

POSITION DESCRIPTION
Electronic Media Tech - Sr
University of Wisconsin-Superior

Summary: This Media Technician position is in the KUWS-FM Engineering department and reports directly to the Northern Regional Manager for Wisconsin Public Radio. This position provides construction, maintenance, and repair support for a wide range of electronic studio and transmitter equipment, including high power RF-based electronic transmitter equipment and systems involved in broadcast of the KUWS signal. This position serves as Chief Engineer and Designated Chief Operator for KUWS and is also responsible for maintenance and repair of various audio and network equipment used at the KUWS studios. The position operates independently with general supervision.

Occasional use of a personal vehicle is required. A valid driver's license is also required. Occasional Standby or on-call status is required. Light lifting (up to 25 lbs) may be required.

TIME % GOALS AND WORKER ACTIVITIES

75% SYSTEMS MAINTENANCE

Maintenance, fault diagnosis, and repair of broadcast equipment for optimum performance and minimum down time.

- Functions as Designated Chief Operator of KUWS, responsible for adherence to all applicable FCC rules and regulations. Responsible for the technical and physical operation of KUWS and associated site equipment.
- Performs maintenance, troubleshooting/ diagnostics, repairs and installations of microwave and intercity relays (ICR), studio transmitter links (STL), transmitter studio links (TSL), analog and digital HD FM transmitters, digital remote control systems, monitoring systems, auto logging systems, network distribution systems. Also, responsible for physical site upkeep and repairs at all sites. Must interface with vendors as required.
- Keeps records and reports on modifications and required maintenance in accordance with FCC rules and regulations, reports out of tolerance conditions to Station Manager as required.
- Provides Listener support, relating to FM reception and interference problems.
- Assures a high degree of cleanliness at all sites maintained.
- Performs other duties as assigned.

15% OPERATIONS

- Monitor modulation levels and control all transmission and remote control equipment associated with KUWS to comply with good engineering practice, NAB and other industry engineering standards, and FCC regulations.
- Monitor, log, and report all required tower light information to maintain FCC/FAA compliance, maintain tower lighting in strict accordance with federal regulations.
- Monitor and confirm reception and transmission of required Emergency Alert System (EAS) tests/activations and information as required by FCC rules and ECB policies.
- Maintain required logs. Report discrepancies experienced during a shift as instructed.
- Provide support for remote production
- Provide remote sound recording services
- Other duties as assigned.

10% SYSTEMS DESIGN AND INSTALLATION

- Design, construction, and installation of broadcast equipment.
- Designs and constructs specialized equipment for broadcast using state-of-the-art techniques.
- Modifies existing equipment to improve broadcast services.
- Installs and proofs new equipment installations.

- Makes recommendations for equipment purchases and/or modifications.
- Maintains and updates remote control/telemetry systems.
- Other duties as assigned

KNOWLEDGE, SKILLS & ABILITIES

- Thorough knowledge of telecommunications principles and practices.
- Knowledge of DWD and OSHA safety standards.
- Demonstrate high mechanical aptitude skills.
- Installation and maintenance of broadcast equipment and related systems.
- Knowledge of electronics, electronic equipment, and electro-mechanical equipment
- Knowledge of FCC standards.
- Evaluation techniques for purchase of new equipment.
- Ability to establish and maintain effective working relationships with associates, subordinates, other agencies, contractors, and the general public.
- Ability to train staff and/or personnel.
- Ability to work independently, prioritize and manage workload with minimum supervision and direction.
- Verbal and written communication skills to present and simplify technical/complex information and procedures in an understandable manner.
- Personal computer skills including but not limited to: installing and removing operating systems and software, configuring drivers, performing updates to operating systems and software, configuring and using serial and Ethernet ports and virtual ports, hard drive backup and replication, maintaining PC security software and firewall services, and minor trouble shooting and mechanical repairs.
- Computer networking skills including: thorough knowledge of network fundamentals and IP concepts, routing fundamentals, safety and security, layer 2 and 3 switching and routing. Knowledge in the use and configuration of network analysis tools and software.
- Responsible for the repair, maintenance, installation, and trouble shooting of transmission alarm and control systems.
- Knowledge in the use and operation of electronic and RF test equipment including: DVM, analog and digital level meters, oscilloscopes, inline and clamp-on amp meters, power meters, RF power meters, RF network analyzers, spectrum measurement tools, and other complex test and measurement equipment.
- Ability to read and interpret documents such as operating manuals, instructions, procedures schematic diagrams, ladder logic, Boolean logic.
- Ability to maintain and test existing telecommunication systems.
- Ability to troubleshoot telecommunications equipment problems.
- Excellent verbal and written communication skills.
- Strong organizational and management skills.
- Ability to work effectively in team environments with strong interpersonal, coaching, and supervisory skills.
- Ability to multi-task and remain calm in urgent situations.
- Ability and willingness to provide or arrange for 24-hour on-call support that includes weekends and all holidays to ensure 24 x 7 system availability.
- Must be able to lift 25 pounds.
- Must be able to climb, squat, bend, reach and sit for prolonged periods of time.
- Must be able to maintain safe work environment by following codes, standards, and legal regulations.
- Knowledge of equipment and techniques for remote production.
- Knowledge of equipment and techniques for field audio/sound recording.