



Position Details

Technical Services- CSOF4

THE FOLLOWING INFORMATION IS FOR APPLICANTS

Advertised job title	Electronics Technician
Job reference	101685
Tenure and work schedule	Indefinite, full time or part time (minimum 0.9FTE) We will explore options for part-time, job-share and flexible work arrangements based on needs of the role and individual circumstances.
Salary range	AU\$100,103 - AU\$113,251 per annum (pro-rata for part-time) plus 15.4% superannuation, and a location allowance of \$1868 per year due to remote location
Location(s)	Narrabri, NSW (Gomeri Narrabri Country) Onsite role with flexible start and finish times considered; transport between Narrabri and the Paul Wild Observatory site is provided
Relocation assistance	Will be provided to the successful candidate if required
Applications are open to	Australian/New Zealand Citizens and Australian Permanent Residents
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
Support and workplace adjustments	We offer a range of reasonable supports and workplace adjustments. Please let us know via email careers.online@csiro.au if we can help you to equitably participate in our recruitment process or the role itself.
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

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](#).

Diversity, inclusion and belonging

At CSIRO, diversity, equity, and inclusion are central to our purpose and impact. We value diverse perspectives, which drive innovation and help us address complex challenges.

Inclusion is key to our culture, ensuring everyone feels supported and empowered to contribute their best work. We recognise the intersectionality of experiences, identities, and social factors that shape each individual. By embracing diversity, we learn from the uniqueness of our people, creating a culture where all belong. CSIRO is an equal opportunity employer, recruiting based on merit and reflecting the community we serve. We value diversity in all its forms, including age, nationality, ability, culture, gender, sexuality, faith, education, and thought.

About CSIRO



Who we are

Australia's national science agency



One of the world's largest multidisciplinary science and technology organisations



6,300+ dedicated people working across 51 sites in Australia and globally



State-of-the-art national research infrastructure



We delivered \$10.2 billion of benefit to the nation

As Australia's national science agency, CSIRO is solving the greatest challenges through innovative science and technology. Many of our iconic innovations were once considered impossible until someone, just like you, joined us and took on the challenge.

As one of the world's largest multidisciplinary mission-driven research organisations, we are focused on the issues that matter the most: for our quality of life, for the economy and for our environment. We believe diverse teams are more effective and deliver more innovative outcomes. When we all focus on the big things that really matter, and work in partnership with our communities and Indigenous Australia, Australian science and technology can solve seemingly impossible problems and create new value for all Australians. Visit [CSIRO.au](https://www.csiro.au) for more information.

CSIRO (Commonwealth Scientific and Industrial Research Organisation) is Australia's national science agency and innovation catalyst and one of the world's largest and most successful publicly funded research and development organisations.

CSIRO is one of the largest and most multidisciplinary mission-driven research agencies in the world. With 51 locations and over 6,300 people across Australia and internationally, CSIRO solves the

greatest challenges through innovative science and technology to deliver world-class economic, environmental, and social benefits for Australia in a global context.

Many of CSIRO's innovations were once considered impossible. Fast WiFi, Aerogard insect repellent and the plastic Australian banknote, to name a few.

Until someone, just like you, joined us and took on the challenge.

We are committed to developing and supporting a diverse workforce in its broadest sense and know diverse teams are more effective and deliver more innovative outcomes for science.

As an employee of CSIRO, you will be eligible for the many benefits of working at Australia's National Science Agency. You can read more here:

- [Life at CSIRO](#)
- [Personal Development and Learning](#)
- [Generous leave conditions and benefits](#)
- [Work / Life Balance](#)



About the Australia Telescope National Facility

CSIRO operates several radio astronomy observatories and data archives that are collectively known as the Australia Telescope National Facility (ATNF). Our technology development program is the cornerstone of the ATNF and is an internationally recognised source of innovative radio astronomy instrumentation, which leads to societal impact.

The ATNF includes:

- the ASKAP radio telescope with its wide field-of-view in a legislated radio quiet zone,
- the Australia Telescope Compact Array with its wide frequency coverage, quick response times and flexible configurations,
- Murriyang, our Parkes radio telescope, which is the largest single-dish radio telescope dedicated to science observations in the southern hemisphere,
- the Long Baseline Array (LBA) providing very long baseline interferometry across Australia,
- the Mopra radio telescope, which is used for single-dish observations, particularly at millimetre wavelengths and as part of the LBA
- astronomical data archives that currently provide 15PB of data, as well as various catalogues, databases and software packages used for obtaining and processing data from our facilities, and
- a comprehensive range of expertise, spanning from the intricacies of front-end receivers to deploying machine learning algorithms for analysing the vast data volumes contained within our archives.

Visit [Australia Telescope National Facility - CSIRO](#) for more information. For two semesters each year, the ATNF accepts Principal Investigator-driven proposals from the national and international community

The ATNF has been involved with the international SKA project from its inception, has contributed to its design, and is delivering the beam-forming instrumentation and local infrastructure for the SKA-Low telescope in Australia. In Australia, CSIRO is partnering with the SKA Observatory to build and operate the SKA-Low telescope. The ATNF's locations, telescopes and engineering expertise are in an excellent position to support and extend the science goals of the SKA telescopes over the next decade.

