

ELECTRONICS SPECIALIST SENIOR/AVIATION AIDS

DESCRIPTION: Under general supervision, performs highly technical work constructing, installing, modifying, and repairing a variety of electronic aids to air navigation; analyzes and solves electronic problems of a complex nature involving very complex electronic equipment; performs related work as required.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Verifies the proper operation of a variety of air navigational aids to facilitate safe and efficient use of the state's airways.

Assists with the location of new aids to provide optimum utilization of the facility.

Designs, lays out and builds various projects; draws prints and writes operation manuals for shop designed equipment.

Develops equipment modification procedures for submission to the Federal Aviation Administration for approval.

Analyzes flight and ground inspection error curve graphs and utilizes the resultant information to perform precision adjustments and station calibrations.

Installs equipment to meet FAA specifications.

Verifies the proper operation of automated weather observation systems (AWOS).

Installs AWOS equipment to meet FAA and National Weather Service (NWS) specifications.

Performs routine scheduled and emergency maintenance on Navigational Aids and AWOS as required.

Maintains technical library.

Assembles, tests and modifies electronic equipment prior to usage.

Evaluates maintenance records and recommends upgrading, modification or replacement.

FULL PERFORMANCE KNOWLEDGES, ABILITIES, AND SKILLS REQUIRED: (These may be acquired on the job and are needed to perform the work assigned.)

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ENTRY KNOWLEDGES, ABILITIES, AND SKILLS REQUIRED: (Applicants will be screened for possession of these through written, oral, performance, and/or other evaluations.)

Knowledge of: tools, materials, methods and practices of electronic repair and construction work; FCC rules and regulations; applicable FAA rules and regulations; air navigation principals; navaid site selection procedures; the application procedures needed to have new navaids included in the National Air Space System; electronic principals and theory.

Ability to: establish work priorities; layout and construct specialized electronic circuits and systems.

Skill in: the operation, repair and calibration of test equipment.

JOB PREPARATION GUIDELINES: (Entry knowledge, abilities, and/or skills may be acquired through, BUT ARE NOT LIMITED TO, the following coursework/training and/or experience.)

Any combination of training and/or work experience that will enable the incumbent to possess the required knowledge, skills and abilities. A general qualification is a high school education or equivalent plus five years experience in electronics with two years of experience with navigational aid equipment. Graduation from a recognized vocational technical school in electronics may be substituted for two years experience in electronics. A FCC General Radio Telephone operators license and FAA VOR, DME and NDB certification is required.