### ELECTRONICS TECHNICIAN

#### MAJOR FUNCTION

This is skilled technical work installing, operating, maintaining, modifying and repairing various types of electronic-electrical equipment in the transit system, aviation, water, wastewater or gas operations. Work is performed under general administrative direction of a supervisor, however, the supervisor may not be electronically trained. Therefore, the incumbent is expected to perform without technical supervision or assistance and to exercise independent judgment and initiative in the performance of work tasks. Work is reviewed through observations and by results obtained.

### ESSENTIAL AND OTHER IMPORTANT JOB DUTIES

#### Essential Duties

Performs preventative maintenance, repair, replace, and/or calibration of electronic-electrical equipment of various transit systems, aviation, water, wastewater or gas operations facilities which digital data display screens, magnetic card readers, thermal printers, dollar bill may include: validators and transporters, power circuitry and printed circuit boards, video cameras, digital video recorders, wireless communication systems, automotive type on board computers (Dinex), data transponders, DC electric propulsion systems, solid state battery charging equipment, fiber optic equipment, CCTV public address and sound systems, fire alarm systems, airport lighting controls, flow recorders, flow meters, pH meters, electric motor and pump controls, electronically and mechanically operated chemical feed equipment, solid state instrumentation (both analog and digital), radio transmitters and receivers and all related equipment. May maintain and repair radio and electronic components of the SCADA network. May direct the work of apprentice Electronics Procures parts and materials; schedules preventative and routine maintenance in Technicians. accordance with operational priorities. Modifies existing equipment to interface with new equipment and construction. Maintains work records and all job-related documentation in maintenance software on work orders. Isolates faulty components of printed circuit boards, and repairs the boards. Performs related work as required.

## Other Important Duties

Services and repairs lab instruments or farebox systems. Modifies or changes existing meters to more appropriate ranges. Orders replacement parts for shop inventory. Designs interfacing relay panels to control equipment by radio or fiber optics and telephone lines. References schematics and manufacturers manuals as necessary to perform system repairs. Services electro-mechanical and gear driven devices. Performs related work as required.

#### **DESIRABLE QUALIFICATIONS**

## Knowledge, Abilities and Skills

Considerable knowledge of the proper safety procedures required for maintaining and repairing electronic-electrical equipment. Considerable knowledge of basic electrical and electronic theory and practices. Considerable knowledge of calibration and test procedures. Ability to define problems, repair or replace defective parts and equipment, and to properly install new parts and equipment. Ability to properly identify repair parts and to initiate procurement through supervisor. Ability to interpret and work from technical manuals, schematics, blueprints, and to utilize this knowledge to troubleshoot and repair equipment. Skill in the use of tools and test equipment utilized in electronic-electrical equipment repair and calibration. Skill in the maintenance, repair and calibration of solid state motor starters and controls, tone telemetry, electronic and mechanical instrumentation, process controls and associated meters, and all related equipment.

# **ELECTRONICS TECHNICIAN**

### Minimum Training and Experience

Possession of a high school diploma or an equivalent recognized certificate; completion of a two year electronics course from a vocational or community college and two years of experience that includes the maintenance and repair of electronic systems; or an equivalent combination of training and experience.

# Necessary Special Requirements

Must possess the appropriate State Commercial Driver License (CDL) and endorsement(s) at the time of appointment, or must have passed the appropriate written CDL test/endorsement(s) and obtained a CDL permit at the time of appointment and obtain the appropriate CDL licensure within 60 calendar days from date of employment as a condition for continued employment; or must possess of a valid Class E State driver's license at the time of appointment.

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