

**MONTGOMERY COUNTY GOVERNMENT
ROCKVILLE, MARYLAND
CLASS SPECIFICATION**

**Code No. 003424
Grade 18**

COMMUNICATIONS TECHNICIAN I

DEFINITION OF CLASS:

This is skilled technical work involving the installation, testing, maintenance, diagnosis and repair of a broad range of complex radio/communications equipment. Contacts are with County personnel for the purpose of giving/receiving information and resolving problems; vendors to arrange for services and equipment, to provide detailed information regarding the work to be performed, and to ensure work performed by contractors complies with contract terms and meets standards; and supervisory personnel to obtain advice, receive assignments, and present and discuss recommendations regarding the resolution of system problems. An incumbent provides limited service or assistance directly to the public.

An employee at this level may be an expert on one system, but has not yet developed expertise on all components of all systems, and the communications needs of all user departments and agencies. The employee is responsible for the County's emergency communications system equipment as noted above.

Communications systems include VHF and UHF FM radios, state-of-the-art computer-controlled radio equipment including transmitter and receiver controllers, communications and data switching systems, pagers, microwave communications systems, base stations, repeater networks, audio systems, and emergency power generating equipment. Employees in this class monitor the work of contract staff installing mobile communications equipment in County vehicles, and ensure the work complies with contract requirements and departmental/agency needs. Employees provide input into the design of communication systems and electronic equipment, and recommend alternative approaches to the resolution of related problems based on their area of expertise. Employees in the class exercise independent judgment and initiative when determining and correcting equipment deficiencies and localizing communications problems. Work is evaluated on the basis of compliance with established procedures and technical accuracy. Routine work is performed independently. The supervisor or a higher level Technician is notified of unusual conditions or problems. Work is performed according to guidelines such as equipment specifications and FCC regulations, but ingenuity and resourcefulness are employed to modify communications equipment within set parameters. Performance of the work of the class involves determining the problem needing resolution, deciding on the proper course of action after considering several factors and alternatives, and planning and organizing the work. The work directly affects the operation of critical Public Safety emergency communications systems, and enables users to access/use these systems effectively. Some work is performed in a shop environment; however, the employee spends a significant amount of time outdoors. The employee is exposed to high voltage, and is required to work on rooftops and atop vehicles. The employee occasionally lifts electronic equipment weighing up to one hundred pounds when installing communication system components. An incumbent may be placed on-call on a rotating basis after normal working hours for emergency response to communications system problems. A Communications Technician I is usually an expert on a particular communications system, but not on the makeup and operation of all systems. Technicians at this level often accompany Communications Technicians II on jobs involving systems with which they are less

familiar, and receive guidance and training from their more experienced co-workers.

EXAMPLES OF DUTIES: (Illustrative Only)

- Installs, tests, adjusts, diagnoses, analyzes, repairs and maintains VHF and UHF FM radios, state-of-the-art computer-controlled radio equipment including transmitter and receiver controllers, communications and data switching systems, pagers, microwave communications systems, base stations, repeater networks, audio systems, and emergency power generating equipment.
- Arranges for contract staff to install mobile radio equipment in vehicles, ensures work is performed within specified time frame, meets user departments' needs and contract terms, and conforms to applicable standards. Reports unsatisfactory contractor performance to the Communications Maintenance Supervisor.
- Maintains parts and spares inventories, and prepares and maintains records documenting work performed on County-owned communication equipment including material and labor expended.
- Provides technical and engineering information/data and recommends specifications for procurement of communications system components, design changes or system modifications based on technical knowledge, evaluation of user comments, and periodic review of equipment history records.
- Services, maintains and repairs diesel and gasoline-powered electrical generators, and electrical and electronic battery charging equipment utilized in conjunction with communications equipment.
- Performs related duties as required.

KNOWLEDGE, SKILLS AND ABILITIES:

- Considerable knowledge of the principles and practices of electrical and electronic disciplines as related to the installation, testing, diagnosis, maintenance and repair of modern VHF and UHF FM mobile radio and microwave communication systems and digital transmission equipment.
- Considerable knowledge of applicable rules and regulations of the Federal Communications Commission.
- Ability to read and interpret complex installation diagrams and manufacturers' specifications related to proper installation.
- Ability to independently solve difficult technical problems concerning communications systems and equipment.
- Ability to communicate clearly and effectively, to record documentation concerning methods, approaches, and steps taken, and to explain technical matters to non-technically oriented customers.
- Ability to comprehend and follow highly technical oral and written instructions.
- Ability to establish and maintain effective working relationships with co-workers, user agency staff, and contractors.
- Ability to perform work on building rooftops and atop tall vehicles.
- Ability to work outdoors under all weather conditions.
- Ability to observe strict safety precautions when working in close proximity to high voltage electrical sources, transmitting antennae, when operating power and soldering tools, and on construction sites.
- Ability to lift, or assist in lifting heavy system components weighing up to 100 pounds.
- Ability to pass a County administered test of recognition of colors commonly used in wiring in the communications industry.
- Ability to perform work, to respond to problems, and to attend meetings at sites other than a normal office setting.

MINIMUM QUALIFICATIONS:

Experience: Considerable (3 years) technical experience (i.e., at the journey level) in the installation, testing, maintenance and repair of radio communications equipment, specifically with experience in VHF and UHF FM mobile radio systems.

Education: Possession of an Associate of Arts degree in electrical, electronics or communications engineering/technology; or graduation from a two (2) year electrical, electronics or communications technical training school.

Equivalency: An equivalent combination of education and experience may be substituted.

LICENSE:

- Possession and maintenance at all times of a valid Class "C" (or equivalent) driver's license from the applicant's state of residence.

PROBATIONARY PERIOD:

Individuals appointed to a position in this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL EXAM PROTOCOL: Core Exam.

Class Established: August, 1963

Revised: April, 1964

February, 1971

April, 1974

June, 1970

May, 1979

June, 1985

May, 1987

Corrected: June, 1987

Revised: July, 1988

June, 1995 (M)

March, 1997

April, 2002 (M)

August, 2013

October, 2014

Formerly Titled: "Communications Equipment Technician I"