Underwater explosives test capability

Defence's Underwater Explosive Test Facility (UETF) is a unique sovereign capability recently commissioned for the underwater explosive shock testing and qualification of maritime equipment and systems in support of ADF.

The UETF provides a capability that addresses all aspects of the maritime lifecycle:

- Requirements gathering
- Test and evaluation
- Sustainment and disposal
- Acquisition
- Shock certification

The capability enables informed advice to be provided regarding the response of maritime platforms (both sub- and full-scale sections), structures, materials, fitted equipment and systems to a shock loading produced from an underwater explosion.
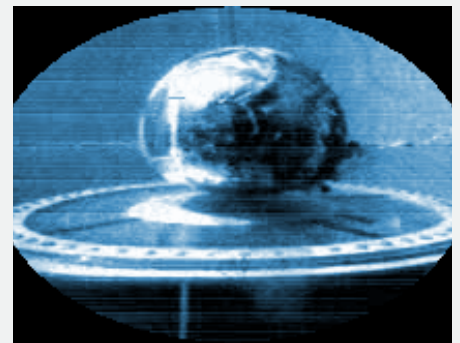
High and ultra-high speed instrumentation is available including data acquisition systems capable of recording high speed transient events, with up to 240 million samples per second at high resolution. High speed surface and underwater video support is also available.

The capability supports Defence industry involved in acquisition programs, and can be utilised for both commercial and academic interests through national and international collaborations.

Potential uses

- Shock qualification/assessment of maritime materials, structure and equipment
- Validation of modelling and simulation tools
- Validation of prototype designs

Whilst primarily an underwater explosive test facility, the facility can be extended to cover research and development in: surface and subsurface hydrodynamics, surface and subsurface unmanned platform performance and magnetic and acoustic signatures.

Features

Located 150km north of Melbourne in Nagambie, VIC

Explosives licence and supporting facilities

Clear water (swimming pool clarity) facility (20m x 20m x 20m)

High-speed underwater imaging system

High and ultra-high speed data acquisition system

Floating Shock Platform (up to 27 tonne test item)

For further information

Please contact:
uetf.nagambie@defence.gov.au

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