## 1-6-84

## ASSISTANT COMMUNICATIONS CABLE WORKER, 3808 COMMUNICATIONS CABLE WORKER, 3802 SENIOR COMMUNICATIONS CABLE WORKER, 3801 COMMUNICATIONS CABLE SUPERVISOR, 3800

Summary of Duties : Assists in the installation, maintenance, changing, removal, location of trouble and repair of overhead and underground lines and cables connected to telephone and teletype, alarm, signal, communications and control systems and appurtenant equipment; or personally performs such skilled electrical work; or supervises such work; and does related work.

Distinguishing Features : Employees in the Communications Cable Worker series specialize in work on low voltage communications lines and cables, circuits, equipment and hardware which involves less hazard than the work performed by employees on power and transmission lines. Employees in these classes must be familiar with the hazards pertaining to power lines and are subject to such hazards since work is performed in close proximity to them. Normally employees of these classes are required to climb poles and work in manholes, in underground and overhead facilities; therefore, it is necessary that incumbents be agile and have a well-developed sense of equilibrium.

Assistant Communications Cable Worker is the entering level class of the Communications Cable Worker series. An employee of this class usually assists a journey-level worker and works under the latter's direct supervision. An Assistant Communications Cable Worker may work independently on routine duties such as delivering nitrogen bottles or inspecting manholes for water.

A Communications Cable Worker normally works in a small crew and receives work assignments in the form of specific duties and responsibilities, complaints on the disruption of service or engineering instructions relating to the construction or installation of new communications systems or facilities. This employee may work from splicing diagrams, prints and sketches or oral instructions. A Communications Cable Worker's work is not subject to immediate supervision since most of it is performed in the field and is subject only to periodic checking and review for satisfactory results.

A Senior Communications Cable Worker is a working supervisor of several crews of journey-level employees and their assistants. An employee of this class is responsible for laying out the work on specific assignments and indicating proper procedures to follow on difficult parts of the work. A Senior Telephone Cable Workerarranges clearances, as required, to work on circuits and receives supervision in terms of general instructions.

A Communications Cable Supervisor is responsible for laying out,

assigning and inspecting the work of several communications cable crews and is responsible for the overall planning and directing of the work of several communications cable and electrical conduit crews. Supervisor's assignments and instructions are received in the form of diagrams or written or oral instructions from either a Senior Communications Engineer, a Communications Engineer or a Senior Communications Electrician Supervisor. Review of the work is normally on the basis of quality or quantity of work performed.

Employees of these classes are distinguished from those in the Communications Electrician series by the fact that the former have the primary responsibility for outside overhead and underground construction, while the latter are primarily concerned with the inside construction, operation, maintenance and repair of electronically operated communications systems and appurtenant equipment.

Examples of Duties : Assistant Communications Cable Worker : Assists Communications Cable Workers and may work independently on the following: installs pole clamps; grounds and bonds lead-covered cable and overhead messenger supported cable; set cable hangers and installs pole ground wires; makes minor repairs and adjusts telephone call boxes and instruments, line signaling relays, alarm and annunciator circuits and equipment; and operates high voltage test sets;

Assists in locating and inspecting faults and damage to underground and overhead communication and control cables and lines, cable terminals, and lightning and high voltage protective equipment; operates fault-finding and tone-generating equipment; reads test equipment to determine condition of cable; cleans and dresses cable sleeves; and solders; erects traffic warning signs and barriers; acts as ground and cable worker during aerial or underground work; prepares routine work reports; occasionally makes simple schematic diagrams of communication equipment; and drives a truck as an incidental duty.

Communications Cable Worker : Installs, maintains, replaces and removes open wire lines and overhead and underground cables for alarm, signal, telephone and teletype systems; installs pole and pole hardware; repairs crossarms, insulators, guy lines and a variety of control boxes; may dig and backfill excavations for conduits; pulls cable through conduit; bonds cable; splices multiconductor cable and wipes lead sleeves; makes duct splices and makes up cable terminals; strings new jumper wires; installs and connects fire alarm boxes and police call boxes; makes routine inspections of communications and control cables and telephone lines for faults or breaks or any condition that may lead to disruption of service; trims trees and strings tree wires to clear communications lines; installs, maintains, adjusts, and inspects gas filled cables and related appurtenances; takes gas pressure readings; inspects for and repairs gas leaks; purges lines of moisture; installs contactors to operate cable gas alarm.

Shoots trouble on communications and control cables and telephone

lines, using ohmmeter, Wheatstone bridge, and other test equipment in determining presence of opens, shorts, grounds, or crosses; identifies cable pairs by using tone test; runs jumpers circuits; changes pairs on circuits and telephone cables; installs loading coils; transposes telephone lines; makes transmission tests and acceptance tests of cable; makes reports of activities and conditions found; and may perform related work in a shop.

Senior Communications Cable Worker : In addition to the above, supervises and works with a crew of Communications Cable Workers and Assistant Communications Cable Workers; determines that tools, supplies, and equipment are available as needed on work assignments; tests and inspects facilities for proper installation and conformance to instructions and required standards; interprets blueprints, specifications and instructions related to cable work; may serve in an advisory capacity to overhead line or underground cable crews during installation of control and communication cables; obtains clearances to work on active control and metering circuits; notifies users of line communication and control facilities, and coordinates scheduled and emergency outages; prepares work records and reports; and drives automotive equipment as an incidental duty.

