



POSITION DESCRIPTION

Position Title:	Undersea Combat System Architectures and Integration Researcher
Position Reference Number:	ECRMD004
Division	Maritime Division
Position Classification:	S&T3-4 Below/Above
Position Location:	Edinburgh (SA)
Security Level:	Negative Vetting 1 (SECRET)
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	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 Undersea Combat Systems Group in South Australia is looking for an enthusiastic Engineer/Computer Scientist to provide science and technology input to the Collins Class and Future Submarines. As the ideal candidate you will be working in a cooperative development program for the Combat Management System deployed on Australian and USA submarines and jointly developed by both nations.

This position will be contributing to the Undersea Combat System research and development program with 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

- Under limited direction from the Discipline Lead, support the investigations into future Combat System architectures for the undersea environment,
- 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,
- Participate in laboratory test and evaluation experiments including field trials and exercises with the Australian Defence Force and/or overseas agencies,
- Participate in international cooperative research and development programs as required,
- Contribute to establishing and executing research agreements with Academia and Industry,
- Provide timely reports for clients and DST leadership on relevant research areas,
- The role is likely to require travel and 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.