

Patria

ASW Training Target



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ASW Training Target is a small and lightweight autonomous underwater vehicle (AUV) that serves as a training target for preplanned underwater acoustic operations. ASW Training Target can have the multiple mission types simultaneously or separately: It can serve as target for active sonar system by repeating the received sonar pulse towards the sonar with proper phase shifting of the pulse as it were reflected from a total length of the moving submarine. The system can also serve as passive sonar target by transmitting the wide band acoustic signature of a submarine. At same time, ASW Training Target can serve as training target

for low weight homing torpedo system by repeating the received torpedo pulses as they were reflected from a moving submarine. Alternatively, ASW Training Target can serve as attacking training target by transmitting the homing torpedo pulses from the waveform library of the device.

ASW Training Target comprises of UUV platform, its payloads, container and handling devices. The bandwidth of the acoustic transmitters and hydrophones can be adjusted according to the active sonars in the customer systems.

Key features

- Designed for active and passive ASW training in open water conditions
- Top notch acoustic transmitters with high acoustic power and wide bandwidth
- Repeats sonar pulses as they were reflected from a submarine
- Contains a waveform library for transmits homing torpedo pulses as well as acoustic signature waveforms of submarines or other vessels
- Active AUV mission is controllable with specific acoustic control pulses
- AUV has a capability to send and receive FRSS-waveforms
- Data storage for hydrophone data from the whole mission
- Technical Readiness Level 9, in operative use

Main components

- Commercial AUV
- Embedded system as payload containing ASW Training Target functionalities
- Hydrophones installed on AUV
- Towed acoustic transmitters
- System for locating AUV based on GNSS
- Pinger for locating the system underwater
- Handheld remote controller and charger
- Mission planning software on rugged laptop

Technical details

- AUV weight 30 kg
- AUV length 1.8 m
- Maximum depth 80 m
- Maximum mission duration 6 h

