

POSITION DESCRIPTION

1. Agency PDCN 80095 **D1359000**

2. Reason for Submission Redescription New Reestablishment Other Explanation (Show Positions Replaced)	3. Service HQ Field X	4. Empl Office Location	5. Duty Station	6. OPM Cert #
		7. Fair Labor Standards Act Not Applicable	8. Financial Statements Required Exec Pers Financial Disclosure Employment & Financial Interests	9. Subject to IA Action Yes X No
		10. Position Status Competitive Excepted (32 USC 709) X SES (Gen) SES (CR)	11. Position is Supervisory Managerial Neither X	12. Sensitivity Non-Sensitive Noncritical Sens Critical Sens Special Sens

15. Classified/Graded by
 a. US Office of Pers Mgt b. Dept, Agency or Establishment X c. Second Level Review d. First Level Review

Official Title of Position	Pay Plan	Occupational Code	Grade	Initials	Date
Electronic Integrated Systems Mechanic	WG	2610	12	rmp	28 Feb 95

16. Organizational Title (If different from official title)	17. Name of Employee (optional)
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18. Dept/Agency/Establishment - National Guard Bureau a. First Subdivision - State Adjutant General b. Second Subdivision -	c. Third Subdivision - d. Fourth Subdivision - e. Fifth Subdivision -
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19. Employee Review. This is an accurate description of the major duties and responsibilities of my position.	Employee Signature /Date (optional)
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20. Supervisory Certification. I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes related to appointment and payment of public funds. False or misleading statements may constitute violations of such statutes or their implementing regulations.

a. Typed Name and Title of Immediate Supervisor Signature _____ Date _____	b. Typed Name and Title of Higher-Level Supervisor/Manager (optional) Signature _____ Date _____
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21. Classification/Job Grading Certification: I certify this position has been classified/graded as required by Title 5 USC, in conformance with USOPM published standards or, if no published standards apply directly, consistently with the most applicable standards. Typed Name and Title of Official Taking Action ROGER M. PARRISH Signature //signed// Date 28 Feb 95	22. Standards Used in Classifying/Grading Position USOPM JGS for Electronic Measurement Equipment Mechanic, Equipment Installation and Maintenance Family, 2600, Aug 81. Information For Employees. The standards and information on their application are available in the personnel office. The classification of the position may be reviewed and corrected by the agency or OPM. Information on classification/job grading appeals is available from the personnel office.
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23. Position Review	Initials	Date								
a. Employee (Opt)										
b. Supervisor										
c. Classifier										

24. Remarks:
 CRA95-1002

25. Description of Major Duties and Responsibilities (SEE ATTACHED)

a. INTRODUCTION:

This position is located in a National Guard aircraft maintenance organization. Its purpose is to maintain, troubleshoot, and repair electronic warfare pods and the complete software controlled test station and its operational systems. On some aircraft, the mechanic also has responsibility for the internal passive electronic countermeasures systems. This position is designated as off- and on-aircraft.

b. DUTIES AND RESPONSIBILITIES:

(1) Repairs, overhauls, trouble shoots and aligns the complete electronic test console for the electronic warfare pod. Analyzes and evaluates complete system operation using a variety of general and specific test equipment, self-test and self-calibration computer programs and/or technical data containing schematic diagrams, signal flow diagrams, data flow diagrams, test procedures, program information and mathematical formulas. Isolates malfunctions to test console, computer programs or unit under test using system test equipment such as oscilloscopes, power meters, digital voltmeters, frequency and microwave counters, spectrum analyzer, frequency response test set and other test equipment. Devises and implements repairs using special and common tools. Duplicates, certifies, modifies and interprets system operating programs, software and mission data. Analyzes system software deficiencies and recurring malfunctions to determine testing voids. Initiates corrective action through software deficiency reports. Ensures the test station specifications are maintained in accordance with applicable technical publications by performing scheduled inspections and servicing.

(2) Conducts detailed tests on the assigned pods by using the computer aided test station to determine the scope of repair or adjustments required. Analyzes performance and isolates malfunctions by tracing schematic, logic, and wiring diagrams. Uses computer aided test equipment and common electronic measuring equipment such as oscilloscopes, power meters, signal generators, pulse generators, digital and analog voltmeters, spectrum analyzers, and frequency counters. Aligns the pod output to meet mission needs and technical order specifications by monitoring signal flow through the pod. Makes various tests to monitor the signal inside the pod from the input receivers, signal amplifiers, package technique components, radio frequency generators and output components. Determines equipment performance to detect whether malfunctions are caused by the software, hardware, digital interface bus, station cabling, pod cabling or actually a pod malfunction. Ensures the test station specifications are maintained in accordance with applicable technical publications by performing scheduled inspections and servicing and assisting the Precision Measuring Equipment Lab (PMEL) calibration technician by running the test station during the calibration procedures.

