

CHIEF BROADCASTING ENGINEER

DEFINITION

Plans, organizes, and supervises the technical operations of the District's television stations (KLCS-TV) including the operation, servicing, and maintenance of ultra-high frequency (UHF) transmitters and digital and studio systems including electronic and mechanical equipment involved in the production and broadcast of live and recorded programs, and is responsible for assuring compliance with the regulations of the Federal Communications Commission.

TYPICAL DUTIES

- Supervises engineering personnel involved in the operation of electronic and mechanical equipment used in the production and broadcast of live and recorded color television and multi-track audio programs.
- Develops layouts and plans for modification and expansion of facilities and for the installation of studio and transmitter equipment.
- Responsible for the overall technical quality control of the station's telecommunications activities.
- Has responsibility for overseeing strategic planning, design, and implementation of the station's digital television and high definition television (HDTV) transition.
- Has responsibility for the overall technical quality control of the station's telecommunications activities and compliance with the Federal Communications Commission (FCC) regulations.
- Meets with the maintenance staff on a regular basis to determine the operational status of all equipment.
- Makes recommendations to the Director of Television Engineering and Technical Operations regarding operating procedures and purchase or modification of equipment and related matters.
- Schedules and oversees an organized program of preventative maintenance and troubleshooting on television equipment and facilities including overseeing the preventative maintenance and troubleshooting of the Engineering Unit's network system.
- Supervises and may participate in routine and emergency maintenance and repair of KLCS-TV recording and broadcast equipment.
- Participates in or supervises the posting of equipment usage and preparation of all performance reports required by the FCC and other reports that may be required relative to engineering functions.
- Trains engineering and production personnel in the technical production and transmission of audio/video programs and related materials.
- Oversees the installation, operation, networking, and maintenance of computer systems and peripherals.
- Assists on the design, preparation of bid specifications, and procurement of equipment, and the fulfillment of contractual obligations relative to the purchase, lease, and maintenance of equipment.
- Operates scheduling programs and traffic systems to transfer data to master control.
- Wires, labels, and maintains the database for the Engineering Unit's network system.
- Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

The Chief Broadcasting Engineer supervises Broadcast Engineers in the operation and maintenance of television broadcasting equipment in the Engineering Unit, studios, mobile or remote units, and at the transmitter and is responsible for compliance with related FCC regulations.

The General Manager, KLCS is the administrator responsible for the development and implementation of policies regarding the goals, purpose, and operation of Television Station KLCS and the administrative direction of the station's operation.

A Broadcast Engineer services and integrates existing and new equipment to support the operational needs of the KLCS-Channel 58 television station at the studio, transmitter, and remote sites; advises the Chief Broadcast Engineer regarding equipment conditions and purchase needs; provides functional supervision to lower-level engineering staff; and provides detailed project supervision of vendor installation efforts.

SUPERVISION

General direction is received from the Director of Television Engineering and Technical Operations. General supervision is exercised over Broadcast Engineers, Television Engineers, and other employees of the Engineering Unit.

CLASS QUALIFICATIONS

Knowledge of:

- Advanced digital technologies such as digital television and HDTV
- FCC regulations regarding analog and digital broadcasting and related records and reports
- Principles and applications of electronics in production and transmission of live, recorded, and videotape color transmission of program material over a television broadcasting facility, and of multi-track audio recording and broadcasting
- Standard technical procedures involved in troubleshooting electronic broadcast equipment
- Characteristics and usage of state-of-the-art radio frequency, broadcast, transmitter, and studio equipment
- Networking principles, protocols and infrastructure, including wiring principles, file structure, VLAN, and routers
- Network analysis tools
- Video compression including MPEG 1,2, and 4, DV, and HD-DV
- Data, video, and audio diagnostic tools including IP network and Spectrum analyzers
- Principles and techniques for setting up and using Command and Control systems
- Program video and audio routers and control panels
- District purchasing procedures
- Methods and applications of inventory control and the safeguarding of station equipment
- Personnel management principles and practices, including selection, training, supervision, and performance evaluation

Ability to:

- Assess the overall operation, maintenance, and repair needs of television station and transmitter equipment
- Schedule preventative maintenance and operational repairs
 - Identify and evaluate a variety of operational alternatives in addressing technical broadcast equipment requirements
- Wire, label, and maintain the database
 - Work with technical and non technical staff to evaluate problems related to equipment repair
- Establish and maintain effective relationships with District and industry personnel, vendors, and others
 - Assist in the selection, supervision, and evaluation of subordinate personnel
- Organize and maintain accurate records
 - Prepare clear and concise correspondence and reports
- Speak effectively in meetings and before groups

Special Physical Requirements:

Safely lift and carry equipment weighing up to 50 pounds
Auditory acuity to distinguish sound frequencies and quality
Visual acuity to analyze color broadcast television signals
Manual dexterity to operate hand tools
Climb ladders measuring up to 16 feet high
Work in crawl spaces

ENTRANCE QUALIFICATIONS

Education:

Graduation from a recognized college or university with a bachelors degree in electronic engineering or electrical engineering. Additional qualifying experience may be substituted for the required education on a year-for-year basis.

Experience:

Three years of experience as a broadcast engineer or equivalent in a television broadcasting station, including responsibility for supervising the operation and maintenance of all technical equipment involved in color television production, recording, and transmission and the preparation of FCC reports.

Special:

A valid Federal Communications Commission General Radiotelephone Operator Permit, SBE Broadcast Technologist Certificate, or higher certification
A valid driver's license to legally operate a motor vehicle in the State of California and the use of a motor vehicle.
On call 24 hours a day, 7 days a week

This class description is not a complete statement of essential functions, responsibilities, or requirements. Requirements are representative of the minimum level of knowledge, skill, or abilities. Management retains the discretion to add or change typical duties of a position at any time.

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