<u>Definition</u> This is technical work in the operation, maintenance and installation of data communications equipment and associated peripheral devices.

An employee in this class performs a variety of technical duties in the operation and maintenance of data communications equipment, computer consoles, electronic test equipment and other associated peripheral devices which monitor and control communications systems that support data processing operations. Work involves installing and testing of host and remote data communications medias, equipment and peripheral components; and monitoring and controlling data communication components and system activity during the operations phase to maintain optimum efficiency, reliability and continuity of data transmission. The work includes working with users groups in identifying communications system malfunctions; coordinating, scheduling and/or conducting repairs of faulty equipment and associated communications system components; and maintaining historical records of installations, system malfunctions, faults isolated, and repairs scheduled and resolved. Work is performed under the direction of a technical supervisor who makes assignments, provides guidance in resolving the more difficult or unusual problems and reviews work for adherence to standards and results achieved.

<u>Examples of Work</u>: Sets up, operates, monitors and/or controls the functioning of front end processors, communication switches, multiplexors and associated data communication equipment.

Conducts test of data communication equipment, medias, and associated peripheral components to: isolate data transmission malfunctions; test quality of data transmission; measure voltage, current, resistance, and continuity of lines and components; and analyze circuit functions.

Switches data transmission signals to alternate modes when primary circuits malfunction in order to maximize continuity and access to available systems.

Installs circuits, coaxial cable, twisted pair wire, modems, visual display terminals and/or other peripheral devices.

Maintains manual and/or automated inventory records of data communication equipment and parts.

Establishes and maintains computer stored records to document system configuration interruption of service to users; network or equipment failure; requests for service to equipment and/or lines; circuit utilization and, activity and requests of equipment utilization.

Receives calls from data communication users on equipment malfunctioning; identifies the nature of the problem; explains the appropriate course of action to user, and/or contacts the appropriate contractor to resolve the problem, and/or conducts repairs.

Utilizes software traces and/or electronic test equipment such as data scopes, break out boxes, ohmmeters, oscilloscopes, and similar test equipment to isolate malfunctions.

Performs related duties as required.

<u>Required Knowledge, Skills and Abilities</u>: Knowledge of the methods and techniques used in the installation, operation, testing and repair of data communications systems and equipment.

Knowledge of data communications terminology and equipment.

Knowledge of basic computer operations techniques and equipment.

Ability to operate electronic test equipment used in testing of data communications equipment and systems.

Ability to analyze test equipment output.

Ability to analyze equipment and systems malfunctions identified by users through telephone contact and initiate corrective measures.

Ability to read, interpret and apply technical data communications manuals, procedures and specifications.

Ability to read video display terminals and computer printouts.

Ability to operate video display terminals.

Ability to communicate effectively, orally and in writing.

Ability to climb ladders to a height of ten feet.

Ability to lift up to forty pounds.

<u>Minimum Experience and Training</u>: One year of experience as Communications Operations Specialist Trainee;

OR

Three years of experience in the installation, repair, maintenance, and testing of data communications systems.

Post-high school training in electronic or communications engineering; or computer or electronic technology may be substituted on a year-for-year basis for up to two years of the required experience.

Experience and/or training must have been obtained within the last five years in order to meet the requirement.