

POSITION DESCRIPTION

Position Title:	Undersea Combat System Architectures and Integration Researcher
Position Reference Number:	ECRMD004
Division	Maritime Division
Position Classification:	S&T3-4
Position Location:	Edinburgh (SA)
Security Level:	Negative Vetting 1 (SECRET)
Minimum Academic Qualification:	Bachelor
Enquiries:	Adam Sbrana Adam.Sbrana@dst.defence.gov.au (08) 9553 3624 or
	Gavin Puddy Gavin.Puddy@dst.defence.gov.au (08) 7389 7522

Academic Disciplines

Aerospace/ Aeronautical Engineering, Naval Architecture
Computer Sciences, IT, Software Engineering, Telecommunications
Mechanical and Mechatronic Engineering (including robotics)

Chemical, Radiological, Biological, Food sciences Mathematics and physics Electronic/ Electrical Engineering Materials Science Psychology and Social Sciences Other

Position Overview

This Undersea Combat System Architectures and Integration Researcher will contribute to the Undersea Combat System research and development program with a particular focus on novel architecture design and integration approaches.

The position will involve interaction with Universities, Industry Partners, and Defence clients in Australia and in partner countries.

Position Duties

- 1. Support the investigations into future Combat System architectures for the undersea environment.
- 2. Work as part of a small team to investigate concepts associated with but not limited to engineering budget optimisation (Space, Weight, Power and Cooling SWaP-C) and integration techniques to maximise Combat System efficiency and capability. This will include areas such as investigating novel computing platforms, further development and utilisation of DST's performance integration and modelling environment, and the use automatic code generation and translations techniques to achieve SWaP-C optimisation.
- 3. Participate in laboratory test and evaluation experiments including field trials and exercises with the Australian Defence Force and/or overseas agencies.
- 4. Contribute to establishing and executing research agreements with Academia and Industry and participate in international cooperative research and development programs as required.
- 5. Provide timely reports for clients and DST leadership on relevant research areas.
- 6. Engagement with national and international clients and other agencies (Government, Industry) both in Australia and overseas.

Other Requirements

Some interstate travel is expected (roughly 4 times per annum). In time overseas travel may be required.

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