

GIB-FT

Portable Torpedo and AUV tracking range



KEY FEATURES

- System's supervision covers Air, Surface and Underwater layers
- Simultaneous multiple-trackings on the same graphical interface (underwater, surface and air vehicles)
- Wide tracking range: up to 100 km² with 12 buoys
- Shallow to deep waters (20 to 600 m of water depth)

- Real-time data are overlapped on a Jeppesen digital vector chart supplied
- Raw data are stored for archiving and off-line post-processing (analysis and reporting)
- Metric accuracy in 3D in the whole coverage area
- Fast buoys' deployment and recovery
- No calibration

KEY BENEFITS

- No need of a dedicated torpedo testing area
- Weapon testing upon various subsea environmental conditions
- Full mission performed in less than 12 hours
- Buoys' deployment fits weapon trajectory
- Joined exercise with friendly navy in foreign waters
- Low acquisition and maintenance cost compare to fixed bottom-mounted tracking ranges

GENERAL PRINCIPLE

The GIB-FT system is composed of a set of buoys that receives acoustic signals transmitted by the pingers mounted on the torpedo and the target. The buoys thus measure the distances to the underwater vehicle and periodically transmit, through a local radio network, their GPS position and the measured distances to a Control and Display Unit installed on a support ship or at shore. This Control & Display Unit triangulates underwater vehicle's positions & displays it over a chart.

SYSTEM COMPONENTS

- 4 to 12 buoys:
 - Radio range: 15 km - Weight: 60 kg - Height: 6 m
 - Autonomy: 8 hours
- 1 Underwater Telephone Adaptation Box (UTAB) for submarine tracking
- 3 GIB autonomous Pingers (for underwater tracking)
- 4 RIB Guidance Units (to track & guide surface & airborne units)
- 1 Control and Display Unit including AQUATIC software (for real-time, mission planning & post-processing purposes)
- 1 GPS Time Synchronization Box
- Acoustic Tests Box tool

ALSEAMAR also proposes full support for training, spares, annual maintenance and all required services during product's lifetime.

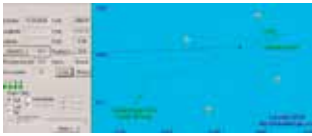


GIB FT in transit



Target or AUV launching

TYPICAL RESULTS



Real-time track of a torpedo running at a speed higher than 50 knots, with high maneuverability (turning radius of about 50 m at a speed of 35 knots). Unfiltered track.



Simultaneous tracking of a torpedo with a target and two test pingers as well as the positions of the 12 GIB-FT buoys.

This tracking fully demonstrates the real-time ability of the GIB-FT system to track 4 pingers simultaneously with excellent stability and positioning accuracy.



Torpedo launching

GIB-FT SYSTEM REFERENCES

The German Federal Office of Defense, Technology and Procurement (BWB) concluded, after an extensive market survey, that GIB-FT was the best torpedo tracking system. The system has been intensively used since 2002 with much success.



The torpedo manufacturer DCNS has been delivered a GIB-FT system in 2010 to perform qualification and cost-effective heavy weight torpedoes tracking.



French MoD (DGA) used GIB FT for training and qualified his new torpedo since 2011.



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