



EXTERNAL VACANCY

The Eswatini Civil Aviation Authority (ESWACAA), a Category A public enterprise invites suitably qualified, well experienced, and willing-to-learn candidates to apply for the position of **Principal Engineer – Visual Aids**. The Position reports to the Chief Electrical Engineer and is tenable at King Mswati III International Airport.

1. JOB PURPOSE:

This is an electrical role responsible for effectively leading, conducting, supervising, and coordinating maintenance activities of the Authority's visual aids for navigation assets in order to retain non-failed equipment in a reliable and safe operational condition and to restore failed apparatus to safely fulfil their function at the desired standard of performance to ensure the regularity, safety, and security of aviation.

The incumbent will:

- Evaluate the quality of preventive maintenance inspections conducted on visual navigational aids to ensure operational performance objectives are met.
- Verify and validate all maintenance work done before the system is brought back online to ensure the airline and people's safety.
- Conduct in-depth fault diagnosis on software problems, line replaceable units, printed circuit boards, or modules to restore failed equipment to a reliability-wise safe state.
- Follow-up on maintenance activities to ensure that maintenance interventions are executed to restore equipment functionality and performance objectives.
- Evaluate the integrity of field circuit underground cables and plan preventative actions to keep the system in a reliability-wise condition.
- Prepare reports when requested.
- Prepare and participate during flight calibration of airport visual navigational aids.
- Monitor maintenance activities conducted by external service providers to ensure work is done professionally and value for money is achieved.
- Record equipment sent out for repairs and follow up with repair service providers.
- Conduct research about current maintenance practices to improve the quality of maintenance and transfer knowledge to others.
- Participate in safety risk management assessment to expose and monitor safety hazards.

- Participate in the development of tender documents of maintenance services, goods and consultancy and evaluation reports.
- Supervise low visibility operations to prevent incursions on movement area. Monitor lighting that may cause confusion to pilots within the airport-controlled airspace.
- Participate in the conduct of apparatus condition assessments to determine the need and timing of preventive and remedial maintenance actions to maintain the desired level of service.
- Conduct job safety assessments to identify and mitigate/eliminate physical, procedural, and environmental hazards.
- Maintain all tools and equipment in proper working order, and calibrate periodically for compliance with safety requirements.
- Review safe work method statements from external service providers.
- Promote effective and efficient maintenance to achieve assets energy efficiencies.
- Identify areas of significant energy use and consumption.
- Research and propose energy-saving strategies to enable cost minimization.
- Prepare economic re-order levels of spares to ensure maintenance tasks are completed without delay.
- Supervise recording of used spares to complete works.
- Participates in the preparation of the airport electrical budget.
- Provide support during airport emergency operations.

2. QUALIFICATIONS AND EXPERIENCE

The ideal candidate must meet the following minimum requirements:

i) Qualification

- BSc Degree or Bachelor of Engineering Degree in Electrical /Electromechanical Engineering or Equivalent
- Certification in Regulations for high voltage systems and AGL

ii) Work Experience

- 5 years experience in an electrical environment
- Experience in working with international standards including ICAO.

iii) Added Advantage

- Experience in Airport Operations

3. SKILLS, KNOWLEDGE, AND PERSONAL ATTRIBUTES:

The ideal candidate must demonstrate the following competencies, knowledge, and personal attributes:

- Troubleshooting skills
- Must have analytical skills.
- Proficiency in computer skills.
- Skill in operating specialized electrical measurement equipment.

- Knowledgeable about electrical occupational safety rules and low and high voltage operational regulations.
- Knowledgeable about ICAO annexes related to visual aids and electrical systems.
- Knowledgeable about the relevant regulatory and legal requirements of the Airport.
- Knowledge of Aerodrome regulations.
- Knowledge of airside hazards.
- Ability to interpret electrical drawings, specifications, and manuals.
- Ability to read electronic schematic diagrams.
- Able to drive the maintenance motor vehicle.
- Excellent communication skills.

Applications with complete up-to-date Curriculum Vitae, and certified copies of academic certificates/professional accreditation, must be emailed to recruitment@eswacaa.co.sz not later than **Friday, 8 September 2023**. Please quote the position **"Principal Engineer – Visual Aids"** in the email subject line.

N.B. Only emailed applications will be admissible.

Only shortlisted candidates will be contacted.