The ATNF forms part of CSIRO's Space & Astronomy research unit, and together we aim to enable humanity to understand our Earth and Universe. This understanding, and our innovative science and technology, contributes to solving the greatest challenges, building future industry, and serving customers from across Australia and the world.



About the Australia Telescope Compact Array

The Australia Telescope Compact Array (ATCA), located 25 km west of the town of Narrabri in rural NSW (about 500 km north-west of Sydney), is used by astronomers to study the structure and evolution of our Universe. The ATCA at the Paul Wild Observatory, is an array of six 22-m high-performance dish antennas with receiver systems spanning 1.1 GHz to 105 GHz. A series of major overhauls, commencing in 2023, upgraded the telescope's entire data processing system, in a multi-million-dollar project, BIGCAT, as well as modernising support infrastructure. The Observatory will also host the first of a series of low-frequency (50-350MHz) clusters as part of a future long-baseline array.

Five of the Compact Array's six dishes sit on a three-kilometre stretch of wide-gauge rail track, with the sixth antenna located three kilometres further west. The antennas remain stationary during observations, and is moved to different locations every few weeks to meet radio astronomy needs. The Compact Array is one of the most advanced telescopes of its type and among the top three telescopes of its kind by both publication numbers and citations. Visit [Paul Wild Observatory Visitors Centre - CSIRO](#) for more information.

Role overview

The role of Technical Services staff in CSIRO is to provide support for scientific research in a diverse range of laboratory and field situations across a range of different research projects. This support consists of the application of accepted technical practices and the development of new practices. The work is usually carried out as a member of a centralised service.

We are seeking an Electronics/Radio Frequency Technician to 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, such as BIGCAT. You will work under broad supervision and guidance to provide technical support for complex digital, analogue and radio frequency systems. This would include cryogenically cooled low-noise receivers, local oscillator and conversion systems and precision 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 current and future projects.

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's radio frequency and associated electronic 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 radio frequency electronic equipment, as well as 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, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO's reputation.
- Work collaboratively as part of a multi-disciplinary, regionally dispersed research team to carry out tasks in support of CSIRO scientific objectives.
- Adhere to CSIRO's Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
- Other duties as directed.

Selection criteria

Essential

1. A relevant Electronics Certificate, Associate Diploma or equivalent in Electronics/RF Engineering with relevant experience.
2. Demonstrated experience in diagnosing and maintaining complex electronics systems and aptitude for advancing system knowledge.
3. Experience with test equipment such as spectrum and vector network analysers, signal generators and associated test equipment.
4. Demonstrated experience with soldering, rework of PCBs and electronic modules.
5. Demonstrated experience developing safety documentation, such as activity-based risk assessments, and a commitment to safe work practices, environmental sustainability and the principles of equity and diversity.
6. Due to the specific duties and conditions associated with this role, it is essential that the preferred applicant climb steep stairs and ladders and work on structures at heights of up to 30m, and at times work in confined spaces.
7. A valid current Class 'C' Australian driver's licence.

Desirable

1. Practical skills demonstrating a mechanical aptitude.
2. Experience with computer aided drafting (CAD).
3. Experience with data cabling including working with optic fibre installation and splicing.

Not sure if you meet all the criteria?

Don't let that stop you from applying. We recognise there are many pathways to developing skills and experience, and we can consider appointing at different levels depending on what you bring. If you have more experience and capability than outlined, the role may be upgraded to a higher level; likewise, if you are still developing in some areas, we may be able to offer the role at a lower level. If you'd like to discuss whether this opportunity could be the right fit, please contact the person listed on page 1.

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.

Setting you up for success

We understand that not everyone works in the same way and sometimes people may require reasonable support and adjustments to perform at their best. Whether related to the recruitment process and or the role itself, this may include options such as providing different methods of communication, flexible hours or physical adjustments to work methods. If you feel comfortable, we encourage you to share any support and adjustments you may need to carry out the inherent requirements of the role. Please reach out to the careers.online@csiro.au, if we can help you to equitably participate in our recruitment process or the role itself.

CSIRO values

CSIRO is a values-based organisation committed to values-based leadership.

Value	Descriptor	Behaviour
People first	Our priority is the safety and wellbeing of our people. We believe in, and respect, the power of diverse perspectives. We seek out and learn from our differences.	• Respectful • Caring • Inclusive
Further together	We achieve more together than we ever could alone. We listen and collaborate, in teams, across disciplines, across boundaries. We embrace ambiguity and use discussion and persistence to generate unique solutions to complex problems.	• Accountable • Authentic • Courageous
Making it real	We do science with real impact. We thrive when taking on the big challenges facing the world. We take educated risks and defy convention. We celebrate successes and failures and leverage them to learn as we strive to be the force for positive change.	• Partnering • Cooperative • Humble
Trusted	We're driven by purpose but remain objective. We fight misinformation with facts. We earn trust everywhere through everything we do. We trust each other and we hold each other accountable. Together our actions drive Australia's trust in CSIRO.	• Curious • Adaptive • Entrepreneurial

Child safety

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](#).

Special requirements

- The successful candidate will undertake a pre-employment background check. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
- The successful candidate must be willing and able to work and travel outside of normal hours on occasion as part of an after-hours/on-call support system, and to assist with upgrades and maintenance. Overtime pay and/or flex leave will be applicable as per policy.
- This role may involve travelling to other CSIRO sites for training and professional development, or to assist with the repairs, installation or maintenance of equipment.