

## COUNTY OF SOLANO

### COMMUNICATIONS TECHNICIAN II

#### **DEFINITION**

Assembles, installs, maintains, and repairs a variety of communications, telephony, and/or telecommunications equipment including, depending on assigned specialty(s), radio, microwave, data, telemetry, transmission and receiving equipment, fire station alerting systems, audio, video, alarm systems, voting receiver systems, simulcast systems, antenna systems, duplexers, combiners, power and back-up power systems, dispatch consoles, detention facility consoles, telephony systems, voice mail systems, data terminals, switching and control systems; and assists other Communications Technician crews in the completion of special projects and the more routine tasks.

#### **CLASS CHARACTERISTICS**

This is the journey level classification in the Communications Technician job series. Incumbents in this class are assigned the full range of duties. Employees in this job class receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies within the work unit. Incumbents in this job class must possess journey level knowledge and skills in either radio/microwave transmitting and receiving or telephony and data communications systems. Incumbents in this job class are expected to have a basic familiarity with all types of communications equipment and systems utilized within the County's operations and supported by the assigned work unit.

#### **SUPERVISION RECEIVED AND EXERCISED**

Receives direction from the Communications Manager.

May provide technical assistance to lower level or newly hired employees.

#### **EXAMPLES OF DUTIES** –*Duties may include but are not limited to the following:*

Installs, tests, modifies, and adjusts VHF/UHF and microwave radio transceivers, antennas, portable radios and paging receivers, remote control devices, inter-communications, sound systems, and closed circuit television both in the field and in the shop.

Installs, maintains, modifies, and repairs various types of telephony/data communications voice/data transmission, signaling and digital and analog switching equipment, cabling and fiber optics both in the field and in the shop.

Adjusts transmitters and receivers for maximum efficiency; measures frequencies, modulation and power output of radio, microwave and digital circuitry; operates and monitors radio telephone equipment.

Responds to service/repair calls or maintenance alarms; troubleshoots, investigates, analyzes and diagnoses the operation and performance of assigned electronic, radio/microwave transmission devices, and/or telecommunications systems/equipment and initiates appropriate action to resolve problem and optimize system/equipment effectiveness.

Constructs and assembles custom design communications equipment; fabricates special brackets and hardware for equipment installation; installs and maintains antenna systems on towers; “lays” and “pulls” cable for telephone and data communications systems.

Monitors the installation and/or servicing of assigned communications systems/equipment by contractors/vendors; provides coordination between County’s customer department and the vendor/service provider for activation/restoration of affected system/equipment.

Assists in providing on the job training for other staff members and/or overseeing the work of others on assigned work crews.

Participates on a variety of special projects and/or combined work crews; learns basics of installing and maintaining a variety of communications systems/equipment, and with training, beyond assigned specialty area of expertise.

Completes reports on work performed.

Builds and maintains positive working relationships with co-workers, other County employees, contractors, vendors, and the general public utilizing principles of good customer service.

## **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

### **Knowledge of:**

Standard electronics theory and practices and standard work safety principles and practices.

### **When assigned to radio/microwave functions:**

Standard and accepted radio communications theory and practices and standard and accepted microwave theory, standard and accepted radio frequency modulation and direction.

Standard tools and test equipment utilized in the repair and servicing of radio communications equipment and standard and accepted radio communications transceiving equipment.

**When assigned to telephony/data communications functions:**

Standard and accepted principles and practices of installing, maintaining, and repairing digital and analog telecommunications equipment and systems.

Standard tools and test equipment utilized in the repair and servicing of telephony and data communications equipment.

Standard and accepted telephony/data communications equipment and systems.

Working knowledge of operations and administrative procedures of the County's organization and the assigned work unit.

**Skill to:**

Operate office equipment including a personal computer, copy and fax machines and printers.

Drive a motor vehicle.

**Ability to:**

Understand and carry out both written and oral instructions in an independent manner.

Understand, interpret and apply laws, regulations, and policies governing designated communications/telecommunications operations.

Comply with laws, regulations, and professional practices governing designated communications/telecommunications operations.

Collect and analyze data and electronic test information and circuitry to repair communications equipment.

Utilize and read precision test instruments accurately and effectively.

## **EXPERIENCE AND EDUCATION/TRAINING**

### **Experience:**

Three (3) years of progressively responsible work experience including radio/microwave transmission/receiving or telephone/data communication systems, equivalent to the work performed by the Communications Technician I with the County of Solano.

### **Education/Training:**

High school diploma or equivalent supplemented with at least thirty semester credits in electronics, electrical engineering, communications technology or a related telecommunications field.

## **SPECIAL REQUIREMENTS**

Possession of, or ability to obtain, a valid and appropriate California driver's license.

Possession of, or ability to obtain, a valid FCC General Radio Operator's License or equivalent may be required.

## **SUPPLEMENTAL INFORMATION**

May be required to work outside normal business hours.

Must be able to perform assigned duties outdoors in all types of weather conditions and may be required to work on towers at heights in excess of two hundred (200) feet.

Candidates and incumbents may be required to pass a background investigation in accordance with applicable policy statements.

## **ADA COMPLIANCE**

**Physical Ability:** Must be able to perform manual labor associated with repair of radio, microwave, telephony, and/or data communications devices, systems, and/or equipment which may include lifting objects weighing between 50 to 100 pounds and utilize the full range of body movements involving reaching, bending, grasping, and climbing.

**Sensory Requirements:** Requires the ability to recognize and identify similarities and differences between shade, degree or value of colors, shapes, sounds, forms, textures or

physical appearance associated with job-related objects, materials, tasks or people.

**Environmental Factors:** Requires the ability to work under conditions where exposure to environmental factors poses a moderate risk of moderate injury or illness.

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Director of Human Resources

**Established Date:** April 2001

**Revised Date:** November 2002

**BOS Date:** June 30, 2003

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