<u>Communications Cable Supervisor</u> : Supervises several crews of Communications Cable Workers and other employees engaged in the above work; from written or verbal instructions and diagrams, determines the materials and supplies needed for each job and directs the crew to make necessary preparations; determines the most efficient and safest manner to accomplish the assignments; prepares and maintains records of labor, time, and materials used and submits reports of work accomplished; assists in planning and coordinating the work of line crews engaged in overhead or underground construction;

Plans, organizes and supervises the activities of several crews engaged in major installation and maintenance of underground and aerial communications cable and aerial wire lines and installation or maintenance of emergency circuits used in civil disturbances or disasters or maintenance, construction, testing and repair of communications and control cable, open wire lines and related facilities; assigns and explains the details of major work projects to subordinates; may prepare rough layouts and diagrams of work assignments; reviews diagrams of major work projects and makes necessary field refinements; prepares requests for material, supplies equipment and labor as required for work projects; meets with joint pole delegates from utilities for the purpose of determining the sequence and allocation of joint pole work to be performed by all interested parties; makes field inspections of work in progress and upon completion; prepares work and progress reports and recommendations on activities of field communication line and cable work; reports any unusual construction, organization, material or personnel problems to supervisor; and maintains related files and records.

Incumbents in all classes may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications :

Knowledges :	Assistant Communi- cations Cable Worker	Communi- cations Cable Worker	Senior Communi- cations Cable Worker	Communi- cations Cable Super- visor
Methods, tools, materials and equipment involved in field construction of tele- phone poles, and installa- tion, maintenance, testing, and repair of overhead and underground alarm, signal, telephone, and teletype lines, and communication and control cables, ter- minal boxes, and conduits, together with skill in their use	Working	Good	Good	Good
Methods and practices employed, together with skill in installing and splicing underground and overhead communication and control cables in- cluding soldering techniques:	Working	Good	Good	Good
Principles of electricity as they relate to the operation and installation of communication and con- trol facilities	General	Good	Good	Good
Sources of trouble common to telephone lines and communication and control cables;	General	Good	Good	Good
Knowledges (Cont) :	Assistant Communi- cations Cable Worker	Communi- cations Cable Worker	Senior Communi- cations Cable Worker	Communi- cations Cable Super- visor

Fundamentals of pressuriza- tion and gasification of cables;		Good	Good	Good
Provisions of state laws and general orders regard- ing safety precautions and clearances and of various types of overhead high voltage lines;		General	General	Good
Hazards involved and safety precautions or devices to be observed or used when working in manholes, sta- tions, and on poles near energized high voltage cables and equipment;	Working	Good	Good	Good
National Board of Fire Underwriters' requirements regarding the construction of fire alarm systems;				Working
First aid methods and prac- tices;	General	Working	Working	Working
Principles of supervision;			Working	Good
Laws and regulations related to equal employment opportunity and affirmative action;			Working	Working
Memoranda of understanding as ate personnel;	they apply to	subordin-	Working	Working
City personnel rules, poli- cies and procedures;				General
Abilities:				
Climb and work safely on poles carrying high and low voltage lines and equipment;	Х	Х	Х	
Abilities (Cont) :	Assistant Communi- cations Cable Worker	Communi- cations Cable Worker	Senior Communi- cations Cable Worker	Communi- cations Cable Super- visor

Do strenuous physical work;	Х	Х	Х	
Interpret and work from blueprints, schematic dia- grams, and sketches;		X	Х	Х
Understand and follow written and oral instruc- tions;		X	X	X
Determine the repairs necessary to restore ser- vice in the most rapid and efficient manner;		X	х	Х
Keep routine work records and prepare reports;		Х	X	Х
Supervise journey-level employees engaged in com- munications line con- struction, installation, maintenance and repair of communications and control lines and cables;			х	X
Lay out work and plan ahead in order to utilize time, labor, and materials to the best advantage;				X
Read and interpret plans and specifications of com- munications line and cable work;				X
Prepare detailed electrical communication line and cable diagrams and cir- cuits;				X
Confer with various techni- cal and joint committees on communications facility construction and installa-				
tion matters				Х

One year of experience as a helper in the installation, maintenance , or repair of communication, control, or power cable facilities i s required for Assistant Communications Cable Worker.

Two years of experience as a helper to a journey level electrica l worker in the construction, installation, maintenance, and repair o f communications and control lines and lead or plastic sheathe d communication type cables of at least 12 pairs containing control , telemetering or telephone circuits is required for Communication s Cable Worker.

Two years of experience as a Communications Cable Worker or in a class which is at least at that level in the installation , maintenance and repair of lead or plastic sheathed communicatio n cables of at least 12 pairs containing control, telemetering o r telephone circuits is required for Senior Communications Cable e Worker.

Two years of journey level experience in overhead or undergroun d communications line construction or installation, maintenance , testing and repair of communication and control lines and cables i s required for Communications Cable Supervisor.

<u>License</u>: <u>All Classes</u>: A valid California driver's license i s required.

<u>Physical Requirements</u>: <u>Assistant Communications Cable Worker</u>, <u>Communications Cable Worker</u> and <u>Senior Communications Cable Worker</u>: Strength to perform average lifting up to 25 pounds and occasionall y over 70 pounds. Some positions require strength to perform heav y work such as lifting 100 pounds maximum and frequent lifting up t o 50\pounds; body agility and equilibrium involved in activities suc h as climbing and balancing on poles under precarious conditions.

Communications Cable Supervisor : Strength to perform light work such as lifting 20 pounds maximum and frequent walking or standing.

Persons with handicaps may be capable of performing the duties o f some of the positions in these classes. Such determination must b e made by the medical examiner on an individual basis.

As provided by Civil Service Commission Rule 2.5 and Sectio n 4.55 of the Administrative Code, this specification i s descriptive, explanatory and not restrictive. It is no t intended to declare what the duties and responsibility of an y position shall be.