

ELECTRONICS TECHNICIAN

DEFINITION OF WORK

Employees in this class independently perform skilled work in the repair, maintenance, and installation of electronic devices, electronic subsystems, and smaller electronic systems on law enforcement vehicles. Employees calibrate, perform preventative maintenance, and troubleshoot electronic systems. Work requires the use of documentation in the form of schematic diagrams, wiring diagrams, and repair manuals. Employees evaluate, install, or may modify existing circuitry to improve performance or effect output or layout circuitry; and maintain spare equipment inventory for replacement of defective units in the field. Employees receive no technical supervision; however, does receive administrative supervision and direction from the Administrative Program Officer.

EXAMPLES OF WORK

Employees maintains the spare parts inventory, level of usage reports, and replacement need reports; read and interpret schematic wiring diagrams and factory maintenance manuals; construct and install electronic devices following detailed schematic diagrams and instructions; evaluate and install electronic devices; recommend additional shop equipment or replacement of equipment to supervisor; fabricate devices to facilitate the installation of equipment; resolve potential safety problems and unsafe work practices in work area; identify and make recommendations for non-standard, complex problems with electronic devices, electronic subsystems, and systems through maintenance and inspection, or following system or equipment installation failure; and occasionally lead work of helpers. Employees perform related work as required.

EMPLOYMENT STANDARDS

Education and Experience:

Associate's degree with coursework emphasis in electronics or a related field of work; or an equivalent combination of education and experience.

Knowledge, Skills, and Abilities:

General knowledge of electronics principles; general knowledge of the fundamentals of physics as applied to electronics; considerable knowledge of mathematical principals as applied to electronic circuit analysis; considerable knowledge and familiarity with the operation and uses of standard and non-standard tools and electronics test equipment; ability to read, understand, and interpret wiring diagrams and maintenance manuals; ability to systematically troubleshoot standard electronic devices; skill and ability to use and care for a variety of hand and power tools; basic knowledge of the principles of organization, administration and supervision; ability to exercise tact and courtesy in contact with the general public; ability to establish and maintain effective working relationships.

SPECIAL REQUIREMENTS

Background check with local law enforcement agency required. Some positions within classification may require a valid North Carolina driver's license. Condition of Employment: Each applicant who is tendered an offer for employment for any position with Cumberland County shall be tested for the use of drugs specified in the County policy. Refusal to submit to testing or a confirmed positive test shall be basis for withdrawal of the conditional employment offer.

ADA REQUIREMENTS

Tasks are regularly performed with minimal exposure to adverse environmental conditions, such as dirt, dust, pollen, odors, wetness, toxic agents, or pathogenic substances.

PHYSICAL REQUIREMENTS

Must have ability to exert moderate, though not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, and crawling.

Must be able to lift, carry, push and/or pull objects and materials of moderate weight up to 50 pounds.

Must have ability to perform simple to complex movements requiring moderate coordination.

Must have visual perception and ability to discriminate colors.

Must be able to perceive and discriminate odors/sounds.

Must be able to perform manual labor for extended periods of time as required by work assignments.