



**Australian
National
University**

Position Description

College/Division:	College of Science
Faculty/School/Centre:	Research School of Astronomy and Astrophysics
Department/Unit:	Siding Spring Observatory
Position Title:	Mechanical Manager
Classification:	ANU Officer 7 (Technical)
Position No:	6069
Responsible to:	Observatory Manager
Number of positions that report to this role:	2
Delegation(s) Assigned:	

PURPOSE STATEMENT:

Located in the Warrumbungle mountains of northern New South Wales, Siding Spring Observatory (SSO) is Australia's largest optical astronomical observatory. SSO supports the research activities of the Australian National University's Research School of Astronomy and Astrophysics (RSAA), consortium members of the Anglo-Australian Telescope (AAT), and several national and international telescopes.

The Mechanical Manager directly supports high-quality research by overseeing the operations of the mechanical team responsible for the design, development, installation and maintenance of telescope systems, experimental equipment and apparatus for astronomical research.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Mechanical Manager provides mechanical design, development and maintenance expertise for the research areas. The role will also be expected to maintain a high level of awareness of current technologies in mechanical systems and will assist with the training of staff and students in these fields.

Reporting to the Observatory Manager, the Mechanical Manager will supervise the Mechanical team and will maintain a close working relationship with a variety of cross functional staff, academic staff and students within the AAT, RSAA and more broadly with staff in related fields across the University.

Role Statement:

Under the broad direction of the Observatory Manager, the Mechanical Manager will:

- Manage the operations of the Mechanical team including all associated instrumentation and telescope systems, ensuring all maintenance and design services provided by the team are performed in a pro-active and consistent manner.
- Supervise the Mechanical team, including supporting staff career development, knowledge sharing, monitoring workloads and managing staff performance.
- Design, manufacture, diagnose, install and commission complex scientific instruments, components and equipment using Computer Aided Drafting (CAD) design software combined with modern Computer Numeric Control (CNC) equipment.
- Coordinate and perform fault finding, repair and maintenance on a broad range of specialised mechanical equipment and scientific instruments ensuring all equipment is ready for installation on the telescope, including action against identified equipment faults.
- Support the general operations of the telescopes, instruments and associated support equipment at SSO including, but not limited to, managing the planned maintenance schedule and managing all instrument changes, and leading the aluminising activities.
- Assist researchers or other area's in RSAA in identifying needs and limitations in developing or modifying research instrumentation and control equipment.
- Produce and/or review reports and recommendations associated with mechanical facilities, including mechanical project reports.

- Maintain awareness of Work Health and Safety legislation and support a safe work environment for staff and/or contractors through the implementation and use of safe work procedures and reporting incidents, exposures, hazards or health and or safety concerns in accordance with University procedure.
- Operate a range of equipment in a safe manor, which may include but not limited to: overhead cranes and lifting equipment, elevated work platforms, forklifts, specialist hand tools and motor vehicles.
- Undertake other duties as required, consistent with the classification of the position and in line with the principle of multiskilling.
- Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity

SELECTION CRITERIA:

- A scientific/technical degree with relevant mechanical expertise or an equivalent combination of relevant experience and education/training.
- Demonstrated supervisory or managerial experience, with an ability to coach and mentor staff, prioritise workloads and to lead the team to deliver on challenging objectives in a timely manner.
- Extensive demonstrated ability to design, construct, test and diagnose and repair a broad range of mechanical equipment within a scientific environment using Computer Aided Drafting (CAD) design software combined with modern Computer Numeric Control (CNC) equipment.
- Excellent written and oral communication skills with the capacity to consult, negotiate and liaise effectively with staff, students and contractors from a diverse range of backgrounds and experience.
- Well-developed organisational skills with demonstrated experience working to deadlines in the achievement of operational outcomes, utilising initiative and judgement.
- A demonstrated high level understanding of equal opportunity principles and a commitment to the application of EO policies in a university context.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

Supervisor/Delegate Signature:		Date:	July 2022
Printed Name:	Robert Brookfield	Uni ID:	

References:

[General Staff Classification Descriptors](#)



Pre-Employment Work Environment Report

Position Details

College/Div/Centre	College of Science	Dept/School/Section	Research School of Astronomy and Astrophysics
Position Title	Mechanical Manager	Classification	ANU Officer level 7 (Technical)
Position No.	6069	Reference No.	

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a primary duty of care, so far as reasonably practicable, to ensure the health and safety of all staff while they are at work in the University.

- This form must be completed by the supervisor of the advertised position and appended to the back of the Position Description.
- This form is used to advise potential applicants of work environment and health and safety hazards prior to application.
- Once an applicant has been selected for the position they must familiarise themselves with the University WHS Management System via Handbook guidance <https://services.anu.edu.au/human-resources/health-safety/whs-management-system-handbook>
- The hazards identified below are of generic nature in relation to the position. It is not correlated directly to training required for the specific staff to be engaged. Identification of individual WHS training needs must be in accordance with WHS Local Training Plan and through the WHS induction programs and Performance Development Review Process.
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria - see 'Employment Medical Procedures' at http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp

Potential Hazards

<ul style="list-style-type: none"> Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a regular or occasional part of the duties. 					
TASK	regular	occasional	TASK	regular	occasional
key boarding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory work	<input type="checkbox"/>	<input type="checkbox"/>
lifting, manual handling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	work at heights	<input checked="" type="checkbox"/>	<input type="checkbox"/>
repetitive manual tasks	<input type="checkbox"/>	<input type="checkbox"/>	work in confined spaces	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Organizing events	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	<input checked="" type="checkbox"/>
fieldwork & travel	<input type="checkbox"/>	<input type="checkbox"/>	electricity	<input type="checkbox"/>	<input type="checkbox"/>
driving a vehicle	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
NON-IONIZING RADIATION			IONIZING RADIATION		
solar	<input type="checkbox"/>	<input checked="" type="checkbox"/>	gamma, x-rays	<input type="checkbox"/>	<input type="checkbox"/>
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	beta particles	<input type="checkbox"/>	<input type="checkbox"/>
infra red	<input type="checkbox"/>	<input type="checkbox"/>	nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>
laser	<input type="checkbox"/>	<input type="checkbox"/>			
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>			
CHEMICALS			BIOLOGICAL MATERIALS		
hazardous substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>	microbiological materials	<input type="checkbox"/>	<input type="checkbox"/>
allergens	<input type="checkbox"/>	<input type="checkbox"/>	potential biological allergens	<input type="checkbox"/>	<input type="checkbox"/>
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>
mutagens/teratogens/ carcinogens	<input type="checkbox"/>	<input type="checkbox"/>	clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	genetically-manipulated specimens	<input type="checkbox"/>	<input type="checkbox"/>
			immunisations	<input type="checkbox"/>	<input type="checkbox"/>
OTHER POTENTIAL HAZARDS (please specify):					
Supervisor/Delegate Name:		<i>Robert Brookfield</i>		Date:	July 2022