

U.S. Office of Personnel Management  
Office of Merit Systems Oversight and Effectiveness  
Classification Appeals and ELSA Programs



Dallas Oversight Division  
1100 Commerce Street, Room 4C22  
Dallas, TX 75242

**Job Grading Appeal Decision**  
**Under Section 5346 of Title 5, United States Code**

**Appellants:** [appellant]

**Agency classification:** Aircraft Electrician  
WG-2892-10

**Organization:** [activity]

**OPM decision:** Department of the Air Force  
[location]  
Aircraft Electrician  
WG-2892-10

**OPM Decision Number:** C-2892-10-01

/s/ \_\_\_\_\_

Bonnie J. Brandon  
Classification Appeals Officer

January 26, 1999

\_\_\_\_\_  
Date

As provided in section S7-8 of the Operating Manual, Federal Wage System, this decision constitutes a certificate that is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the government. There is no right of further appeal. This decision is subject to discretionary review only under conditions and time limits specified in section 532.705(f) of title 5, Code of Federal Regulations (address provided in the Introduction to the Position Classification Standards, appendix 4, section H).

**Decision sent to:**

[appellant's address]

Classification and Career Programs Branch  
Civilian Personnel Division  
HQ AFRC/DPCC  
155 2nd Street  
Robins AFB, GA 31098-1635

Director of Civilian Personnel  
HQ USAF/DPCC  
1040 Air Force Pentagon  
Washington, DC 20330-1040

Chief, Classification Branch  
Field Advisory Services Division  
Defense Civilian Personnel Management  
Service  
1400 Key Blvd., Suite B-200  
Arlington, VA 22209-5144

## **Introduction**

On August 31, 1998, the Dallas Oversight Division of the U.S. Office of Personnel Management (OPM) received a job grading appeal from [appellant]. The agency classified the position as Aircraft Electrician, WG-2892-10. The appellant believes that his position should be classified as an Aircraft Electro/Environmental Mechanic, WG-2801-12. There are other employees assigned to this job description number, 79985, in the [activity], [location]. Although the other employees will be affected by the decision, [appellant's name] is the sole appellant. We have accepted and decided this appeal under section 5346 of title 5, U.S. Code.

To help decide this appeal, OPM conducted a telephone audit of the appellant's job. The audit included interviews with the appellant, his immediate supervisor and the servicing personnel office. In reaching our appeal decision, we reviewed the audit findings and the information of record furnished by the appellant and his agency, including his official job description.

## **General issues**

The appellant compares his job to an Aircraft Electro/Environmental Mechanic, WG-2801-12 at another Air Force base. By law, OPM must classify positions solely by comparing their current duties and responsibilities to OPM standards and guidelines (5112 of title 5, U.S. Code). The appellant agrees that the official job description is an accurate statement of the major duties and responsibilities required by his job. The job description of record is adequate for classification purposes.

## **Job information**

This is an Air Reserve Technician position assigned to the electro-environmental function of the maintenance squadron. That section is responsible for organizational and intermediate level maintenance on aircraft electrical and environmental systems of the assigned aircraft, i.e., the C-130. The primary purpose of the appealed job is to perform a wide range of activities to support the complete electrical systems checks on the aircraft. The appellant utilizes test equipment such as multimeters, oscilloscopes, volt meters, squib testers, temperature control analyzers and specialized test equipment to test, evaluate, and functional check components. The appellant tests, evaluates, troubleshoots, repairs, adjusts, overhauls, inspects, services, calibrates, and performs operational checks of aircraft electrical systems and electrical operated components such as wiring, relays, control units, voltage regulators, frequency and load controllers, generators, alternators, warning panels, lighting systems, electronic control and analyzing units, and other similar systems. The appellant troubleshoots electrical tie-in with other major systems, e.g., engines, landing gear, anti-skid, engine and propeller anti-icing, auto pilot, hydraulic, pneumatic, electronic, and mechanical systems or equipment. The appellant also tests, evaluates, troubleshoots, repairs, overhauls, inspects and performs operational checks on aircraft oxygen (gaseous and liquid), heating and air conditioning, extinguisher systems, wing anti-icing systems, and their components and related systems.

