CITY OF ST. LOUIS
CLASSIFICATION SPECIFICATION

CLASSIFICATION TITLE: Electronic Instrument Technician

CLASS CODE: 3443

GENERAL DESCRIPTION OF DUTIES:

Incumbents in this classification monitor, calibrate, maintain and repair electronic instruments and devices.

DISTINGUISHING CHARACTERISTICS:

This is a journey-level technical classification in the Maintenance Series – Electronic Control Group job family within the City of St. Louis. Incumbents within this classification perform moderately complex duties with a variety of related tasks. The distinguishing characteristics of this classification within the series include responsibility for the repair and maintenance of electronic instruments, requiring a significant amount of work in the field. The Electronic Instrument Technician classification is distinguished from the Electronic Control Systems Technician classification in that the latter routinely performs electronic system design and programming and network administration.

Incumbents work under general supervision. While workers require some supervision in most assignments, they are free to develop their own work sequences within established procedures, methods and policies. They are generally subject to periodic supervisory checks.

EXAMPLES OF WORK (Illustrative Only):

(The list of duties is intended to be representative of the duties performed in positions within this classification. It does not include all the duties that may be assigned to a position and is not necessarily descriptive of any one position in this class.)

Monitors, adjusts and calibrates a variety of electronic control, data and monitoring systems; ensures that systems meet established operational parameters.

Performs on-site diagnoses and repair of electronic instruments such as air quality and monitoring system instruments and control and data system instrumentation; replaces devices to restore operation.

Installs new electric, electro-mechanical, and electronic instrumentation and telemetry equipment such as samplers, generator units, field test systems, control and data acquisition equipment; fabricates and mounts apparatus and cabinets for the installation of equipment.

Gathers data from monitoring locations; records and retrieves readings; generates data reports; operates sampling equipment.

Installs and tests cabling using test equipment such as a fiberoptic line tester, multimeter, toner and coaxial line tester.

KNOWLEDGE, SKILLS AND ABILITIES:

Data Utilization:

Requires the ability to perform mid-level data analysis including the ability to audit, deduce, assess, conclude and appraise. Requires discretion in determining and referencing such to established criteria to define consequences and develop alternatives.

Human Interaction:

Requires the ability to explain, demonstrate and clarify to others within well-established policies, procedures and standards. Ability to follow specific instructions and respond to simple requests from others.

Equipment, Machinery, Tools and Materials Use:

Requires the ability to operate equipment and machinery requiring monitoring multiple conditions and making multiple, complex and rapid adjustments, such as electronic data, control and monitoring equipment and instruments; diagnosis and testing equipment; hand tools; computer and; motor vehicle. Ability to repair complex equipment and machinery.

Verbal Aptitude:

Requires the ability to utilize a variety of advisory data and information such as blue prints, logic charts, flow charts, diagrams, technical manuals, reference books, catalogs, and various data reports.

Mathematical Aptitude:

Requires the ability to perform addition, subtraction, multiplication, and division; ability to calculate decimals and percentages; ability to perform basic algebra and trigonometry.

Functional Reasoning:

Requires the ability to apply principles of rational systems. Ability to interpret instructions furnished in written, oral, diagrammatic or schedule form. Ability to exercise independent judgment to adopt or modify methods and standards to meet variations in assigned objective.

Situational Reasoning:

Requires the ability to exercise the judgment, decisiveness and creativity required in situations involving the evaluation of information against measurable or verifiable criteria.

Environmental Factors:

Tasks may risk exposure to adverse environmental conditions, such as dust, odors, wetness, humidity, rain, fumes, temperature and noise extremes, machinery, vibrations, electric currents, and toxic agents/chemicals in performing electronic instrument repair and maintenance activities.

Physical Requirements:

Requires the ability to exert sustained physical effort, typically involving the handling of moderately heavy objects and materials, twenty to fifty pounds, such as tool cases, generators, calibrators, analyzers, gas cylinders, particle samplers, monitors,

Requires the ability to stoop, kneel, crouch, climb and bend in order to perform instrumentation repair, installation and maintenance functions. Prolonged standing is required to calibrate equipment.

Sensory Requirements:

Requires the ability to recognize and identify similarities or differences between characteristics of colors, to determine smoke density and coded wiring; sound to identify, calibrate and diagnose instrumentation problems; odor to identify dangerous gases and instrument and equipment failure. Requires the ability to distinguish objects clearly at both close and far-range such as reading and setting instrument controls and operation of a vehicle.

The City of St. Louis is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City of St. Louis will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the City.