

MONTGOMERY COUNTY GOVERNMENT
ROCKVILLE, MARYLAND
CLASS SPECIFICATION

Code No. 003426
Grade 18

TELECOMMUNICATIONS TECHNICIAN

DEFINITION OF CLASS:

This is full performance level technical work involving the installation, testing, maintenance, troubleshooting, repair, removal, function changes, and rearrangement of County owned digital and Internet Protocol (IP) telephones, ancillary equipment, cabling, and wiring. Contacts are with County employees at all levels in order to resolve telephone, Interactive Voice Response (IVR) and Voicemail system problems, present and discuss technical telephone system requirements and suggest modifications with the supervisor, and to arrange and complete installation, maintenance, and repair of Private Branch Exchange (PBX), telephone equipment and associated adjuncts. An incumbent in this class does not normally offer direct service or assistance to the general public.

An employee in this class is responsible for installation, testing, repairing, removing, relocating, and maintaining cables, wiring, system trunk lines telephone instruments, and related equipment. An incumbent also utilizes PBX Administration software to update PBX databases relating to installation, removal, or maintenance of County equipment, and maintaining inventory and maintenance records. A Telecommunications Technician plans the work to be performed, completes assignments independently, and chooses the appropriate procedures, supplies, and tools. The work is evaluated for technical soundness, as evidenced by proper telecommunications system functionality; the methods and approaches used in the work are not reviewed in detail. An employee selects and applies established manufacturer's specifications, Commercial Building Telecommunications Wiring and Pathway/Spaces Standards, and County procedures in performing most work, but must also employ ingenuity in modifying and adapting cable systems to ensure communications service in emergency situations. The complexity of the work is characterized by the use of problem solving skills in the diagnosis of PBX and telecommunications problems, and the technical skill employed in recommending system changes and making necessary repairs. The work of this class directly affects the ability of all County departments and agencies to communicate with others, conduct their business, and provide service; and the ability of the public to contact County Government offices to obtain information or service. The work is performed primarily throughout County Government buildings in offices, mechanical/telecommunications closets, ceilings, and walls, and involves exposure to moderate levels of dust and dirt. Installation, testing and repair work is occasionally performed outdoors in all kinds of weather. Employees in this class occasionally work in close proximity to electrical current, and must wear protective gear when performing work on construction sites. Employees in this class occasionally provide support outside of normal business hours. Employees occasionally lift equipment and supplies that weigh between twenty-five (25) and fifty (50) pounds, and must maneuver back-up battery cells weighing approximately one hundred fifty (150) pounds (lifting should be accomplished by two employees). Performance of the work of the class requires the climbing of ladders, and occasionally crawling and working in confined spaces.

EXAMPLES OF DUTIES: (Illustrative Only)

- Installs, moves, tests, adjusts, repairs, maintains, troubleshoots, removes and rearranges County

owned digital and IP telephones, voicemail and ancillary equipment including cabling and wiring.

- Updates system configuration for changes, additions and deletions.
- Checks/updates equipment firmware.
- Adds/removes PBX systems and circuit cards.
- Installs, maintains, and repairs complex voice systems and components including PBX, IVR and voicemail systems.
- Diagnoses complex system failures, identifies alternative solutions, and implements the appropriate corrective action(s).
- Performs facility site surveys.
- Troubleshoots and performs problem diagnosis for station cabling.
- Repairs station cabling and jacks.
- Troubleshoots issues related to lines/trunks.
- Assists in identification and resolution of CLEC/ILEC line/circuit problems.
- Coordinates and acts as focal point for problem resolution for service providers.
- Documents preventive maintenance routines.
- Maintains records of installations, repairs and modifications to the PBX platform.
- Provides technical input to supervisor in the technical planning of installations.
- Discuss telephone system and equipment location requirements with employees of County agencies and contract installers, advises alternative approaches, and ensures installations by contractors complies with standards and meets contract specifications.
- Prepares equipment orders for various telephone system and ancillary equipment.
- Sends equipment for repair that cannot be repaired in-house.
- Maintains equipment inventory and records of work performed by contractors.
- Recommends changes for work schedules, maintenance plans, installation procedures, and equipment modifications to meet user needs and increase efficiency of telephone system, equipment installation, repair and maintenance.
- Ensures regularly scheduled backups and tape/disk rotations are completed.
- Develops and maintains positive customer relations by ensuring that customer requests are handled in an efficient, effective and timely manner.
- Attends training and meetings as required.
- Performs related duties as required.

KNOWLEDGE, SKILLS AND ABILITIES:

- Considerable knowledge of telephone equipment and infrastructure cabling, including telephone switching equipment, call sequencers, and voice mail systems.
- Considerable knowledge of testing and measuring electrical and electronic circuits.
- Skill in troubleshooting and analyzing telephone system problems, determining solutions, and making repairs.
- Skill in employing test equipment including oscilloscopes, multi-meters, and signal generators; comprehending digital and analog readouts; and the ability to compare readings with manufacturer's listed specifications in order to properly diagnose problems and adjust equipment.
- Skill in the use of a wide variety of hand and power tools; such as wire cutters and strippers, drills, screwdrivers and wrenches, ratchets and sockets, micrometers, and scales.
- Ability to read and comprehend work orders, technical manuals, circuit wiring diagrams, floor plans and sketches in order to plan, layout, and complete the installation of telephones and related equipment.
- Ability to observe all necessary safety procedures related to work on electronic circuits.
- Ability to operate a computer terminal to input changes to telephone switch databases, and ability to

utilize computer applications to track repairs and work orders, provide reports for management and develop documentation.

- Ability to establish and maintain effective working relationships with co-workers, user agency and contract staff.
- Ability to work in confined workspaces, frequently bend or stoop, carry tools and equipment weighing up to fifty (50) pounds, occasionally maneuver back-up battery cells weighing up to one hundred fifty (150) pounds, and climb ladders.
- Ability to occasionally work outdoors in all types of weather conditions.
- 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: Three (3) years of experience as a field technician in the installation, testing, repair, and maintenance of voice and data cabling systems and equipment.

Education: Completion of an accredited two year undergraduate, certificate or trade school program, which provided training in the installation of telecommunications system infrastructure, digital circuitry, and signaling modulation techniques.

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

Physical Ability: Ability to occasionally lift equipment and supplies that weigh between twenty-five (25) and fifty (50) pounds, and must maneuver back-up battery cells weighing approximately one hundred fifty (150) pounds (lifting should be accomplished by two employees).

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 1988

Revised: March 1992

Classification Study: June 1995 (M)

Classification Study: April 2002 (M)

October 2012

August 2013

October 2014

Formerly Titled: "Telephone Technician"