## **Occupation determination**

The appellant believes that his job should be classified as an Aircraft Electro/Environmental Mechanic, WG-2801-12 because of work associated with environmental systems equipment (e.g., performing fill-ups and weight checks of life raft bottles). The appellant provides assistance to pneudraulic mechanics and other shops in addition to aircraft electrical systems check-up and maintenance. The majority of the appellant's time is spent on C-130 aircraft--troubleshooting, adjusting, and repairing electrical systems and equipment. Although the appealed job includes duties and responsibilities described in another occupation, i.e., WG-8268 Aircraft Pneudraulic Systems Mechanic, the WG-2892 duties are grade controlling and occupy most of the appellant's time. As described in Part 1, Explanation of Job Grading System for trades and labor occupations: "The "01" code. . . is used for jobs which cannot be identified with an established occupation within the family but which can be identified with the family itself." Jobs requiring the performance of work in two or more occupations (mixed jobs) are coded to the occupation which is most important for recruitment, selection, placement, promotion, or reduction in force purposes and is generally the job that has the highest skill and knowledge requirement. The appealed position's primary purpose is to perform aircraft electrician duties and this occupation is used for recruitment purposes. Therefore, the position is properly classified in the WG-2892 Aircraft Electrician occupation.

## **Title determination**

Jobs classified in the WG-2892 Aircraft Electrician occupation that are graded at WG-10 and above are properly titled Aircraft Electrician. Accordingly, the appellant's job is titled Aircraft Electrician.

## **Standard determination**

Jobs classified in the WG-2892 Aircraft Electrician occupation are graded using the WG-2892 Job Grading Standard. As this is a mixed position also requiring a knowledge of the maintenance, modification, and repair of aircraft hydraulic and pneumatic systems, comparison with the Job Grading Standard for the WG-8268 Pneudraulic Systems Mechanic will also be made.

## **Grade determination**

The Job Grading Standard for the WG-2892 Aircraft Electrician occupation uses four factors to evaluate the proper grade of a job: Skill and Knowledge, Responsibility, Physical Effort, and Working Conditions.

### *Skill and Knowledge*

Jobs at the WG-8 level require a working knowledge of electrical theory, principles, circuitry, and a general understanding of basic electronic principles to perform routine and repetitive repairs, disassembly, modification, assembly, testing, installation, and maintenance of aircraft electrical systems and their interrelationships. A basic understanding of aircraft electrical systems is required.

Workers at this level typically follow established work methods and procedures found in technical orders, manufacturers specifications, and engineering directives. Accordingly, they must be able to read and interpret blueprints, wiring diagrams, and schematics. WG-8 level workers perform operational checks of limited complexity, correct minor discrepancies, and perform functional checks on electrical components installed or repaired to insure proper operation. Workers at this level are skilled in the operation of common electrical test devices, use of hand tools, and other specialized tools of the trade.

At the WG-10 grade level, aircraft electricians apply a comprehensive knowledge of electrical theory, principles, and circuitry; a thorough knowledge of aircraft electrical systems and their interrelationships; and a working knowledge of electronic principles in order to troubleshoot, modify, repair, overhaul, and maintain complex electrical systems on fixed and rotary wing aircraft. They must apply a thorough knowledge of the interface of electrical systems with hydraulic, electronic armament, instrument, and mechanical systems assemblies.

WG-10 aircraft electricians exercise skill, not only in testing, troubleshooting, analyzing, modifying, and repairing complex electrical systems and components, but also in tracing hard to locate and intermittent electrical defects and problems. They are skilled in wiring to facilitate the installation of conventional and nonconventional equipment, and in the assembly of a variety of locally developed test devices, utilizing switches, diodes, resistors, and other similar components. Grade 10 aircraft electricians apply skill in performing initial and final functional and operational checks on the entire aircraft electrical system. They must be able to assist engineering personnel in developing modifications and changes on electrical, electronic instrument, and other integrated electrical systems. Skill is exercised in the setup and operation of computerized multiple circuit analyzing equipment in running existing and new diagnostic programs and must be able to work with or assist programming personnel in developing, debugging or modifying such programs.