(3) Configures Electronic Warfare Pods to meet mission requirements by reprogramming the jamming technique as directed from

the Electronic Warfare Officer. Performs equipment reprogramming during routine system updates and worldwide reprogramming exercises. Receives intelligence by either message, computer software, or encoded computer tapes then uses the necessary programming procedures and equipment to accomplish the task. Maintains reprogramming equipment to technical publication specifications.

(4) Performs equipment maintenance on the hydraulic Pod Cold Plate Liquid Cooler system by doing periodic inspections. Obtains nondestructive inspection samples, analyzes them, and repairs malfunctions. Isolates problems to the pump, flow systems, cooling system, or filtering system. Monitors fluid pressure and temperature. Determines equipment duty cycle.

(5) Documents maintenance performed and records information relating to system and component status in historical forms/records.

(6) Recommends methods to improve equipment performance, technical data and maintenance procedures. Initiates unsatisfactory equipment and technical order deficiency reports. Maybe required to file a challenge when the price of parts seems out of order.

(7) May be required to serve as on-the-job trainer (OJT) and production inspector. May be tasked as technical order monitor, equipment custodian, composite tool kit (CTK) monitor, bench stock monitor, and test measurement diagnosis equipment (TMDE) monitor.

(8) Complies with safety, fire, security, and housekeeping regulations. Ensures that material and equipment are properly stored, protected, and maintained.

(9) Prepares for and participates in various types of readiness evaluations such as Operational Readiness Inspections (ORI), Inspector General (IG) inspections, and Unit Effectiveness Inspections and mobility and command support exercises. May be required to perform additional duties such as structural fire fighting, aircraft fire/crash/rescue duty, security guard, snow removal, munitions loading and handling, heavy equipment operator, maintenance of facilities and equipment, or serve as a member of a team to cope with natural disasters or civil emergencies.

(10) Performs other duties as assigned.

c. SKILL AND KNOWLEDGE:

(1) Knowledge of electronic principles and theory, including solid-state devices, dual mode transmitting systems, and principles of logic and digital techniques; application of electronic operational settings to electronic countermeasures equipment, intercept and analysis equipment, and special purpose support equipment; concepts and application of applicable maintenance directives; and using and

interpreting technical orders, computer programming tapes or instructions, blueprints, wiring diagrams and schematic and logic diagrams.

(2) Comprehensive knowledge of the software controlled test station, test results, special purpose test equipment, self-test programs and technical data containing schematic diagrams, signal and data diagrams, test procedures, program information, and mathematical formulas to identify and isolate malfunctions and determine if a malfunction is in the program, hardware, digital interface bus, interconnecting cabling, or the electronic warfare pod being tested.

d. RESPONSIBILITY:

Receives general supervision. Independently accomplishes assignments. The supervisor provides technical guidance and assistance on highly unusual or controversial problems. Work is accomplished in accordance with technical orders, manufacturer handbooks, specifications, and engineering data. Work is subject to spot check and quality control checks upon completion for acceptability and adherence to instructions and established standards.

e. WORKING CONDITIONS:

Work is performed inside in well lighted, heated, and ventilated areas or on the aircraft in high or restricted places; under conditions of heat or cold; and occasionally outside in inclement weather. Subject to injuries such as electrical shock, cuts, bruises, burns caused by electrical or RF energy, or by soldering irons. Works in a high noise environment.

f. PHYSICAL EFFORT:

Physical effort involves lifting components and equipment, and working in tiring and uncomfortable positions. Items lifted generally weigh up to 55 pounds. Assistance is usually available with heavier items. There is frequent standing, walking, bending, crouching, reaching and stooping.

ADDENDUM TO PD# D1359000
Electronic Integrated System Mechanic, WG-2610-12

OTHER SIGNIFICANT FACTS:

Incumbent may be required to prepare for and support the mission through the accomplishment of duties pertaining to military training, military readiness, force protection and other mission related assignments including, but not limited to, training of traditional Guard members, CWDE/NBC training, exercise participation (ORE/ORI/UCI/MEI/OCI/IG, etc.), mobility exercise participation, FSTA/ATSO exercise participation, SABC training, LOAC training, weapons qualification training, participation in military formations, and medical mobility processing within the guidelines of NGB/ARNG/ANG/State/TAG rules, regulations and laws. These tasks have no impact on the classification of this position and should NOT be addressed in any technician's performance standards.

