PhD and Scholarship Opportunity with Defence Science and Technology Group

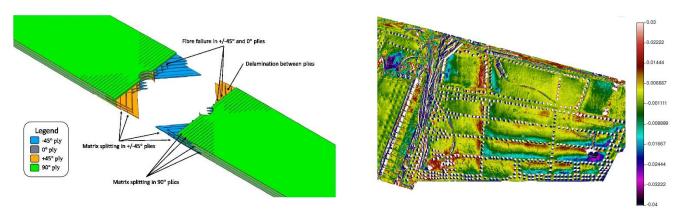
Background



Composite materials usage is increasing in the ADF fleet. To support these platforms, and make confident airworthiness decisions, improved knowledge and understanding of composite material behaviour is required.

Project

A PhD project is being offered at UNSW, with the support of Defence Science and Technology Group and Deakin University. The project will develop analysis methodology for reliable strength prediction and fatigue life assessment of impact damaged composite aircraft structures using novel simulation tools. The project will integrate materials testing and material state determination (damage assessment using non-destructive techniques).



Candidates and Scholarship

This project is open to Australian domestic candidates only, due to limitations of the funding agreement. The chosen candidates will be supported to apply for an RTP scholarship and will be extremely competitive. The candidate will also be provided with a generous \$20k p.a. top-up scholarship and a \$3.5k p.a. travel and expenses fund.

Requirements of the candidate:

- Bachelors or Masters degree in a related field (Aerospace, Mechanical, Manufacturing, Materials). Students in their final term may also apply.
- Meeting the requirements for PhD and scholarship eligibility (general 1st class honours and above).
- An interest in composite materials modelling, simulation and testing.





Supervision and Facilities

The research candidates will have access to a stellar research team across UNSW, Deakin University and DST Group in Melbourne, including data from international research partners. This is a great stepping-stone to a future in applied composites research, especially in the aerospace/defence sectors.

The primary project supervisors will be:

- A/Prof Garth Pearce (UNSW):
 - o https://research.unsw.edu.au/people/associate-professor-garth-morgan-kendall-pearce
 - o g.pearce@unsw.edu.au
 - o +61 2 9385 4127
- Dr Mathew Joosten (Deakin):
 - o https://www.deakin.edu.au/about-deakin/people/mathew-joosten
 - o <u>mathew.joosten@deakin.edu.au</u>
 - o +61 3 5247 9180





Other support for the project will be provided by:

- Dr Xiaobo Yu (DST Group)
- Professor Ganga Prusty (UNSW)
- Professor Chun Wang (UNSW)
- Dr Sonya Brown (UNSW)
- Dr Matthew Donough (UNSW)

UNSW and Deakin University are home to some of Australia's premier composites research and technology centres and have world-class equipment and research support.

Defence Science and Technology Group – Aerospace Division provides support and innovative solutions to enhance the operational capability, survivability, availability and safety of the Australian Defence Force's (ADF's) aircraft platforms.

These projects will give the candidates access to the best research facilities available and a direct pathway for their ideas and innovations to be applied in service.