The position requires a thorough understanding of aircraft electrical, environmental, and associated systems and system interrelationships. The position also requires a working knowledge of blue prints, wiring diagrams and technical drawings. This knowledge is used by the appellant to work on different models of the C-130 aircraft. The newer models may differ from older models but the same basic knowledges and skills are required to perform the work. There are about 16 airplanes that are checked in accordance with an isochronal calendar (every 360 days). The systems checked include aircraft electrical integrated circuitry and interconnecting cabling. The appellant serves as a member of the electrical checkout team to condition test and insure the integrity of parts and components in the aircraft. The appellant analyzes and interprets the test symptoms given by analytical test equipment, narrows down the location/spot of the problem, troubleshoots, and uses judgment to initiate proper corrective action. A working knowledge of the Maintenance Data Collection Program and the Core Automated Maintenance System is required by the appellant to report and document completion of maintenance. The appellant also provides assistance in the pneudraulics shop. Since there are Pneudraulic Systems Mechanics on board, the appellant only contributes to the electrical side of the function in this shop and other shops.

We find that the appellant's duties match and do not exceed the criteria for the WG-10 grade level of this factor.

### *Responsibility*

Typically, work assignments at the WG-8 level are given in the form of oral and/or written instructions by a supervisor or higher graded worker. These assignments are usually supplemented with wiring diagrams, blueprints, technical manuals, engineering instructions and schematics. On routine assignments, workers independently select tools and test equipment, plan work sequence, and decide the methods and techniques for completing the assignment. These methods are controlled by established operating procedures and detailed instructions. Routine work assignments are carried out with little, or no, review in progress. On new or unusual assignments, workers receive more detailed written or oral instructions. All work is subject to review and evaluation by a higher grader worker, supervisor, or quality control inspector during and upon completion.

Grade 10 aircraft electricians receive work assignments from the supervisor in the form of written or oral instructions. Blueprints, schematics, or technical data may be incomplete or absent on occasion. Accordingly, grade 10 aircraft electricians are required to make independent decisions and judgments regarding troubleshooting techniques and modification and repair procedures. They are responsible for planning the sequence in which work will be accomplished, selecting tools, and assuring that work assignments are carried out in accordance with technical and engineering specifications. Work at this level includes primary responsibility for checking out the complete aircraft wiring system and connections, and insuring that all settings, calibrations, functional and operational checks are within specifications and conform to specific ranges and characteristics. A supervisor, or higher graded worker, is usually available to provide technical assistance on unusual or difficult problems. Completed work may be subject to spot checks by the supervisor or quality control personnel to insure that the work has been completed in accordance with specifications and procedures. Grade 10 aircraft electricians may also be required to "sign off" or certify that they have completed their work assignments properly.

The appellant receives work orders that are generated from an automated job control system. The problems have been identified and written up by airplane pilots and engineers. The appellant independently troubleshoots the anticipated problem, performs repair, and clears it from the automated system. The work may require periodic inspection of planes in hangars due to flight hours or fixing in-shop aircraft equipment and components. Red-X inspections (severe problem) that can endanger flights are signed by equivalent Air Reserve Technicians in the same occupation. Although the appellant may check the work of other WG-10's, the knowledges and skills required to perform this work do not differ substantially from those described at the WG-10 level. The appellant's supervisor is available when needed. This responsibility does not warrant grading the position above the WG-10 level. Subsequently we find that the appellant's duties meet and do not exceed the criteria for the WG-10 level for Responsibility.

### *Physical Effort*

The physical effort is the same at the WG-8 and WG-10 levels of the standard. Employees at both levels are frequently required to climb up and down ladders, check stands, work platforms, scaffolding, and aircraft structures while making repairs on installations. The work can involve long periods of standing and considerable kneeling, bending, stooping, and stretching. This can include working in awkward or strained positions. The work requires lifting and carrying aircraft electrical items weighing up to 20 pounds unassisted and occasionally up to 50 pounds with assistance.

