



# POSITION DESCRIPTION

<b>Position Title:</b>	Rotary Wing Flight Modeller
<b>Position Reference Number:</b>	ECRAD006b
<b>Division</b>	Aerospace
<b>Position Classification:</b>	S&T3-4 below
<b>Position Location:</b>	Fishermans Bend, Vic
<b>Security Level:</b>	Neg Vet 2
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## Academic Disciplines

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

## Position Overview

Under limited direction and often as part of a team, the successful applicant will be required to perform flight modelling related to the operations of rotary winged assets within the ADF. This includes the development of rotary wing flight models as well as using them to support first of class flight trials and incident and accident investigations. There may also be a requirement to use other techniques such as Computational Fluid Dynamics (CFD) and wind tunnel modelling to aid in the development of these flight models.

## Position Duties

As part of a multidisciplinary team:

- Work collaboratively and operate as an effective team member undertaking research and development in areas appropriate to meet Defence stakeholder requirements;
- Develop and apply mathematical models and simulations to predict flight characteristics of a range of ADF rotary wing aircraft;
- Plan and participate in flight trials and/or human-in-the-loop simulation experiments involving rotary wing aircraft;
- Analyse and interpret research in areas including aeronautical sciences as well as aerodynamics and fluid mechanics with the ability to apply it to a range of complex rotary wing flight models;
- Provide advice on aircraft behaviour control aspects of air vehicle flight incidents and accidents (Rotary Wing).

## Other Requirements

Demonstrated knowledge and appropriate experience in some or all of the following areas:

- development of aircraft flight models of varying fidelity (preferably rotary wing);
- development of computer programs using conventional programming languages or high level environments such as MATLAB.

Appointees will be initially be engaged on a Baseline security clearance with an upgrade to a Top Secret Negative Vetting (NV2) Security Clearance required upon commencement.