

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 5177

TITLE: COMMUNICATIONS ENGINEER

GRADE: S-21

DEFINITION:

Under general supervision coordinates and supervises the daily activities of a group of communication equipment repair technicians; or installs and repairs complex cable television (broadband) transmission and terminal equipment; and performs related duties as required.

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

May supervise a maintenance program and a group of Electronic Equipment Supervisors or; perform more complex repairs and maintenance.

ILLUSTRATIVE DUTIES:

Coordinates day-to-day repair, modification and installation of County-owned communications equipment, including two-way radio systems, base stations, computer-aided-dispatch equipment and electrical power plants;
Designs, installs and writes specifications for new communications equipment;
Inspects installed equipment to ensure compliance with manufacturer's specifications and Federal Communications Commission regulations;
Develops a program of continuing maintenance for all equipment;
Trains and supervises subordinate employees;
As a cable television repair engineer performs complex cable television installation and repair work;
Constructs cable television wiring systems and installs electronic equipment such as multiplexers, data and voice modems, and video modulators;
Investigates electrical engineering problems and malfunctions and assists in testing and inspecting installed systems ;
Maintains, troubleshoots, and repairs system electronics;
Performs technical work in research, development and design of cable television internal wiring systems and connecting video, voice and data links;
Assists in drafting complex plan specifications and developing system estimates;
Prepares documentation and submits reports on engineering tests;
Reviews complex cable system plans as required.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge of the principles and practices of electronics or electronic engineering;
Knowledge of the materials and methods used in radio or cable transmission and terminal equipment repair work, as appropriate;
Knowledge of federal, state, and local laws, codes, and regulations applicable to County communications systems;

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Ability to investigate problems or malfunctions and recommend solutions or corrective actions;

Ability to collect and interpret data;

Ability to communicate effectively both orally and in writing;

Ability to maintain effective working relationships with the public and County personnel;

May require ability to plan and supervise the work of others, depending on assignment.

EMPLOYMENT STANDARDS:

Any combination of education, experience, and training equivalent to:

High school graduation or a G.E.D. issued by a state department of education; PLUS

Two years of technical electronics study at a college or a trades school and;

Four years of responsible communications and/or cable television (broadband) equipment repair experience as appropriate.

CERTIFICATES AND LICENSES REQUIRED:

A valid FCC General Radiotelephone License or equivalent industry certification may be required dependent on assignment.

REVISED: June 30, 1992

REVISED: November 16, 1987