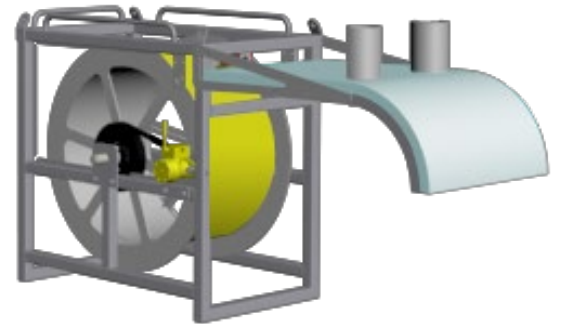
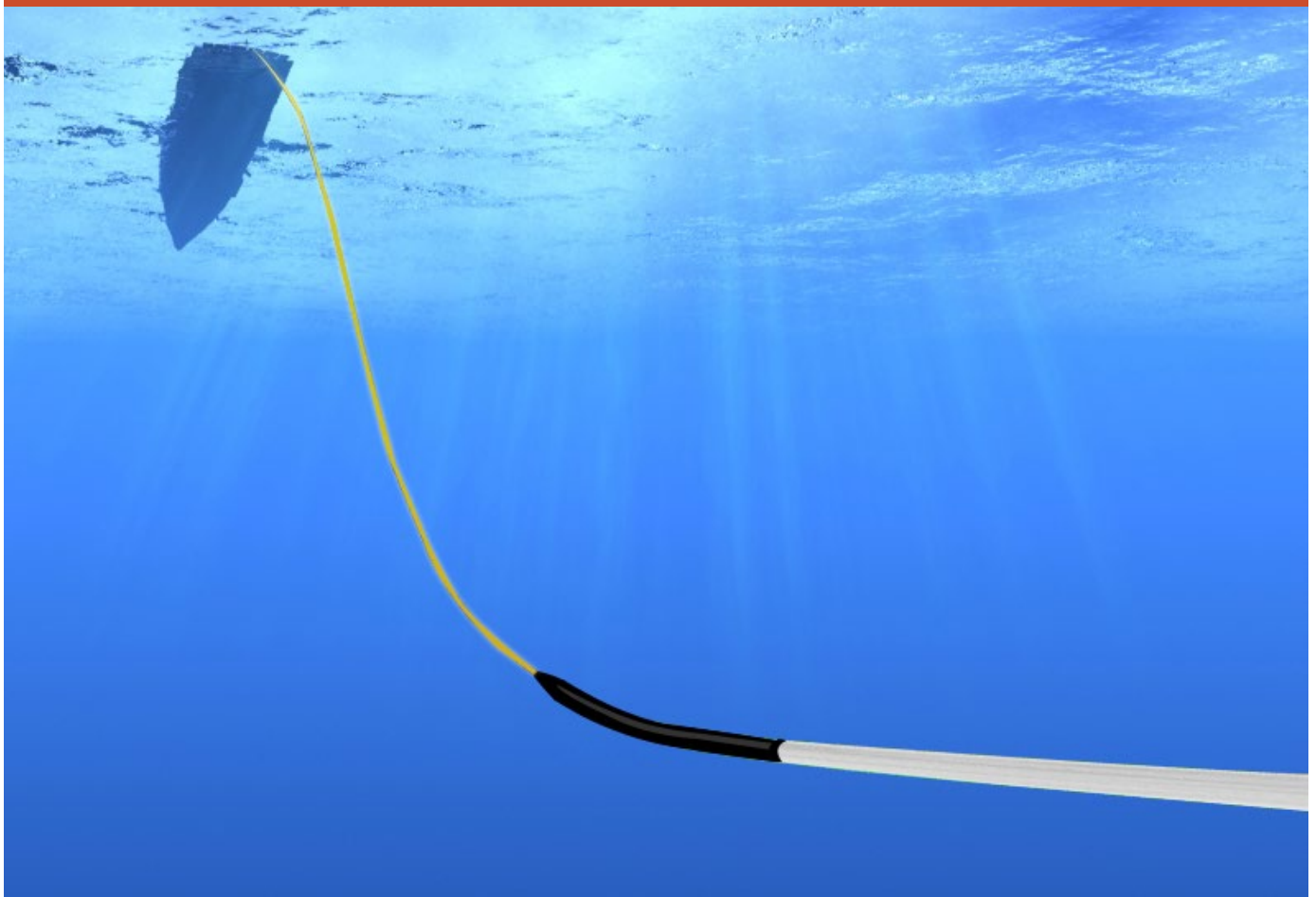


- FOTA is a proven, compact and lightweight Fibre Optic Towed Array that utilises Thales' world leading fibre laser based technology
- Proven reliability, with automated deployment and recovery and single person operation



THALES AUSTRALIA

## FOTA Fibre Optic Towed Array





**Advanced signal/data processing**

**SPED processing providing excellent performance in high traffic environments**  
**Reverberation rejection**  
**Open architecture for rapid capability insertion**  
**Single person operation.**

