

Design Safety Engineer

Job Location

Cheshire, UK (Head Office)

Area / Department

Engineering

Contract Type

Fixed Term Contract

Salary

Circa GBP 60,000 depending on experience, with excellent benefits

Closing Date

21/04/2023

Ref No

10240

At the SKAO we are coordinating a global effort to deliver one of the largest science facilities on the planet. The SKAO telescopes will be next-generation instruments that will help to answer key questions in astrophysics, drive technological innovation and support human capital development.

More than a dozen partner countries and over a thousand scientists and engineers around the world are already on board, making the SKA project an international collaboration like no other, and one of the most ambitious science and engineering endeavours of the 21st century.

Headquartered in the UK, with telescope sites in Australia and South Africa, the SKAO will be one observatory operating two telescopes, an endeavour spanning three continents. Multinational by design, in early 2021 the SKAO became an intergovernmental organisation, one of only a select handful of science infrastructures to do so worldwide.

Our Global HQ is located near the buzzing city of Manchester at the historic Jodrell Bank Observatory, a UNESCO World Heritage site located in the Cheshire countryside. It is home to a rapidly expanding international team of more than a hundred, working in a highly collaborative and inclusive way, in coordination with SKAO teams in Australia and South Africa as part of a global astronomy and engineering community.

Being part of Team SKA means contributing to something extraordinary: a uniquely exciting project to advance human knowledge that will last for decades. In return, we offer a diverse multicultural working environment, 30 days annual leave plus public

holidays, a generous pension scheme, visa and support with relocation (if applicable), regular social events, a family-friendly environment and much more. Come and join us!

An amazing opportunity for an engineer with experience in design safety to join an international organisation and support the delivery of the largest radio telescope on the planet.

The Role

The SKAO and its partners have developed the reference design of the two SKA Telescopes and their subsystems. This work included the execution of various Hazard Analyses which culminated in a consolidated Hazards Register which identifies the expected Safety Hazards associated with the construction and operation of the SKA Telescopes.

The SKAO is now contracting the final design, manufacturing and site installation of the Telescopes subsystems, and will then proceed with the integration, commissioning and verification of the Telescopes. Each supplier will be required to assess the Design Safety Hazards associated with their final designs in updated safety analyses, and implement suitable design or procedural mitigation measures. During this period the SKAO Engineering team will need to review and accept the identified hazards through a Design Safety Review process. This forms part of the formal verification of the delivered subsystems and the integrated telescopes.

Each of the two Telescopes have a dedicated Safety Manager that has the overall responsibility for the safe construction and operation of the Telescopes. A Design Safety Committee supports them by reviewing and accepting the Design Safety Hazards and the evidence that appropriate mitigation measures have been implemented.

The Design Safety Engineer will report to the Head of Engineering and will support the Design Safety Committee as its secretary as well as acting as the custodian of the Design Safety Hazards Register. The Design Safety Engineer will support the two Telescope Engineers and the Design Authorities of each subsystem, to evaluate and capture the ongoing safety analyses in a consistent way, and assess the safety risk levels of each hazard.

This role will be a 4-year fixed term appointment and will be based at the SKAO Global Headquarters at the iconic Jodrell Bank Observatory, Cheshire, UK. Occasional national and international travel to suppliers will be required.

SKAO is committed to providing an inclusive and flexible working environment, meeting the requests of our Colleagues whilst also fulfilling the needs and objectives of the Observatory.

We encourage applications from under-represented groups such as women and individuals with disabilities, as well as open conversations during the recruitment process in relation to any specific requirements.

There may be occasions where this role requires the post holder to work across different time zones and, in line with SKAO policy, flexible working hours will be supported in agreement with the line manager.

Key Responsibilities, Accountabilities and Duties

- Undertake surveillance of ongoing design and design for manufacture activities to anticipate and prevent the introduction of safety issues.
- Support the Product Assurance team in the verification of safety critical items.
- Support the Telescope Engineers and Design Authorities in identifying Significant, Unusual and Non-obvious Hazards and review their mitigations.
- Participate in the Engineering Change Proposal process with regard to safety aspects.
- Advise the Telescope Engineering Team and the Safety Managers in the establishment of the SKAO Design Safety Review process.
- Act as secretary to the Design Safety Committee and help ensure that the review process is applied consistently and achieves a safe telescope design.
- Advise and support the Design Authorities and contractors of the telescope subsystems during their design work to champion a safe design and implementation thereof.
- Facilitate the capturing of the safety analyses in the SKAO Design Safety Review tool (JIRA), and do an initial triage of the hazards.
- Participate in Design Reviews to help SKAO engineers identify potential safety hazards and assess their proposed mitigations.
- Represent SKAO at technical professional forums to keep up to date with best safety practice within a specialist engineering field.
- Occasionally travel nationally and internationally as required (typically up to one week, 3-4 times a year).
- Undertake any other reasonable duties as directed by the Head of Engineering.

