

Position Details

Technical Services - CSOF4

THE FOLLOWING INFORMATION IS FOR APPLICANTS		
Advertised Job Title	Field Engineer - SKA-Low Telescope	
Job Reference	98654	
Tenure	Indefinite Full-Time, Part-Time or Job-Share	
Salary Range	AU\$96,811 – AU\$109,527 per annum, plus 15.4% superannuation	
Location(s)	Geraldton, Western Australia	
Relocation Assistance	Will be provided to the successful candidate if required	
Applications are open to	Australian/New Zealand Citizens and Australian Permanent Residents	
Client Focus – Internal	0%	
Client Focus – External	100%	
Position reports to the	This role will report to the SKA-Low Field Team Supervisor	
Number of Direct Reports	0	
Enquire about this job	To enquire about this role, please reach out to the Deployment and Maintenance Manager Pablo Carrillo, Pablo.carrillo@csiro.au for more information.	
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 <u>vision towards reconciliation</u>.

The CSIRO Experience

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:

- 1. Life at CSIRO
- 2. Personal Development & Learning
- 3. Generous Leave & Conditions
- 4. Work / Life Balance

Background

The SKA Observatory (SKAO) is a next-generation radio astronomy facility that will revolutionise our understanding of the Universe and the laws of fundamental physics. Enabled by cutting-edge technology, it promises to have a major impact on society, in science and beyond. As an intergovernmental organisation, the SKAO brings together nations from sixteen countries around the world.

The Observatory has an international footprint and consists of the SKAO Global Headquarters in the UK, the SKAO's two telescopes at radio-quiet sites in South Africa and Australia, and associated facilities to support the operations of the telescopes.

Constructing and operating these telescopes will position the SKAO as the leading research infrastructure for radio astronomy globally, providing science capabilities to the international astronomical community for decades to come.

Australia will host the SKAO's low frequency telescope (SKA-Low) in remote Western Australia on Wajarri Yamaji Country.

The Traditional Owners and native title holders, the Wajarri Yamaji, have gifted CSIRO with the traditional name Inyarrimanha Ilgari Bundara for the CSIRO Murchison Radio-astronomy Observatory, home to the SKA-Low telescope. The traditional name means 'sharing sky and stars' in the Wajarri language.

In Australia, SKAO is collaborating with CSIRO to operate and support the construction of the SKA-Low Telescope. SKA-Low teams are operating out of:

- Inyarrimanha Ilgari Bundara, the CSIRO Murchison Radio-astronomy Observatory on Wajarri Yamaji Country.
- Our Engineering Operations Centre on Nhanhangardi, Naaguja, Wilynyu and Amangu Country in Geraldton.
- Our Science Operations Centre on Whadjuk Noongar Country in Perth.

Further Reading: Explore CSIRO and the SKA-Low Telescope Project

Role Overview

We are looking for field engineers who are looking to make an impact to join the team building the world's largest low-frequency radio telescope and help shape the future of science from the ground up.

As a Field Engineer with the SKA-Low Maintenance and Deployment Team, you'll play a hands-on role in building and maintaining this groundbreaking facility in the West Australian outback.

You'll work with a wide range of bespoke and cutting-edge technologies, including the analogue and digital signal chains. Whether you're commissioning a station of 256 antennas or solving a tough integration issue at our high-tech test facility, you'll be at the heart of making this massive scientific instrument work flawlessly.

In this role you will:

• Be hands on: work directly with the hardware that brings SKA-Low to life, overseeing the installation and maintenance of electronic, RF, optical, and signal processing systems out in the field.

- Troubleshoot: test, diagnose, and fine-tune complex systems to ensure the telescope runs
 reliably and at peak performance by solving technical issues both on-site and at the
 integration facility.
- Improve systems: drive upgrades and continuous improvement efforts as the telescope transitions from construction into full-scale operations, helping shape how it evolves.

The Field Engineer plays a key role in physically deploying and maintaining the telescope hardware.

This role will be on a 4 day on; 3 day off roster- Monday-Thursday at the Inyarrimanha Ilgari Bundara CSIRO's Murchison Radio-astronomy Observatory on Wajarri Country. There will be occasional travel to Perth to our Science Operations Centre on Whadjuk Noongar Country. Travel is via 6- and 9-seat charter flights out of Geraldton on a Monday morning, returning Thursday evening. The role will also present additional occasional opportunities for domestic and international travel.

CSIRO and the SKA Observatory value and respect difference, and we are committed to building an inclusive culture by creating an environment where you can balance a successful career with your commitments and interests outside of work. We believe that you will do your best at work if you have a work / life balance. We are open to discussing flexible working opportunities with this role being offered on a full-time, part-time or job share basis. Please raise your preference in your application.

