

Telecommunications Technician

Knowledge, Skill, Ability, and Personal Characteristic Statements Rating Results

1	Knowledge of the techniques (e.g., soldering, connectorizing, interpreting schematic diagrams) used in the installation and modification of public safety communications equipment and systems at the component level to ensure proper operation of equipment.
2	Ability to modify and assemble communications equipment to properly interface with communications systems in accordance with manufacturer specifications and engineering instructions.
3	Knowledge of the methods of repair, diagnosis, and maintenance of public safety communications equipment and systems at the component level to ensure proper operation of equipment.
4	Knowledge of troubleshooting techniques for public safety communications equipment and systems at the component level to resolve equipment operation problems.
5	Knowledge of equipment manufacturer's software applications (e.g. consoles, logging recorders, radio programming) to effectively configure and repair public safety communications equipment.
6	Knowledge of operational configurations of hardware (e.g., consoles, logging recorders, repeaters/base stations) within public safety communications systems to ensure proper operations and meet client needs.
7	Knowledge of wiring, cabling, and connectors associated with communications systems to successfully interconnect various pieces of equipment.
8	Knowledge of the laws, rules and regulations of the Federal Communications Commission relating to radio and microwave communications to ensure compliance.
9	Ability to climb towers, structures, and ladders to perform daily activities of a public safety communications technician.
10	Ability to lift and carry 50 pounds unaided to complete daily work activities of a public safety communications technician.
11	Ability to bend, stoop, kneel, twist, and squat for extended periods of time to perform daily activities of a public safety communications technician.
12	Ability to push and pull for extended periods of time to perform daily activities of a public safety communications technician.
13	Ability to stand and sit for extended periods of time to perform daily activities of a public safety communications technician.

14	Ability to climb antenna structures of 100 feet or more to install, repair or maintain public safety antenna systems.
15	Ability to operate conventional and non-conventional vehicles safely to perform the daily activities of a public safety communications technician.
16	Willingness to travel by unconventional means (e.g., snowcat, vehicles, snowshoes, boats, helicopters) to sites in adverse conditions, at any time, throughout the state to perform daily activities of a public safety communications technician.
17	Knowledge of safety procedures with regards to climbing, carrying, and lifting to reduce risk of injury.
18	Knowledge of safety procedures in adverse weather conditions to reduce risk of injury.
19	Knowledge of safety procedures to reduce risk of injury associated with hand and power tools (e.g., soldering, drills, grinder).
20	Knowledge of safety procedures to reduce risk of injury applicable to working with electrical energy (e.g., RF radiation exposure, electrical shock).
21	Knowledge of electrical static discharge (ESD) safety procedures to prevent damage to electronic components.
22	Ability to interpret and apply the laws, rules and regulations of the Federal Communications Commission relating to radio and microwave communications to ensure compliance.
23	Ability to use basic algebra and electronic formulas to prepare various reports, summaries, and to perform electronic calculations.
24	Ability to read and comprehend written materials (e.g., emails, memos, reports, regulations, policies) in order to apply information and determine appropriate courses of action.
25	Ability to diagnose problems with radio, microwave, and communication systems at the component level to ensure operability of equipment.
26	Ability to detect, eliminate, and prevent sources of radio frequency interference using test equipment on radio, microwave, and communication systems to assure proper operation.
27	Ability to be flexible, adapting to changes in priorities, work assignments, schedules, and other conditions that may impact pre-established courses of action for completing projects and assignments.
28	Ability to use a computer to service radio and microwave equipment and communications systems (e.g., program, align, edit).
29	Ability to use precision instruments for measuring radio frequencies, power, deviation, modulation, and other parameters as required by the Federal Communications Commission.

30	Knowledge of computer operating system software (e.g., Linux, Windows, DOS) to meet work requirements.
31	Ability to utilize word processing software to prepare reports, memos, and other correspondence.
32	Ability to utilize email software to communicate amongst staff and meet client needs.
33	Knowledge of networking principles (e.g., TCP/IP, UDP, Ethernet networks, routing protocols, FTP, SNMP, DHCP) to manage, configure, and troubleshoot problems on public safety communications systems.
34	Ability to manage and service servers, hosts, and networking systems utilized by clients to perform daily functions of a public safety communications technician.
35	Knowledge of various types of computer component hardware (e.g., hard drives, RAM memory, optical drives, processors, PC architectures) to diagnose and repair computer based communications systems.
36	Ability to diagnose, configure, and repair computer based communications systems to meet client needs.
37	Ability to assemble various configurations of simple networks to assist with connectivity and communication needs.
38	Knowledge of digital transmission formats (e.g., DS3, DS1, DS0, T1) and protocols (e.g., B8ZS, AMI, VoIP/RoIP) to meet communications needs.
39	Ability to test digital transmission formats (e.g., DS3, DS1, DS0, T1) and protocols (e.g., B8ZS, AMI, VoIP/RoIP) to meet communications needs.
40	Knowledge of private line testing methods to ensure line levels, loss, and frequency response are within specifications that comply with Public Safety Communications Division policy.
41	Knowledge of antenna system testing methods (e.g., wattmeter, return-loss-bridge, spectrum analyzer) to ensure that antenna system components (e.g., isolators, cavities, coaxial cable, antenna) are operating within design specifications.
42	Knowledge of conductance testing to determine the condition of a battery bank.
43	Knowledge of trunking systems (e.g., Motorola, EF Johnson, GE/Harris) to maintain proper operational parameters that meet client needs.
44	Ability to maintain trunking systems (e.g., Motorola, EF Johnson, GE/Harris) to ensure operational parameters meet client needs.
45	Ability to maintain simulcast systems to ensure operational parameters meet client needs.
46	Knowledge of simulcast systems to maintain proper operational parameters that meet client needs.

47	Ability to communicate clearly when conveying ideas and information in writing.
48	Ability to interpret and clearly communicate policies, procedures, rules, and/or regulations to departmental employees and other government agencies to facilitate comprehension.
49	Ability to establish and maintain effective working relationships with staff in order to facilitate a productive work environment.
50	Ability to work independently on projects without immediate supervision or detailed instructions.
51	Ability to communicate effectively with staff and clients in a courteous, professional manner to maintain positive client relationships.
52	Ability to read and comprehend technical manuals, schematics, drawings, manufacturer specifications, and troubleshooting guides used in the installation, configuration, and repair of communications equipment.
53	Knowledge of proper spelling, grammar, punctuation, and sentence structure to ensure accuracy of documents.
54	Ability to interpret and analyze test results, computer printouts, and trouble reports to determine possible equipment repair needs and/or required repair methods.
55	Ability to create/edit drawings, schematics, or other documentation that illustrate layouts of equipment (e.g., electrical distribution, site access maps, special site considerations and needs, interconnect drawings) to maintain accurate records.
56	Skill to consistently establish and maintain priorities in order to complete projects and assignments within timelines.