Mandatory Knowledge, Skills and Experience

- Degree in Physics, Engineering or another closely related and relevant field, or equivalent experience.
- Experience in large multi-disciplinary development projects, preferably involving electro-mechanical systems such as telecommunication dishes, vehicles, aircraft or defence systems.
- Experience in performing safety analysis or reviewing safety hazards in accordance with design safety processes such as IEC61508, ISO26262, IEC 62279, IEC 62061 or IEC 61513.

- Deep understanding and experience in an engineering field addressing multifaceted technical issues.
- Good analytical skills.
- Ability to work independently and effectively within an extended team.
- Effective oral and written communication skills in English with the ability to influence internal and external stakeholders at all seniority levels.

Desirable Knowledge, Skills and Experience

- Membership of, or eligibility for membership of, a recognised national or international engineering institute.
- Knowledge or interest in the development, operation and ethos of large-scale international research infrastructures such as observatories.
- Experience in design for volume production and/or in large-scale manufacturing and assembly.
- Familiarity with astronomical radio telescope development and operation.

Equality Diversity and Inclusion Statement

SKA Observatory recognises that our diversity is a strength. We aim to create a welcoming and inclusive environment where everyone feels they belong, and diverse perspectives and ideas thrive. As such, Equality, Diversity, and Inclusion are at the core of SKA Observatory's agenda.

Our aim is to recruit and retain the most talented individuals, regardless of gender, race, disability, age, sexual orientation, marital status, religion, nationality or background.

Women have traditionally been under-represented in the fields of science and engineering; SKA Observatory welcomes and encourages female applicants.

Where applicants with a disability need facilities or adjustments to enable them to participate in the recruitment process, these will be provided.

SKA Observatory welcome all candidates, especially those from member countries.

The "How to Apply" information contained within the SKA Observatory recruitment portal provides more detail regarding our application and selection approach.

Personal Assistant

Job Location

Cheshire, UK (Head Office)

Area / Department

Business Support

Contract Type

Permanent

Salary

GBP 25,000 - 30,000 depending on experience, with excellent benefits

Closing Date

12/04/2023

Ref No

10236

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An amazing opportunity for an experienced Personal Assistant to join an international, multicultural team.

The Role

Reporting to the Administration Manager in the Office of the Director-General, the Personal Assistant will be responsible for ensuring efficient and effective administration support to the Director-General, Chair of the SKAO Council, and members of the Executive Leadership team.

The successful candidate will be a proactive and self-motivated team player with excellent prioritising and time management skills.

We welcome applications from candidates of all nationalities, especially those from member countries. However, for this role visa and relocation support will not be available and applicants must be able to comply with the terms of a UK based local contract, details of which may be accessed on SKAO's recruitment portal.

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Key Responsibilities, Accountabilities and Duties

- Organise and maintain calendar diaries, make appointments, and arrange meetings.
- Support the preparation of agendas and itineraries for meetings and external visits.
- Produce documents, briefing papers, reports and presentations as required.
- Support meeting preparations, such as providing meeting information to internal colleagues and attendees, and compiling the supporting papers.
- Take notes or minutes at meetings as required and circulate within tight deadlines.
- Manage meeting and stakeholder distribution lists.
- Screen telephone calls, enquiries and requests, and handle them as appropriate.
- Deal with email, hard copy correspondence and respond as appropriate in an accurate and timely manner.
- Arrange travel, visas, accommodation and other associated paperwork for corporate travel.
- Prepare the Director-General's, SKAO Council Chair's and other senior staff expense claims.
- Maintain controls of personal information and documentation.
- Provide other administrative support as required by the Director-General.

The above responsibilities are not exhaustive and a flexible approach and willingness to adapt to unexpected and changing needs and priorities is essential.

Mandatory Knowledge, Skills and Experience

To perform in this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills, and/or abilities required:

- Good level of education with a demonstrable competence in Mathematics and English.
- Experience working as a Personal Assistant to a company director (or equivalent) in a busy office environment.
- Outstanding planning, time management and organisation skills.
- Conscientious self-starter capable of working proactively and accurately at pace.
- Excellent verbal and written communication skills with internal and external stakeholders at all seniority levels.
- Ability to build good working relationships with a diverse employee population.
- Good IT skills, with a working knowledge of Microsoft Office, particularly Word and Outlook.
- Ability to work independently, under pressure, and to tight deadlines.
- Discretion and understanding of confidentiality issues.
- Flexible team player who is adaptable to change.
- Ability and willingness to work on occasion outside normal business hours.

Desirable Knowledge, Skills and Experience

- Degree educated.
- Touch typing and/or shorthand skills.
- Experience of working in an international environment.

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