# **DEWARS**



## Deep Water Acoustic Range System

DEWARS is a high-performance range system which measures and analyses the submarine's underwater noise, maximazing its capacity for survival by maintaining acoustic stealth.

#### Much more than accuracy

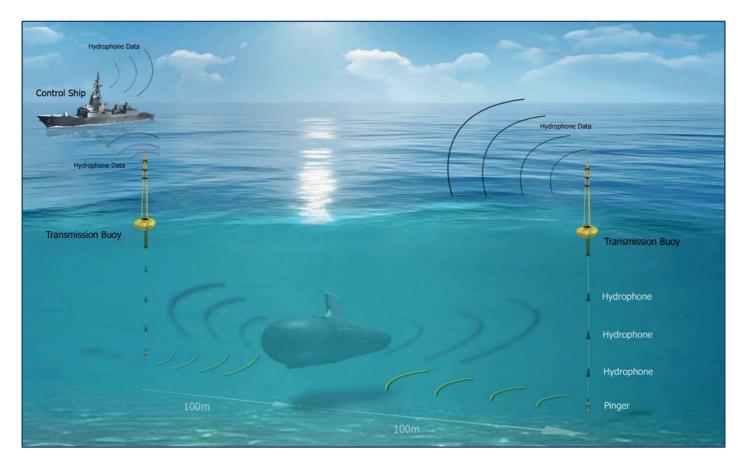
Precision and performance are the main features that characterize DEWARS. Moreover the Acoustic Analysis Software allows the user to take full advantage of the data collected making DEWARS stand out from other range sustems.

#### Measure the submarine regularly

Ensure submarine's acoustic discretion before engaging a mission.

#### Navies and shipyards use it to:

- Acquire the submarine's acoustic signature at different operational conditions and depths.
- Measure, analyse and record acoustic noise.
- Detect undesired noise sources, providing data to the combat system for own noise cancellation.
- Compare data to own historical data, and to other ships of the same class.
- Provide signatures and ranging report in Broadband and Narrowband.
- Analysis and evaluation of counter-detection ranges.





#### **DEWARS** features

- Acoustic signature calculation at different depths.
- Ranging and signature analysis in Broadband and Narrowband.
- Transient and Cavitation Detection and Analysis.
- Detection of the sources of undesired own noise.
- Tools for level-noise comparison within own historical data or between several ships belonging to the same class.
- Closest Point of Approach (CPA) calculation.
- Proprietary algorithms for own-noise analysis and control.
- High-accuracy hydrophones.
- Rigorous quality standards compliance.
- Raw data storage and database generation.
- High performance at different sea states.
- Noise level measurements of submarine at different operational conditions and depths.
- Modular and upgradeable.

The key of the signature control is to not only have reliable measurements but to make the most of the data in order to increase the submarine discretion and meet the objectives of the mission.

#### **DEWARS** units

#### Communication Buoy

- Encripted data relay
- Data storage/recording
- Status messages
- SWaP design.
- RTK/D-GPS positioning



#### Smart digital hydrophone - SDH

- High-sensitivity and accuracy
- Minimal S/N ratio
- Operation range up to 100 meters
- Programmable



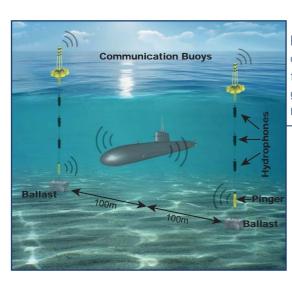
#### Range Control Station



- Hierarchical user profile access & security.
- COTS based station
- Easy on-board or land installation.

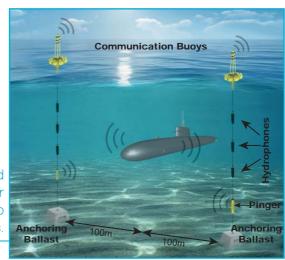
### Available in two configurations adapated to the coast seabed

DEWARS can be deployed in two different configurations depending on the seabed profile of the end-user's operational area.



Proven stability in drift configuration for depths greater than 100 meters.

Anchored configuration for water depth up to 100 meters.



DEWARS is also used to measure others vessel types such as frigates and corvettes.

