# Position Details

## Technical Services- CSOF4

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| The following information is for applicants |
| Advertised Job Title | Electronics Technician |
| Job Reference | 88321 |
| Tenure | Indefinite |
| Salary Range | AUD$87,068 to AUD$98,504 plus up to 15.4% superannuation |
| Location | Narrabri, NSW |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian Citizens Only
* Australian/New Zealand Citizens and Australian Permanent Residents
* All Candidates
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| Position reports to the | Engineering Team Leader |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Peter Mirtschin via email at Peter.Mirtschin@csiro.au |
| How to apply | Apply online at <https://jobs.csiro.au/> Internal applicants please apply via **Jobs Central**If you experience difficulties when applying, please email careers.online@csiro.au or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

### Role Overview

Space and Astronomy (S&A)manages CSIRO’s world-class facilities for radio astronomy and spacecraft tracking. We are internationally renowned for our radio astronomy research and engineering expertise, and closely engaged with construction of the SKA, a $€2$ billion international project in radio astronomy sited jointly in Western Australia and South Africa.

CSIRO’s radio astronomy observatories are collectively known as the Australia Telescope National Facility (ATNF) and comprise radio telescopes at three observatories in NSW near the towns of Parkes, Narrabri and Coonabarabran. A fourth telescope, the next-generation Australian Square Kilometre Array Pathfinder (ASKAP), is operated at the Murchison Radio-astronomy Observatory (MRO) in Western Australia.

The Paul Wild Observatory near Narrabri is the location of the Australia Telescope Compact Array (ATCA), an array comprising six 22-metre high-performance dish antennas with receiver systems spanning 1.1GHz to 105GHz. In 2023 we will commence a major upgrade of the telescope’s entire data processing system, in a multi-million dollar project called BIGCAT. The Observatory will also host the first of a series of low-frequency (50-350MHz) clusters as part of a future long-baseline array to operate with SKA. The observatory site is located 25 km from the township of Narrabri. Transport between Narrabri and the Observatory site is provided.

We are seeking an Electronics Technician be part of the support team for the ATCA Observatory Operations and, together with ATNF staff at other sites, to support delivery of major new instrumentation projects including BIGCAT. You will work under broad supervision and guidance to provide technical support of complex digital, analogue and radio frequency systems including low-noise receivers, digital signal processing, control and monitoring, and timing systems. The role includes participating in planning for critical systems maintenance activities, fault finding and testing, and participating in the planning and deployment of new state-of-the-art instrumentation.

You will be part of a small multi-disciplinary engineering team located on the Narrabri site, but working at times within the broader ATNF technical team including at our Marsfield Headquarters to maintain operations and support new projects such as BIGCAT.

This is an opportunity to combine the advantages of a rural lifestyle with a role that presents unique challenges at a world-class science and technology research facility.

### Duties and Key Result Areas

* Work within a multi-disciplinary team to monitor system performance and maintain the Observatory electronics systems, to ensure the highest levels of availability required for the National Facility.
* Apply your knowledge and experience, working under limited direction, to undertake fault diagnosis and corrective maintenance on a diverse range of specialised analogue and digital electronic equipment, sharing your knowledge and skills with other staff.
* Undertake repairs to electronic equipment and modules down to component level.
* Proactively identify potential spares issues or failure modes and work with external suppliers or staff at other ATNF sites to determine suitable replacement parts or alternative solutions.
* Actively participate in planning and design of new instrumentation projects for the Observatory, working closely with colleagues at other ATNF sites and within CSIRO.
* Travel occasionally to other ATNF sites, as required, to assist with installation and maintenance of electronics systems and to participate in project planning.
* Participate in the Observatory on-call roster to attend to after-hours breakdowns, and work flexible hours as required.
* Actively contribute to written and online documentation associated with equipment repair and maintenance, including management of system drawings and schematics, and configuration management.
* Communicate openly, effectively and respectfully with all staff, contractors and visitors in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

Under CSIRO policy only those who meet all essential criteria can be appointed.

1. A relevant Electronics Certificate, Associate Diploma or equivalent in Electrical/Electronic/RF Engineering with at least 3 years relevant experience.
2. Demonstrated experience in diagnosing complex electronics systems and aptitude for advancing system knowledge.
3. Proven ability to work effectively as part of a multi-disciplinary, regionally dispersed team, and to carry out tasks autonomously.
4. Demonstrated experience with soldering, rework of PCBs and electronic modules as well as mechanical assembly
5. Willingness to travel to other CSIRO sites for training and professional development or to assist with the repairs, installation or maintenance of equipment.
6. The ability and willingness to work and access heights up to 30m above the ground.
7. Demonstrated commitment to safe work practices, environmental sustainability and the principles of equity and diversity.
8. A current Class ‘C’ Australian driver’s licence (or equivalent).

#### Desirable

1. An understanding of RF systems and a mechanical aptitude.
2. Experience with computer aided drafting (CAD).
3. Experience with data cabling including working with optic fibre installation and splicing.

## **Required Competencies**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
* **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.
* **Resource Management/Leadership:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
* **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
* **Independence:** Recognises and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

Special Requirements

* Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.
* You will be required to participate in the Observatory on-call roster to attend to after-hours breakdowns, and to work flexible hours as required.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [ATNF Website](https://www.atnf.csiro.au/) for more information.

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted