

Class Title: Radio Communications Systems Analyst, Senior

BRIEF DESCRIPTION OF THE CLASSIFICATION:

Ensures reliable radio communication for police, fire, paramedics, and other city departments. Performs systems analysis on various communications equipment. Operates the radio and electronics service center to install, program, test, and repair radio systems, and provides on call service.

ESSENTIAL FUNCTIONS:

This information is intended to be descriptive of the key responsibilities of the classification. The following examples do not identify all duties performed by any single incumbent. Specific requirements of individual positions are described in the Job Description.

	Physical Strength Code	ESSENTIAL FUNCTIONS
1	M	Performs repairs and maintenance of radio systems by receiving incoming equipment, generating work orders in QBIC system, determining the necessary repair, obtaining parts, replacing defective components and aligning, testing, completing entering work orders in the system, maintaining tuning fork calibration database, and performing preventative maintenance at multiple sites.
2	M	Performs systems analysis by using vendor software and special test equipment to obtain operational data, analyzing files from data acquisition modules, monitoring real time radio traffic, listening to dispatch center audio recordings, and locating, measuring, and identifying interfering wireless signals.
3	M	Programs microprocessor controlled radios and hardware by using radio service software, uploading data, downloading parameters and configurations, and saving and maintaining archive files for all programmable devices.
4	M	Designs, plans, installs, and tests equipment by identifying the materials required, assembling and testing off-the-shelf components, installing equipment racks, pulling cable, terminating wires, mounting antennas, preparing and filing drawings to document installations, and evaluating the installation progress.
5	L	Provides technical support to customers by developing lesson plans, handouts, viewgraphs, and conducting classes on proper radio procedures and equipment usage.
6	M	Manages a technical publications library, FCC issues, and tower inspections by preparing FCC license applications, staying informed on current regulations, coordinating and monitoring tower inspections and work done by contractors, and interfacing with vendors, manufacturers, and other service shops to network information and services.

CSC Adopted: October 2001, CSC Revised: June 2015

CLASS REQUIREMENTS:

CLASS REQUIREMENTS	
Formal Education / Knowledge	Work requires knowledge of a specific vocational, administrative, or technical nature which may be obtained with a two year associate's degree, diploma or equivalent from a college, technical, business, vocational, or correspondence school. Appropriate certification may be awarded upon satisfactory completion of advanced study or training.
Experience	Two years experience in Electronics.
Certifications and Other Requirements	Valid Driver's License, Federal Communications Commission General Radio Telephone Operator's License or NABER certification within six months of employment
Reading	Work requires the ability to read technical manuals, specification sheets, operating instructions, and government regulations.
Math	Work requires the ability to perform general math calculations such as addition, subtraction, multiplication and division, technical math, algebra, and plane geometry.
Writing	Work requires the ability to write correspondence, work orders, operating instructions, alignments, and preventative maintenance guides.
Managerial	N/A
Budget Responsibility	N/A
Supervisory / Organizational Control	Work requires the occasional direction of helpers, assistants, seasonal employees, interns, volunteers or temporary employees.
Complexity	Work is governed by broad instructions, objectives, and policies. Work requires the exercise of considerable initiative and independent analytical and evaluative judgment.
Interpersonal / Human Relations Skills	Contacts others within the organization. These contacts may involve similar work units or departments within the City which may be involved in decision making or providing approval or decision making authority for purchases or projects. Vendors and suppliers may also be called upon for information on purchases, supplies or products. Meetings and discussions may be conducted with customers, brokers and sales representatives.

CSC Adopted: October 2001, CSC Revised: June 2015

OVERALL PHYSICAL STRENGTH DEMANDS:

Sedentary	Light	Medium X	Heavy	Very Heavy
S = Sedentary Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time	L = Light Exerting up to 20 lbs. occasionally, 10 lbs. frequently, or negligible amounts constantly OR requires walking or standing to a significant degree.	M = Medium Exerting 20-50 lbs. occasionally, 10-25 lbs. frequently, or up to 10 lbs. constantly.	H = Heavy Exerting 50-100 lbs. occasionally, 25-50 lbs. frequently, or up to 10-20 lbs. constantly.	VH = Very Heavy Exerting over 100 lbs. occasionally, 50-100 lbs. frequently, or up to 20-50 lbs. constantly.

