound and echo repeater can be changed to suit a mission's needs. The signature generation system has two basic functions: passive and active, to match all operational needs. Operators can alter the length of the vehicle's tail to meet a range of target sizes, and program the speed to determine battery life.

The AUV62-AT provides for multiple, consecutive exercises over long periods of time. This is achieved with state-of-the-art battery technology and short recharge cycles. Dramatically shortened ramp-up, recovery and turnaround means time is spent on the things that matter.

Included in the AUV62-AT package:
- AUV62-AT vehicle
- Signal Generation and Analysis System
- Mission Planning System
- Mission Evaluation System
- Launch and Recovery System (LARS)
- ILS Package

SYSTEM SPECIFICATIONS

| DIA METER | 21 inches |
| WEIGHT | Approx 620 kg |
| SPEED | 0–12 knots |
| OPERATIONAL DEPTH | 0–300 m |

ENDURANCE
- > 3 h at 12 knots
- > 10 h at 8 knots
- > 24 h at 4 knots

NOISE
- PROGRAMMABLE

PASSIVE SIGNATURE
- 10 Hz – 100 Hz, 130 dB
- 100 Hz – 300 Hz, 150 dB
- 300 Hz – 100 kHz, 160 dB

ECHO REPEATER
- PROGRAMMABLE

TARGET STRENGTH
- -10 – +22 dB

OUTPUT
- > 185 dB (rel. 1 Pa 1m)

FREQ. RESPONSE
- 1 kHz – 100 kHz
SAAB DEVELOPS **HIGH TECHNOLOGY UNDERWATER SYSTEMS** THAT ENABLE ARMED FORCES TO ENHANCE THEIR SITUATIONAL AWARENESS, EXTEND THEIR OPERATIONAL CAPABILITIES AND RESPOND TO ANY THREAT – EVEN IN THE HARSHEST ENVIRONMENTS.