

SECURITY ELECTRONICS TECHNICIANDEFINITION

Under general supervision, evaluates, installs, maintains, repairs, modifies, and monitors a variety of complex security electronics equipment and systems within the Santa Ana Jail.

ESSENTIAL FUNCTIONS INCLUDE BUT ARE NOT LIMITED TO

Installs, maintains, repairs and adjusts security electronics equipment including touch screen controls, PLCs, CCTV cameras and systems, television distribution systems, intercom systems, inmate visitation phone systems, personal alarm systems, computers and related equipment, audio and video equipment, and other electronics equipment. Analyzes defective electronics equipment using diagnostic and test equipment such as multimeters, wattmeters, oscilloscopes, radio frequency meters, computer diagnostic systems, and a variety of hand tools. Makes repairs, recommends equipment to be replaced, or recommends equipment be repaired by vendor. Designs, builds, or modifies electronics systems used in the various security electronics systems within the Jail. Conducts research, writes specifications, and works with purchasing to procure security electronic parts, equipment and systems. Prepares records and reports concerning work performed. Meets and works with representatives of vendors, the police department and other City departments. Prepares prototypes and simulations to pre-test modifications. Performs other related functions as assigned.

DISTINGUISHING FEATURES OF THE CLASS

This is a journey level classification in which incumbents are expected to be proficient in areas such as Programmable Logic Controllers, CCTV camera systems including switchers, recording systems, network access and playback components; intercom systems, touch-screen control systems, UPS, computer equipment and network systems, personal alarm systems, radio equipment including fixed and mobile radio transmitters and receivers and portable radios, sound and video equipment, as well as computer programs such as Microsoft Word, Excel and Access.

RECOMMENDED MINIMUM QUALIFICATIONS

Graduation from an accredited college or university with a minimum of an Associate of Applied Science (AAS) in electronics, supplemented with training in computer touch screen software and PLC programming software, and five years of experience in the maintenance and repair of security electronics equipment which results in the following knowledge, skills and abilities:

DESIRED KNOWLEDGE, SKILLS, AND ABILITIES:

Thorough Knowledge of: principles, practices, techniques, methods, test equipment and tools used in installation, maintenance, repair, modification and fabrication of security electronics equipment and systems.

General knowledge of: digital and logic circuitry used in computers and other electronics equipment. Principles of electronics system design and operation. Computer networks and networking tools. Some knowledge of personal computers; literate in the use of software programs such as Microsoft Word, Excel and Access.

Ability to: install, maintain, troubleshoot, repair and modify a variety of security electronics equipment and systems; read and interpret instructions in technical manuals including circuitries, schematics and symbols; read blueprints; use the proper test equipment related to electronics maintenance and repair; establish and maintain effective working relationships with other city staff, electronic contractors, vendors and members of the general public; record technical information in reports, logs, and invoices.
Skill in: the use of traffic signal operations software, traffic signal maintenance tools and testing equipment, and twisted wire and fiber optic communication equipment.

SPECIAL REQUIREMENT

Must possess and retain a valid California Class C driver's license as a condition of employment.

SPECIAL WORKING CONDITIONS

Incumbent will be required to be on-call during evening and weekends.

PHYSICAL REQUIREMENTS

Some assignments may require climbing, lifting and moving heavy equipment and components up to 50 lbs.

CHARACTERISTICS OF SUCCESSFUL PERFORMERS

Successful performers are technically competent, conscientious workers who use independent judgment and initiative to develop work methods and seek solutions to problems. Effective communicators, they work well with the general public and staff.

Class title established per Resolution 2007-045,
effective 7/01/07

Class spec prepared: 6/07
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