

Click one of these links to see the Job Description for that class:

Job Code	Title
M08851	Electronics Specialist/Aviation Aids
M08852	Electronics Specialist Senior/Aviation Aids

Electronics Specialist Aviation Aids Series

Job Family

DESCRIPTION OF OCCUPATIONAL WORK

Teammates in this class series participate in and oversee the performance of a variety of aviation electronic equipment. Positions will design, install, inspect, repair, and maintain aviation navigation system and automated weather observation systems.

Electronics Specialist/Aviation Aids

M08851

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

Under immediate supervision, in a training capacity, learns to perform highly skilled and technical work constructing, installing, modifying, and repairing a variety of electronic aids to air navigation; learns to analyze and solve electronic problems of a complex nature involving 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.)

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

Assists with the installation of navigational aids.

Learns to design, layout and build various specialized projects; draws prints and writes operation manuals for shop designed equipment.

Learns to analyze flight and ground inspection error curve graphs and utilize the resultant information to perform precision adjustments and station calibrations.

Learns to install equipment to meet FAA specifications.

Learns to verify the proper operation of VHF Omnidirectional Radio Range [VOR], Nondirectional Radio Beacon [NDB], Distance Measuring Equipment [DME] and Automated Weather Observation Systems (AWOS).

Learns to install navigational aids and weather systems 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 adjusts electronic equipment prior to usage.

[KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED:](#) (These are needed to perform the work assigned.)

Knowledge of: tools, materials, methods and practices of electronic repair and construction work; circuit boards, processors, chips, electronic equipment and computer hardware and software application; FCC rules and regulations; air navigation principals; electronic principals and theory.

Ability to: operate, repair, and calibrate test equipment; solve complex electronic equations; trouble shoot and repair electronic systems, modules, and circuit cards to the component level both in-house and on site; read and understand schematics, construction plans, and drawings.

Skill in: establish work priorities; repair and construct electronic circuits and systems; math and algebra; verbal and written communication.

[MINIMUM QUALIFICATIONS:](#) (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Associates degree from a vocational technical program in electronics or two years of related experience. Possession of a General Radiotelephone Operator License (PG) issued by the Federal Communications Commission is required within three months of employment.

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Electronics Specialist Senior/Aviation Aids

M08852

[DISTINGUISHING CHARACTERISTICS:](#) (A position is assigned to this class based on the scope and level of work performed as outlined below.)

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 navigational aids and weather equipment to meet FAA specifications.

Verifies the proper operation of VHF Omnidirectional Radio Range [VOR], Nondirectional Radio Beacon [NDB], Distance Measuring Equipment [DME] and Automated Weather Observation Systems (AWOS).

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.

[KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: \(These are needed to perform the work assigned.\)](#)

Knowledge of: tools, materials, methods and practices of electronic repair and construction work; circuit boards, processors, chips, electronic equipment and computer hardware and software application; 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; solve complex electronic equations; trouble shoot and repair electronic systems, modules, and circuit cards to the component level both in-house and on site; read and understand schematics, construction plans, and drawings.

Skill in: the operation, repair and calibration of test equipment math and algebra; verbal and written communication.

[MINIMUM QUALIFICATIONS: \(Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.\)](#)

Associates degree from a vocational technical program in electronics and related experience with navigational aid equipment. Additional years of experience in the work described may substitute for the educational requirement on a year for year basis. Possession of a General Radiotelephone Operator License (PG) issued by the Federal Communications Commission. Possession of FAA letter of verification for Automated Weather Observation Systems (AWOS).

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SPECIAL NOTES APPLICABLE TO ALL LEVELS:

Positions in this series may require an employee to possess a valid driver’s license or the ability to provide independent authorized transportation in order to perform work-related travel.

Positions in this series may be required to participate in overnight and extended period of travel.

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).

Established: <1978/2023>

Note: Classification-specification is subject to change. Please refer to the Nebraska State Personnel Job Specification website at <https://das.nebraska.gov/personnel/classcomp/jobspecs/jobspecs.html> to ensure this represents the most current copy of the description.

The following is a summary of changes made to this class specification.

Section	Change Description	Effective Date
MQs for both Classifications	Updated MQs to match best practices	4/3/2023