Duties and Key Result Areas

Hands on Engineering

- As an integrated part of the Maintenance and Deployment Team, work directly with the telescope hardware and software to install and integrate RF, electronic, optical, and signal processing systems.
- Verify functionality of systems on-site, applying structured tests to understand how the systems work.
- Perform preventative maintenance and LRU replacements for components of the telescope system.
- Collaborate with technicians, engineers, and contractors to coordinate technical field activities.

Testing and Troubleshooting

- Diagnose and fix issues across RF, electronic, optical, and signal processing systems to commission and maintain the telescope.
- Use test equipment to identify problems and develop practical fixes that can be performed by Field Technicians or original equipment manufacturers.
- Help shape standard procedures and log issues using tools like the computerised maintenance management system.

Continuous System Improvements

- Use your unique insights as a field deployed engineer to drive real improvements in system design, user interfaces, and operating procedures.
- Contribute ideas and hands-on solutions to improve how we build, maintain, and troubleshoot the system.
- Keep records up to date, capture accurate configuration management details, and refine documentation for future teams.

Other Relevant Duties

- We expect our Field Engineers to share what they know, and what they will learn, with the teams of trainee Field Technicians. We want you to inspire and mentor those trainees and help build our future technical capability.
- Adhere to the spirit and practice of both the SKA Observatory and CSIRO's values, Code of Conduct, health, safety and environment procedures and policies, diversity initiatives and zero harm goals.
- Undertake any other reasonable tasks or duties as directed to ensure the success of the SKA-Low project and operations.

Fundamental requirements:

- 1. Ability to work outdoors in remote outback environments.
- 2. Willingness to traverse uneven terrain for extended distances.
- 3. Adaptability to a FIFO (fly-in, fly-out) roster from Geraldton. (4 days on/3 days off)
- **4.** Physical capability to repetitively lift and carry objects up to 10kgs.

Selection Criteria

CSIRO is an Equal Opportunity employer working hard to recruit world-class talent that represents the diversity across our society. As part of our commitment to equitable employment outcomes for under-represented groups, preference will be given to Indigenous Australian people and women who meet the role criteria.

Essential

Under CSIRO policy only those who are able to demonstrate how they can meet the essential criteria may be appointed.

Selection Criteria

Essential:

- Qualifications: A tertiary degree in Electrical, Electronic, Communications, RF, or a related engineering field (such as Mechatronics, Aerospace, Computer, or Engineering Physics), or equivalent experience gained through academic, industry, government or similar settings.
- **Experience:** Hands-on experience with RF and mixed-signal systems, including integration or troubleshooting of components like amplifiers, filters, digitisers, or processors.
- **Aptitude:** Demonstrated ability to systematically identify, diagnose, and resolve issues in complex systems—such as RF chains, signal processing, and control systems.
- **Professionalism:** A strong commitment to safety and experience working under Health, Safety, and Environment (HSE) protocols in technical or field settings.
- **Technical reporting and documentation:** Proficient in using software applications to log and report faults and work requests, and to retrieve schematics, drawings, and other technical documentation to support effective troubleshooting.

Desirable:

- Experience scripting or programming for test and measurement automation or control (e.g., Python, MATLAB, LabVIEW).
- Familiarity with time and frequency systems (e.g., GPS receivers, atomic clocks, or precision timing protocols), and calibration or QA practices for RF systems.
- Experience using asset management, configuration, or maintenance systems such as Limble, ALIM, Jira, or Jama.

• Experience working in remote or outdoor environments on technical systems, especially in large-scale scientific, infrastructure, or defence projects.

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 team 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: Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
- Judgement and Problem Solving: Investigates underlying issues of complex and illdefined problems and develops appropriate response by adapting/creating and testing alternative solutions.
- Independence: Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
- 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

- The successful candidate will be required to gain a National Police Clearance or equivalent. This will be conducted by CSIRO, Talent Services, through our provider HireRight. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
- The successful candidate will be required to undertake a pre-employment medical examination prior to commencement.
- The successful candidate will be required to hold a "C" class drivers licence at a minimum.
- Inyarrimanha Ilgari Bundarra, The CSIRO Murchison Radio-astronomy Observatory is a remote location in the Australian outback. While this role is based at the Engineering Operations Centre in Geraldton, regular travel to site will be required to perform aspects of the role. Willingness to safely perform duties in outdoor remote environments is crucial to this role.

Child Safety

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our <u>Child Safe Policy</u>.

CSIRO and SKAO Values

Visit <u>CSIRO Online</u> and <u>Space and Astronomy</u> and <u>SKAO online</u> and <u>SKAO Location</u> for more information. In your application and at interview you will need to demonstrate behaviours aligned to our values of:

CSIRO	SKA Observatory
People FirstFurther TogetherMaking it RealTrusted	 Diversity and Inclusion Excellence Collaboration Creativity and Innovation Sustainability and Safety