**Sea proven handling system design**

**Rapid, automated deployment/recovery**  
**Proven reliability**  
**Compact, lightweight configuration.**

**High strength**

**Slimline high strength fibre optic tow cable.**

**Vibration isolator**

**Vibration Isolator shields array from platform noise and tow cable strum.**

**Ambiguity solving passive fibre optic array with torpedo alert capability**

**Slimline, lightweight, scaleable and modular architecture**  
**Patented fibre laser technology**  
**High reliability**  
**Long detection ranges.**



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## FOTA

### Fibre Optic Towed Array

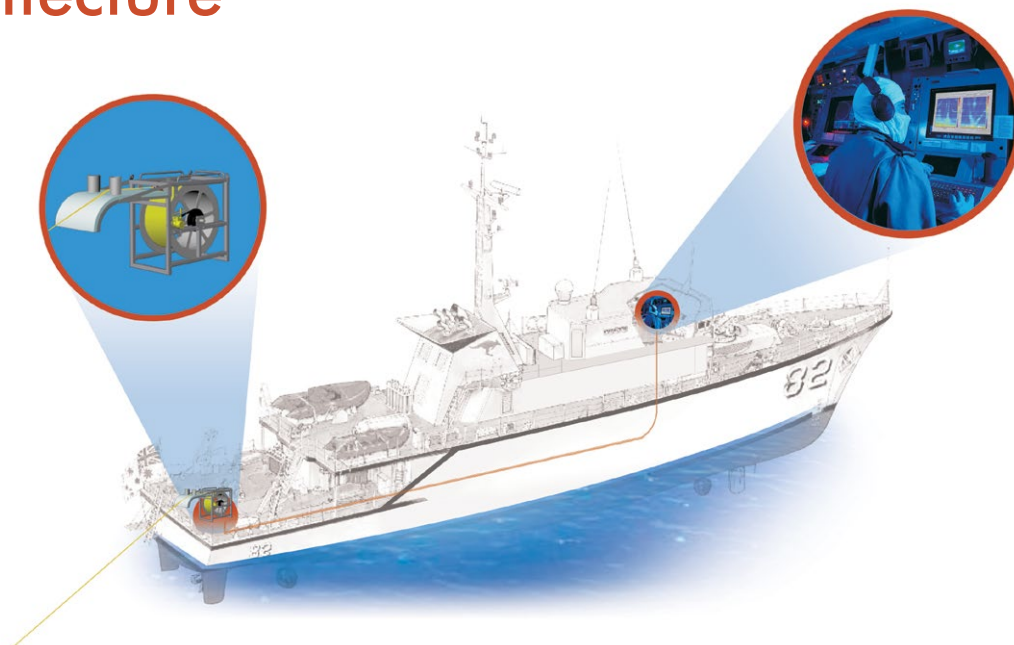
#### THE TECHNOLOGY

Fibre Laser Sensor technology has been pioneered in Australia by the Defence Science and Technology Organisation (DSTO). Thales has collaborated with DSTO in the development of this technology for sonar applications. Thales has more than 30 years experience in the design, manufacture and installation of towed array sonar. This experience has culminated in a world first development and manufacture of the fibre optic towed array system (FOTA) utilising Thales' patented fibre laser based technology.

These arrays are of lower diameter and weight than traditional towed array designs, but provide equivalent performance with a significantly reduced ship footprint. This makes them attractive for new ship fitment, and also provides the opportunity for retrofitting to Craft of Opportunity (COOP) and naval vessels ranging in size from patrol craft to large surface combatants.

The FOTA system in-water component consists of a low diameter but strong fibre optic tow cable that is connected to the array via a specially designed vibration isolator that shields the array from a platform and tow cable flow noise. The array is of much smaller diameter and weight than conventional towed arrays, and features unique and patented Thales fibre laser technology. The array can also be connected to a non-acoustic sensor module to provide the operator with information such as array heading and depth. These modular and scaleable characteristics allow the FOTA system to be tailored to meet specific operator requirements. The FOTA system shipboard component consists of a proven, low-weight winch connected to a simple and compact operator console housing all signal and data processing electronics.

## Slimline, lightweight, scaleable and modular architecture



FOTA integrated shipboard configuration

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## PLATFORM FITMENT

For an integrated capability the FOTA winch is secured to the deck at the stern of the platform, with the operator console, housing all data and signal processing electronics, located remotely at a suitable location onboard.

The low weight and compact design of the FOTA system enables it to be housed and shipped in a standard ISO 20 foot container. For vessels having sufficient weight and space allowances and where an integrated solution is not preferred, this container can be secured to the deck at the stern of the platform. Once connected to the platform's power and communication network the FOTA system is fully self-contained.

In both integrated and container based solutions deployment and recovery is automated, with single person operation.

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Deployment  
and recovery is  
automated, with  
single person  
operation.

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If preferred the complete FOTA system can be housed and shipped in a standard ISO 20 foot container