



POSITION DESCRIPTION

Position Title:	Marine Acoustics Researcher
Position Reference Number:	PDMD002
Division	Maritime Division
Position Classification:	S&T3-4 Below
Position Location:	Eveleigh (NSW)
Security Level:	NV-1
Minimum Academic Qualification:	Honours Degree
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Academic Disciplines

Aerospace/ Aeronautical Engineering, Naval Architecture	Chemical, Radiological, Biological, Food sciences	Materials Science
Computer Sciences, IT, Software Engineering, Telecommunications	Mathematics and physics	Psychology and Social Sciences
Mechanical and Mechatronic Engineering (including robotics)	Electronic/ Electrical Engineering	Other

Position Overview

The Marine Acoustics Researcher will investigate novel uses of acoustic technologies to allow humans and robotic systems to sense and characterise the underwater battlespace for military advantage, and communicate better underwater.

Position Duties

Under guidance from staff, the Marine Acoustics Researcher will:

1. Assist in the integration, validation, assessment and improvement of underwater acoustic sensors and communications systems for maritime autonomous systems.
2. Investigate how techniques from signal and image processing, data analytics and machine learning can be used to characterise the underwater battlespace – its topography, biota, seabed features, and surface and underwater vessel and vehicle traffic.
3. Report the results of trials and investigations in publications and presentations.
4. Assist in the operation and maintenance of group S&T infrastructure, including autonomous maritime vehicles, oceanographic sensors and communications systems.

Other Requirements

Appointees will initially be engaged on a **BASELINE** security clearance with an upgrade to a **Negative Vetting 1 (NV-1) Security Clearance** required upon commencement.

Appointees will be required to participate in sea trials and undertake work-related interstate and overseas travel.