EVALUATION STATEMENT

A. Title, Series and Grade: Electronic Integrated Systems Mechanic, WG-2610-12

B. References:

1. USOPM JGS for Electronic Measurement Equipment Mechanic, WG-2602, Feb 81.

2. USOPM JGS for Electronic Integrated Systems Mechanic, WG-2610, Feb 81.

3. USOPM Introduction to Electronic Equipment Installation and Maintenance Family 2600, Aug 81.

C. Background:

1. Air National Guard units have been reorganized to form an Aircraft Generation Division (AGD) as directed by the Air Force. This position is redescribed to reflect these changes.

2. This position was the subject of an appeal decision issued by the Chicago Region of the Office of Personnel Management in Jul 85. OPM found that the work involved was properly assigned to code 2604 at the WG-11 level. An OPM decision constitutes a certificate under authority of Title 5 USC, and is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the agency. The agency may not change the title, series, or grade of a certified position unless a new grading standard is issued by OPM or there is a substantial and significant change in the duties and responsibilities assigned to the position. This position description reflects such a change. The appeal decision indicated that the semiautomatic test station is an integrated system within the definition of the WG-2610 standard, but that the appellant, as indicated by the position description to which he was assigned (F3499000), made recommendations on major repairs or adjustments but did not make the major repairs himself. Incumbents are now responsible for repairing, overhauling, troubleshooting, and aligning the AN/ALM-126C semiautomatic support equipment (SASE). The test station contains a computer, graphics translator, two disc drive assemblies, scanner monitor assemble, RF signal conditioning system power control and monitor panel, spectrum analyzer, digital to analog converter, power meter, system voltmeter, VHF switching unit, digital interface bus, high voltage power supply test set, and cooling assembly.

D. Series, Title and Grade Determination:

1. Series: Work involved in the maintenance, repair, calibration, and certification of electronic test, measurement, and reference equipment used for precise measurement of a variety of electrical and electronic values, quantities, and relationships is generally covered by the Electronic Measurement Equipment Series, WG-2602. However,

work involving troubleshooting, repairing, calibrating and maintaining automatic or semiautomatic test stations is excluded from coverage by the WG-2602 job grading standard and is specifically included in the Electronic Integrated System Mechanic, WG-2610, job grading standard. The SASE is comprised of programmable instrumentation that automatically provides stimulus and measurement functions for checkout and fault isolation of the ECM Pod. The equipment maintained thus meets the requirements for inclusion in the WG-2610 series.

2. Title: The title for positions in the WG-2610 occupation is Electronic Integrated Systems Mechanic.

3. Grade: The four factors used in grading positions in the WG-2610 series are skill and knowledge, responsibility, physical effort, and working conditions. The first two factors are used in grading this position since physical effort and working conditions are the same at grades WG-12 and WG-13.

a. Skill and Knowledge: The duties described under the skill and knowledge factor at both grade 12 and 13 relate primarily to integrated systems onboard the aircraft itself. No specific discussion of automatic test stations or the skill and knowledge required to maintain them is made in the grading criteria. However, the Introduction to the Electronic Equipment Installation and Maintenance Family does provide a good indication of how to evaluate the work involved. The introduction indicates that when the mechanic applies a full knowledge of the automatic test equipment (ATE), the units under test (UUT), and the related computer programs in order to recognize deficiencies in the test equipment, programming, or UUT and to work with engineering personnel to correct them, then the total complexity of the assignment and the skill and knowledge required of one or more mechanics in the ATE shop will be greater than that required for traditional bench test and repair of the units under test. This position meets those conditions. Repair of the ECM Pod has been set at the WG-11 level by the OPM appeal. The minimum grade of any position classifiable to the Electronic Integrated Systems Mechanic Code is WG-12. The incumbents are not performing trouble analysis and final alignment of a multisystem complex consisting of several complete integrated systems. Therefore, the total complexity of the assignment and the skill and knowledge required of the incumbent is considered equivalent in complexity to that described for grade WG-12 in the standard.

b. Responsibility: Grade 12 mechanics receive oral and written assignments and a general discussion of the work to be performed. They exercise judgment and independence in determining solutions to maintenance and repair problems which are complicated by the interactions of the various complex subsystems, the cause of an observable malfunction may be in some other area of the equipment and changes made in one area may affect other remote portions of the test equipment or systems under test. The mechanic receives assignments

from a supervisor, who relies on the mechanic for independent work accomplishment. The responsibility meets the grade 12 level in the standard.

E. Conclusion: Based on the above evaluation, this position is classified as Electronic Integrated Systems Mechanic, WG-2610-12.

Classifier: Roger M. Parrish Region: NGB-HR-WC Date: 28 Feb 95