ELECTRONICS TECHNICIAN III *

Function of Job:

Under general supervision from a designated supervisor, and/or member of the research staff, to perform with a high degree of skill, complex work in the construction, modification, maintenance, and repair of specialized electronic equipment and related devices; to resolve operational problems; and to coordinate the work of other technicians.

Characteristic Duties and Responsibilities:

1. Test, repair, and calibrate complex scientific/electronic components and equipment involving the use of metes oscilloscopes, frequency standards, vacuum tubes, transistors, capacitors and transformers.
2. Assist in the fabrication and modification of complex electronic devices and instrumentation systems, including sampling oscilloscopes, radar test units, pulse amplifiers, interfacing units, and solid state and digital circuitry.
3. Advise professional staff on equipment and component requirements and capabilities.
4. Repair and adjust electronic transmitting equipment.
5. Modify standard electronic circuitry including data collection equipment and spectrum analyzers.
6. Assist in resolving design problems or malfunctions in complex or specialized electronic equipment.
7. May train and/or oversee the work of other technicians.
8. Prepare complex schematics and wiring diagrams, and mechanical and electronic layout.
9. Perform highly specialized electronic assembly including integrated circuits, instrument standards and control systems.
10. Participate in data collection and reduction activities.
11. In connection with other duties as required, perform skilled soldering, and operate portable machine tools and electronic instruments.
12. Perform related duties as assigned.

Minimum Acceptable Qualifications:

1. Bachelor’s degree in Electrical or Electronic Engineering or related field or Associate degree in electronics or related field or equivalent and two years of experience in the construction, maintenance, testing and repair of scientific or electronic instrumentation and equipment, or high school graduation and four years of experience in the maintenance, repair and construction of basic electronic and electrical instruments and equipment.
2. Sound knowledge of the principles of electronics including fundamentals of electricity.
3. Knowledge of the methods and materials used in repair and maintenance of electronic instruments and devices.
4. Ability to read and interpret complex diagrams and specifications, and to modify complex electronic instruments and devices.
5. Advanced skill in the use of electronic testing equipment, such as signal generators and oscilloscopes.

Additional Desirable Qualifications:

1. Training and/or experience in the design of electronic instruments and equipment.

This document is a generic classification specification of the University System of New Hampshire. Its purpose is to describe the representative responsibilities and general level of complexity, and it is not a substitute for the specific job description of the individual position.

* Revised - Original approved 4/10/75 and revised 7/30/80.