PHYSICAL DEMANDS:

C = Continuously 2/3 or more of the time.	F = Frequently From 1/3 to 2/3 of the time.	O = Occasionally Up to 1/3 of the time.	R = Rarely Less than 1 hour per week.	N = Never Never occurs.
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This is a description of the way the job is currently performed; it does not address the potential for accommodation.

PHYSICAL DEMANDS	FREQUENCY CODE	DESCRIPTION
Standing	F	Complete work orders, testing equipment
Sitting	F	Computer, desk work, testing equipment, mounting brackets, running cable
Walking	F	Material, supply and tool retrieval, inter-office, meetings, to/from offsite jobs
Lifting	F	Boxes, equipment, parts, office supplies, tools, jack stands
Carrying	F	Boxes, equipment, parts, office supplies, tools, jack stands, ladders
Pushing/Pulling	O	Cable installations
Reaching	F	Mounting equipment, brackets, equipment, antennas, on top of vehicle, on shelves
Handling	F	Boxes, equipment, parts, office supplies, tools, ladders
Fine Dexterity	F	Computer keyboard, equipment repair, writing, soldering
Kneeling	O	Installing mobile equipment, repair or replacement of parts
Crouching	O	Installing mobile equipment, repair or replacement of parts
Crawling	R	Installing mobile equipment, repair or replacement of parts
Bending	F	Picking up boxes, equipment installation, repair or replacement of parts
Twisting	F	Picking up boxes, equipment installation, repair or replacement of parts
Climbing	O	Ladders, vehicles, site cable troughs
Balancing	O	Ladders, vehicles, reaching
Vision	C	Computer, desk work, reading, observation, installation, repair or replacement of parts, driving
Hearing	C	Telephone, co-workers, customers, vendors, meetings, environment, radio performance
Talking	C	Telephone, co-workers, customers, vendors, meetings
Foot Controls	R	Driving
Other (specify)	N	

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MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS:

Computer, printer, fax machine, copy machine, telephone, calculator, Standard Microsoft Windows and Office software, Unix Operating System, QBIC Maintenance System, FoxPro, Pro Com, MOSCAD Graphics Master Central, NCP 500 Mobile Data, Smartnet Information Management System (SIMS), OB4, Advantage Financial System (AFIN), voltmeter, multimeter, watt meter, ladder, soldering and desoldering stations, oscilloscopes, service monitors, frequency counters, general hand and workshop tools

ENVIRONMENTAL FACTORS:

D = Daily	W = Several Times Per Week	M = Several Times Per Month	S = Seasonally	N = Never
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HEALTH AND SAFETY		ENVIRONMENTAL FACTORS	
Mechanical Hazards	D	Dirt and Dust	D
Chemical Hazards	W	Extreme Temperatures	S
Electrical Hazards	D	Noise and Vibration	D
Fire Hazards	N	Fumes and Odors	D
Explosives	N	Wetness/Humidity	S
Communicable Diseases	N	Darkness or Poor Lighting	D
Physical Danger or Abuse	D		
Other (see 1 below)	N		

PRIMARY WORK LOCATION	
Office Environment	--
Warehouse	--
Shop	X
Vehicle	--
Outdoors	--
Other (see 2 below)	--

- (1)
- (2)

PROTECTIVE EQUIPMENT REQUIRED:

Eye protection/goggles or other eyewear, ear protection/ear plugs, hard hat, safety shoes or boots, tower climbing safety belt

NON-PHYSICAL DEMANDS:

C = Continuously 2/3 or more of the time.	F = Frequently From 1/3 to 2/3 of the time.	O = Occasionally Up to 1/3 of the time.	R = Rarely Less than 1 hour per week.	N = Never Never occurs.
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NON-PHYSICAL DEMANDS	
Time Pressures	F
Emergency Situations	O
Frequent Change of Tasks	F
Irregular Work Schedule/Overtime	O
Performing Multiple Tasks Simultaneously	F
Working Closely with Others as Part of a Team	F
Tedious or Exacting Work	F
Noisy/Distracting Environment	O
Other (see 3 below)	N

- (3)