The physical effort required in appellant's job matches that described in the standard. We find this factor meets and does not exceed the WG-10 level found in the job grading standard.

### *Working Conditions*

The working conditions are the same at the WG-8 and WG-10 levels of the standard. Workers are subject to drafts, noise, and varying temperatures in hangars and weather, temperature, and noise extremes on flight lines. Also, there is exposure to dust, dirt, grease, oil, fumes, solvents, and other aircraft fluids while working on aircraft in various stages of repair or modification. Workers are exposed to the possibility of abrasions, cuts, burns, electrical shock, skin and eye irritations, and falls from elevated work areas.

The appellant's working conditions match those described in the standard. He works on top of planes and in and around tight spots. The appellant is also exposed to extreme noises and the possibility of electrical shocks. We find that the appellant's working conditions meet and does not exceed the criteria in the job grading standard for the WG-10 level.

### *Evaluation using the WG-8268 Aircraft Pneudraulic Systems Mechanic*

Since the appealed position is a mixed series position with the paramount requirement being aircraft electrical functions and tie-in with other major systems, the work is also compared to the WG-8268 Aircraft Pneudraulic Systems Mechanic standard for cross-reference. The Job Grading Standard for the WG-8268 standard uses four factors to evaluate the proper grade of a job: Skill and Knowledge, Responsibility, Physical Effort, and Working Conditions.

### *Skills and Knowledge*

At the WG-10 level in the WG-8268 standard, the work requires knowledge of hydraulic and pneumatic principles and physical laws governing the behavior of fluids; knowledge of aircraft pneudraulic systems and equipment; ability to read and interpret technical material, operate test equipment, and diagnose and repair systems and components.

Similarly, the appellant's work requires troubleshooting and repairing aircraft electrical and environmental systems such as cabin pressurization and oxygen and similar systems. For example,

the appellant inspects or troubleshoots brake mechanisms, landing gear, aircraft oxygen (gaseous and liquid), fire extinguishing systems, their components and related equipment. The appellant uses his knowledges and skills to diagnose malfunctions, authenticate specific factors and substantiate corrective actions. The appealed position meets but does not exceed the WG-10 level of the WG-8268 standard for skills and knowledges.

### *Responsibility*

At the WG-10 level in the WG-8268 standard, the work is assigned orally or in writing, and the employee makes independent judgment in completion of work assignments and making decisions. The employee utilizes a variety of technical manuals, equipment specifications, and test calibration procedures in performing the work. At this level, the supervisor checks work out for compliance with specifications and accepted trade practices.

The appellant receives oral and written assignments (work orders) that include blueprints, schematics, technical data, and engineering instructions. The appellant independently makes decisions on appropriate troubleshooting techniques, selects tools, repair procedures and steps for completion. The supervisor is available for unusual or difficult problems. The appellant's work may be checked in progress and on completion for compliance with specifications and accepted trade practices. The appealed position meets but does not exceed the WG-10 level for responsibility.

### *Physical Effort*

At the WG-10 level of the WG-8268 standard, the work requires standing, bending, kneeling, stooping, climbing, lifting and carrying aircraft parts, and working in awkward and cramped positions. The physical effort expended by the appellant is generally the same as that described at the WG-10 level.

### *Working Conditions*

At the WG-10 level of this standard, the work is performed both indoors and outdoors in prevailing weather. Employees may work in high temperatures, noise, dirt, grease, oil, lubricants, chemicals and fumes. They are also subject to cuts and abrasions, electrical shock, and severe burns. Similarly, the appellant works in areas subject to drafts, noises, varying temperatures in shops, hangars, and other types of exposure. The working conditions for the appealed position equate to the WG-10 level.

The appealed position meets the WG-10 level by comparison to both the WG-2892 and the WG-8268 series.

## **Decision**

We find that the appellants' job is properly classified as Aircraft Electrician, WG-2892-10.