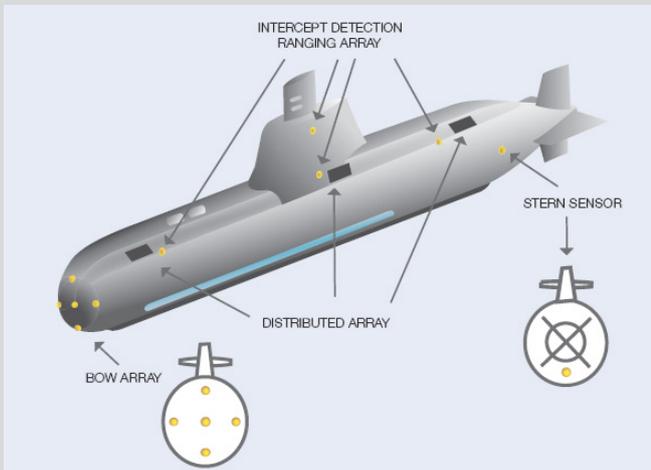




Active Intercept and Ranging The answer to a submariner's prayer



The Sonartech Active Intercept and Ranging (AI&R) Sonars are a family of well-proven submarine sonar processing systems providing the ability to intercept, process and display active sonar transmissions and transient events.

The AI&R Sonars will localise and characterise the acoustic signal source for immediate and effective threat assessment.

The AI&R Sonars will provide the command team with the bearing, range and speed of the target vessel or signal source without the need to conduct any ownship manoeuvres.

The system is most effective against high Signal to Noise Ratio (SNR) contacts and will automatically produce highly reliable solutions from an intercept or a series of intercepts.

The Sonartech AI&R Sonars are currently in use with multiple Navies throughout the world including the Royal Australian Navy (RAN).

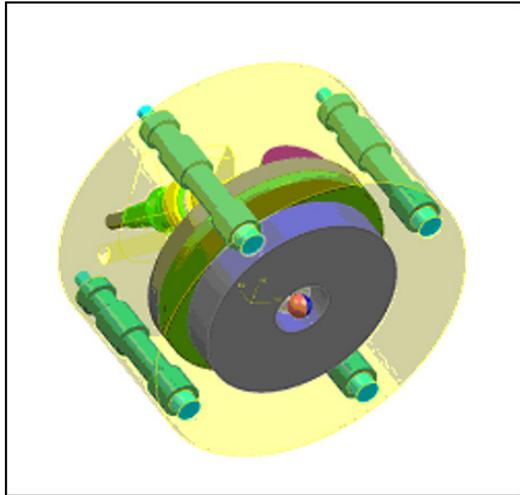
Capabilities

- Automatic Detection
- Accurate Bearings
- Accurate Ranges
- Contact Classification Information
- Easy to operate

Intercepted Acoustic Sources include:

- Active sonar transmissions
- Weapon and countermeasures deployment
- Underwater communications
- Platform mechanical, including transients machinery state changes
- Crew transients such as hatch drop

... a sound decision



Accurate Threat Assessment Data

- The AI&R Sonars provide a submarine command team with indication of a potential threat through timely Target Motion Analysis.
- Combined with accurate and current classification information the AI&R Sonars can assist operators in conducting contact classifications.

Detection

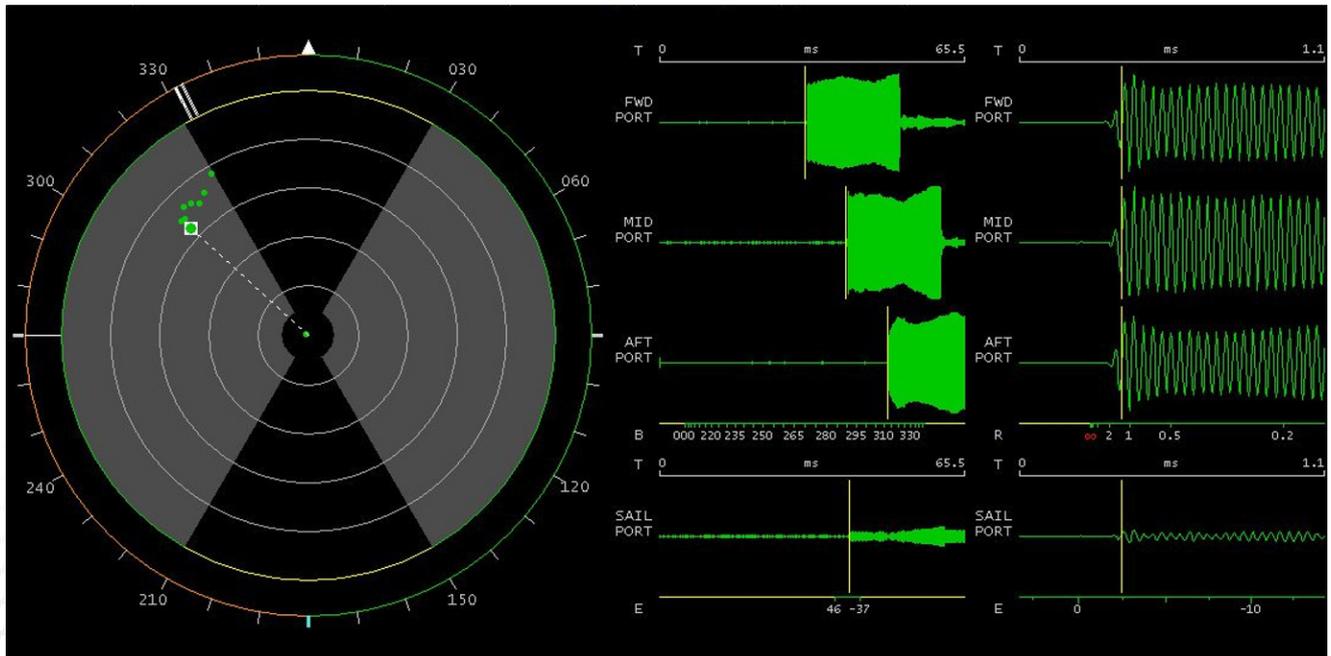
- Selectable automatic detection capability that processes transmission intercepts and received transients without operator intervention.
- Concurrent use of multiple detection processes to ensure that all types of events are captured.
- A 'Detect Alert Panel' indicates when a transmission has been received. Manual control of the threshold level for all automatic detection processes is provided that allows the false alarm rate to be easily managed.

Accurate Ranges

- Using advanced wavefront curvature analysis calculations, the AI&R system is able to accurately determine the range to the noise source.

Contact Classification Information

- Functionality to extract the following classification information from intercepted sound sources:
 - Frequency
 - Pulse interval and length



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