

**Killeen Independent School District
Job Description**

Job Title: Lead Telecommunications Technician
Reports to: Manager for Network Communications
FLSA: Non-Exempt

SUMMARY:

Designs and supports strategies for defining, deploying, and maintaining Killeen Independent School District's IP telephony voice communication architecture, IP video distribution system and architecture, District radio communications network, District Network Time Protocol campus clock, intercom, speaker and public address systems and all District Layer 1 Cabling requirements for copper and fiber.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

IP Network Streaming Video Distribution System

Develop the processes, procedures, functional specification, and design documentation for KISD's Safari Montage live video streaming services.

Configures, develops, tests, and implements appropriate formats, bit-rates, encoding, compression, streaming and multicast settings for live video streaming events.

Provides direction, support, and lead implementation for the future of Killeen Independent School District's growing video streaming infrastructure and service.

Installs, maintains, and troubleshoots existing analog coaxial systems for media distribution and interconnectivity with new Safari Digital delivery systems.

Radio Communication Infrastructure

Manages the district radio-system network, ensuring all locations receive appropriate SLA levels.

Provides technical expertise, suggestions and design guidance for all KISD radio upgrades and expansions.

Ensures compliance with FCC rules and regulations.

Maintains all radio equipment, tower site equipment and Mobile Communications vehicle equipment.

Maintains the KISD Radio System FCC Licenses.

Conducts monthly inspections and periodical testing of the following as related to each radio site: ground testing, site alarms, emergency generators, bench marking coverage.

Maintains required software configuration as it relates to the radio system.

Maintains and monitors the required FCC and OSHA radio frequency emissions compliance standards for the district's radio system.

Maintains the KISD Radio System equipment inventory and configuration documents.

Plans, designs, (or assists) and constructs radio systems (e.g. voice, radio, network, 2-way, data, microwave, etc.)

Analyzes radio systems problems and needs (e.g. interference, intelligibility, clarity, etc.) to determine the most appropriate means of reducing, eliminating, and/or avoiding current and future problems and improve communications.

Assists in design of radio communications sites to establish building and tower placement, power requirements, antenna placement, and radio communications equipment required for new and/or existing sites.

Completes and submits required frequency coordination forms, Federal Communications Commission radio license applications, and use permits to allow mobile radio and microwave communications to take place in accordance with federal regulations.

Determines (or assists in) appropriate configurations of radio systems hardware and software to ensure the desired performance of radio equipment.

Researches, gathers, (or assists in) and compiles relevant technical information to enhance, modify, and maintain assigned networks and radio systems.

Evaluates new products and services from vendors to determine applicability to hardware, software, networks and radio systems.

Develops long and short term plans for updating equipment, adding capabilities, enhancing existing systems, and providing improved radio systems.

Verifies proper frequency use and assignment, checks applications for compatibility with existing FCC licensed users.

Creates manuals for use by system users to provide information needed to operate assigned radio systems.

Pulls voice and data cables; plans configuration of cable topology.

Intercom/PA/Clock Infrastructure

Configures, maintains, and troubleshoots Intercom system, microphones, speakers and Layer 1 cabling interconnects.

Designs and maintains District-wide intercom infrastructure diagrams.

Designs and maintains District-wide intercom policies and procedures.

Configures, maintains, and troubleshoots District NTP-based IP digital clock architecture to include Stratum 2 servers and associated Campus Router/Switch configurations.

Designs and maintains District-wide NTP-based IP digital clock infrastructure diagrams.

Designs and maintains District-wide NTP-based IP digital clock policies and procedures.

Configures quarterly bell scheduling per campus on an as-needed basis.

Layer 1 Cabling

Plans and prepares for Layer 1 cable installation to include site inspections, selection and verification of cable pathways.

Performs cable installations for inside and outside plants to include creating openings for cable pathways, installing/pulling medium in cable pathways, laying out and installing cable and supports, inspecting and preparing cables for installation, and installing fiber backbone and copper cables, horizontal cables and firestop systems.

Terminates/splices cables by installing mounting equipment, fiber and copper terminating and splicing components, electrical protection equipment, grounding, bonding connections/cables, cross connecting and patching cables

Performs labeling, testing and documentation by labeling cable systems as Unshielded Twisted Pair (UTP), Shielded Twisted Pair (STP), Screened Twisted Pair (ScTP) and completing field documentation

Troubleshoots cable systems/hardware by identifying and repairing UTP/STP/ScTP, coaxial cable systems, equipment connecting cables and fiber optic systems.

SUPERVISORY RESPONSIBILITIES:

Directly supervises the Telecommunications Technician and contracted or temporary workers as required. Carries out supervisory responsibilities in accordance with the organization's policies and applicable laws. Responsibilities include training employees; planning, assigning, and directing work; addressing complaints and resolving problems.

QUALIFICATIONS:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE:

Associate's degree in Telecommunications or equivalent training and two years telecommunications experience; or high school diploma/GED and four years telecommunications experience.

LANGUAGE SKILLS:

Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of the organization.

MATHEMATICAL SKILLS:

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios and proportions to practical situations.

REASONING ABILITY:

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram or scheduled form.

CERTIFICATES, LICENSES, REGISTRATIONS:

Must be licensed to drive a District vehicle. Cisco CCNP Certification or equivalent preferred.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to stand, walk, use hands, handle, feel, climb and balance. The employee is occasionally required to sit, reach with hands or arms, and stoop, kneel, crouch or crawl. The employee must occasionally lift and/or move up to 50 pounds.

WORK ENVIRONMENT:

The work environment characteristics described here are representative to those an employee encounters while performing the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently exposed to outside weather conditions. The employee is occasionally exposed to wet and/or humid conditions. The noise level in the work environment is usually quiet.

Revised Date: August 24, 2016

The foregoing statements describe the general purpose and responsibilities assigned to this job and are not an exhaustive list of all responsibilities, duties, and skills that may be required.