

# **POSITION DESCRIPTION**

Position Title:	Operations Research/Aerospace Analyst			
Position Reference Number:	ECRJOAD001			
Division	JOAD			
Position Classification:	S&T3/4			
Position Location:	Fishermans Bend, Melbourne			
Security Level:	NV1			
Minimum Academic Qualification:	Bachelor Degree (or higher)			
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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 Operations Research/Aerospace Analyst will work as part of a team undertaking analysis of Australian air power using a variety of techniques and scientific approaches. They will apply and develop advanced operations analysis tools and methods to assist with: the evaluation of tactics and concepts of operations, and the assessment of future capability options. Of particular interest are the evaluation of integrated tactics, and the effective utilisation of Australia's Airborne Electronic Attack and Air Combat capabilities.

### **Position Duties**

Under guidance, the Operations Research/Aerospace Analyst will:

- 1. Participate in and contribute to operations analysis studies that examine Australian air power.
- 2. Research and develop leading edge operations analysis methods. These may be in the areas of: data analytics, design of experiments, Artificial Intelligence, complex behaviour representation, optimisation, modelling and simulation, experimentation & wargaming, and advanced visualisation.
- 3. Assist with the modelling and simulation of advanced systems including: aircraft sensors, weapons, and non-kinetic effectors. This will include the use and development of tools, software libraries, computational methods and innovative data visualisation techniques.
- 4. Develop an understanding of military air operations, including concepts of operation, tactics and the performance of aircraft, sensors and weapons.

## **Other Requirements**

This position will involve travel to engage with military and scientific partners, and to attend scientific conferences.

It may also involve observation of Australian Defence Force Air Warfare training and exercises