NoRTEC JOB SPECIFIC SKILLS COMPETENCY

ELECTRONICS TECHNICIAN

DOT CODE: 003.161-014 SVP 7

Job Description: Lays out, builds, troubleshoots, repairs and modifies developmental and production electronic components, parts, equipment, and systems, such as electronic timers, photoelectric devices, audio and video units, missile control instrumentaiton, electron tubes, test equipment, and machine tool numerical controls. Physical Demands - Sedentary w/light lifting, carrying, or moving (up to 20 lbs); General Educational Development - R5 M5 L4; Aptitudes - Above average General Learning Ability, Verbal, Numerical, Spatial, Form Perception, Motor Coordination, Finger Dexterity and Manual Dexterity.

CORE SKILL COMPETENCIES/INDICATORS:

1. **Can demonstrate knowledge of the principals and theories of electronics. (R, IN, S, T)**
2. **Can demonstrate knowledge of the principals and theories of electrical circuitry. (R, IN, S, T)**
3. **Can demonstrate knowledge of the principals and theories of engineering mathematics. (R, IN, S T)**
4. **Can demonstrate knowledge of the principals and theories of electronic and electrical testing. (R, IN, S, T)**
5. **Can demonstrate knowledge of the principals and theories of physics. (R, IN, S, T)**
6. **Can demonstrate knowledge of basic electronic systems and components. (R, IN, S, T)**
7. **Can demonstrate the ability to appropriately draw sketches that will clarify design details and functional criteria of electronics units. (R, IN, S)**
8. **Can demonstrate ability to effectively and appropriately discuss layout and assembly procedures and problems with Electronics Engineer personnel. (IN, I, S)**
9. **Can demonstrate ability to assemble experimental circuitry (breadboard) or complete prototype model according to engineering instructions and technical manuals. (R, IN, S, T)**
10. **Can demonstrate ability to appropriately recommend changes in circuitry or installation specifications to simplify assembly and maintenance. (R, IN, I, S, T)**
11. **Can demonstrate proper techniques used to set up standard test apparatus. (R, IN, S, T)**
12. **Can demonstrate ability to appropriately devise test equipment and circuitry to conduct functional, operational, environmental, and life tests to evaluate performance and reliability of prototypes, or production models. (R, IN, S, T)**
13. **Can demonstrate ability to appropriately analyze and interpret test data. (R, IN, S)**
14. **Can demonstrate procedures used to adjust calibrate, align, and modify circuitry and components, and record the effects on unit performance. (R, IN, S, T)**
15. **Can demonstrate ability to pinpoint malfunctioning components. (R, IN, S, T)**
16. **Can demonstrate ability to make changes in parts of circuits to improve performance of equipment. (R, IN, S, T)**
17. **Can demonstrate ability to write technical reports and develop charts, graphs, and schematics to describe and illustrate system's operating characteristics, malfunctions, deviations from design specifications and functional limitations. (R, IN, S)**
18. **Can demonstrate proper procedure for evaluating system performance under actual operating conditions. (R, IN, S)**
19. **Can demonstrate ability to operate bench lathes, drills, or other machine tools to fabricate parts such as coils, terminal boards, and chassis. (R, S, T)**
20. **Can demonstrate ability to instruct and supervise other technical personnel. (R, IN, I, S, T)**
21. **Can demonstrate the ability to work under stress to meet schedule deadlines. (R, I)**