



Career Service Authority

Page 1 of 4

Aviation Electrical/Electronic Support Engineer

GENERAL STATEMENT OF CLASS DUTIES

Performs intermediate level technical engineering support work on electrical, electronic, and/or other hi-tech systems maintenance.

DISTINGUISHING CHARACTERISTICS

This class performs intermediate level technical engineering support work. This class is distinguished from the Engineer class that performs intermediate level professional engineering work on a variety of engineering assignments with emphasis placed upon the application of engineering mathematics, principles, and practices on all phase of routine/moderately difficult engineering projects/assignments.

Guidelines, Difficulty and Decision Making Level:

Guidelines are generally numerous, well established, and directly applicable to the work assignment. Work assignment and desired results are explained by general oral or written instructions.

Duties assigned are generally repetitive and restricted in scope but may be of substantial intricacy. Employee primarily applies standardized practices.

Decisions or recommendations on non-standardized situations are limited to relating organizational policies to specific cases. Problems that are not covered by guidelines or are without precedent are taken up with the supervisor.

Level of Supervision Received and Quality Review:

Under general supervision, the employee receives assignments and is expected to carry them through to completion with substantial independence. Work is reviewed for adherence to instructions, accuracy, completeness, and conformance to standard practice or precedent. Recurring work clearly covered by guidelines may or may not be reviewed.

Interpersonal Communications and Purpose:

Contacts with the public or employees where explanatory or interpretive information is exchanged, gathered, or presented and some degree of discretion and judgment are required within the parameters of the job function.

Level of Supervision Exercised:

By position, performs lead work.

ESSENTIAL DUTIES

Trouble shoots and identifies recurring maintenance problems and develops and designs solutions including system and component factors.

Selects materials, approaches, and design concepts to equipment to remedy operational problems.

Makes recommendations for changes on operational procedures and resource utilization.

Provides detailed specifications and drawings on major design modifications to equipment and works with vendors to test construction.

Participates in the development of bid specifications for equipment and materials.

Reviews submitted bids for sound mechanical, electrical, and other engineering principles and participates in the selection process.

Performs failure and cost analysis of various vendors and products and submits detailed report for management review.

Develops and provides training programs for staff to assist them with field troubleshooting and repairs.

Performs other related duties as assigned or requested.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

MINIMUM QUALIFICATIONS

Competencies, Knowledge, & Skills:

Electronics Engineering – Knowledge of the concepts, principles, theories, and methods related to the design, analysis, test, fabrication, or verification of analog or digital electronic systems.

Electrical Engineering - Knowledge of the concepts, principles, theories, and methods related to the design, analysis, test, and integration of electrical systems.

Technical Competence – Uses knowledge that is acquired through formal training or extensive on-the-job experience to perform one's job, works with, understands, and evaluates technical information related to the job, and advises others on technical issues.

Decision Making - Makes sound, well-informed, and objective decisions, perceives the impact and implications of decisions, commits to action even in uncertain situations to accomplish program goals, and causes change.

Reasoning - Identifies rules, principles, or relationships that explain facts, data, or other information, analyzes information, and makes correct inferences or draws accurate conclusions.

Planning and Evaluating – Organizes work, sets priorities, and determines resource requirements, determines short- or long-term goals and strategies to achieve them,

coordinates with other organizations or parts of the organization to accomplish goals, and monitors progress and evaluates outcomes.

Oral Communication – Communicates or explains ideas and/or information clearly. Thoughts are well organized and recognizes potential miscommunications.

Reading – Understands and interprets written material including technical material, rules, regulations, instructions, reports, charts, graphs, or tables and applies what is learned from written material to specific situations.

Writing – Uses correct English grammar, punctuation, and spelling to communicate thoughts, ideas information, and messages in writing.

Information Management – Identifies a need for and knows where or how to gather information and organizes and maintains information or information management systems.

Customer Service – Works and communicates with clients and customers to satisfy their expectations and committed to quality services.

Teamwork – Encourages and facilitates cooperation, pride, trust, and group identity, fosters commitment and team spirit, and works with others to achieve goals.

Conflict Management – Manages and resolves conflicts, grievance, confrontations, or disagreements in a constructive manner to minimize negative personal impact.

Problem Solving – Identifies problems, determines accuracy and relevance of information, uses sound judgment to generate and evaluate alternatives, and makes recommendations.

Diversity – Is sensitive to cultural diversity, race, gender, and other individual differences in the workforce.

Integrity/Honesty – Contributes to maintaining the integrity of the organization, displays high standards of ethical conduct, understands the impact of violating these standards on an organization, self, and others, and is trustworthy.

Physical Demands (Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs):

Walking: moving about on foot.

Handling: seizing, holding, grasping, or otherwise working with hand(s).

Fingering: picking, pinching, or otherwise working with fingers.

Talking: expressing or exchanging ideas by means of spoken words.

Eye/hand/foot coordination: performing work through using two or more.

Field of Vision: ability to see peripherally.

Color Vision: ability to distinguish and identify different colors.

Working Environment:

Noise: sufficient noise to cause distraction or possible hearing loss

Hazards: conditions where there is danger to life, body, and /or health

Exposed to a variety of electromechanical hazards

Exposed to hazards from electro/mechanical/power equipment

Education Requirement:

Bachelor's Degree with major course work in electrical or electronic engineering.

Experience Requirement:

Three years of experience in applying engineering principles to operational problems, equipment, or other sources.

Education/Experience Equivalency:

Additional appropriate education may be substituted for one year of the minimum experience requirement

Licensure and/or Certification:

Possession of a valid driver's license at the time of application.

CLASS DETAIL

FLSA CODE: Exempt

ESTABLISHED DATE: 09/16/1995

REVISED DATE: 03/21/2010

REVISED BY: Patricia Anderson

CLASS HISTORY 3/2010 - This class has been revised and updated.