

U.S. Office of Personnel Management  
Division for Human Capital Leadership & Merit System Accountability  
Classification Appeals Program

Atlanta Field Services Group  
75 Spring Street, SW., Suite 1018  
Atlanta, GA 30303-3109

**Classification Appeal Decision**  
**Under section 5112 of title 5, United States Code**

**Appellant:** [appellant's name]

**Agency classification:** Engineering Technician  
GS-802-11

**Organization:** [name] Branch  
[name] Directorate  
[name] Center  
National Aeronautics and Space  
Administration  
[location]

**OPM decision:** Engineering Technician  
GS-802-11

**OPM decision number:** C-0802-11-09

/s/ Robert D. Hendler

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Robert D. Hendler  
Classification and Pay Claims  
Program Manager

December 20, 2005

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Date

As provided in section 511.612 of title 5, Code of Federal Regulations, this decision constitutes a certificate that is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the government. The agency is responsible for reviewing its classification decisions for identical, similar, or related positions to ensure consistency with this decision.

There is no right of further appeal. This decision is subject to discretionary review only under conditions and time limits specified in the *Introduction to the Position Classification Standards*, appendix 4, section G (address provided in appendix 4, section H).

**Decision sent to:**

[appellant's name]

[address]

[location]

Director

Office of Human Capital Management

National Aeronautics and Space

Administration

[name] Center

[address]

[location]

Director of Personnel

National Aeronautics and Space

Administration

Washington, DC 20546

## **Introduction**

The Atlanta Field Services Group of the U.S. Office of Personnel Management (OPM) accepted a position classification appeal on June 1, 2005, from [appellant's name] who occupies a position currently classified as Engineering Technician, GS-802-11. The appellant works in the [name] Branch, [name] Directorate, [name] Center, National Aeronautical Space Administration at [location]. He requests that his position be upgraded to GS-12. We accepted and decided this appeal under section 5112(b) of title 5, United States Code (U.S.C.). We received a complete administrative report for the appeal on July 14, 2005.

## **General issues**

The appellant makes various statements about his agency's review and evaluation of his position. He compares his position to a GS-802-12 position description (PD) for another position in his branch as part of his classification rationale. He also provided an unofficial draft PD prepared for his position which he believes, in contrast to his official PD, accurately identifies his design work, technical leadership, and work with research projects.

By law, we must classify positions solely by comparing their current duties and responsibilities to OPM standards and guidelines (5 U.S.C. 5106, 5107, and 5112). Since the comparison to standards is the exclusive method for classifying positions, we cannot compare the appellant's position to others which may or may not be classified correctly, as a basis for deciding the appeal. In adjudicating this appeal, our only concern is to make our own independent decision on the proper classification of his position. Therefore, we have considered the appellant's statements only insofar as they are relevant to making that comparison. Since our decision sets aside any previous agency decision, any actions previously taken by the agency in their review of the appellant's position are not germane to the classification appeal process.

Like OPM, the appellant's agency must classify positions based on comparison to OPM standards and guidelines. However, the agency also has primary responsibility for ensuring that its positions are classified consistently with OPM appeal decisions. If the appellant considers his position so similar to others that they warrant the same classification, he may pursue the matter by writing to his agency's human resources office. In doing so, he should specify the precise organizational location, classification, duties, and responsibilities of the positions in question. If the positions are found to be basically the same as his, the agency must correct their classification to be consistent with this appeal decision. Otherwise, the agency should explain to him the differences between his position and the others.

The appellant questions the agency's use of illustrations from the Engineering Technician, GS-802, position classification standard (PCS), because he believes they pertain to construction work rather than aerospace engineering projects. A PCS is designed to provide the best criteria for analyzing and classifying the essential characteristics of a position covered by the PCS. It does not attempt to, nor does it have to, describe specific duties and characteristics of all covered types of positions in order to provide adequate guidance for the proper classification of a covered position. Careful application of the appropriate PCS to the work that is performed should yield the correct grade for a position covered by the PCS. Any of the position's duties not specifically

referenced in the PCS can be evaluated properly by comparison with similar or related duties that the PCS does describe as well as the entire pattern of grade-level characteristics. A grade represents a band or range of difficulty and level of work, and it may encompass a considerable variety of specific types of duties at the same grade level.

In reaching our classification decision, we have carefully reviewed all information furnished by the appellant and the agency, including the PD of record. We also conducted a telephone audit with the appellant and an interview with his supervisor.

### **Position information**

The appellant is assigned to PD number [#]. The appellant did not certify the accuracy of his official PD for reasons indicated previously. His supervisor certified the accuracy of an addendum, which he prepared, to the official PD. The addendum consists of differences between the appellant's existing PD and his current duties and responsibilities.

A PD is the official record of the major duties and responsibilities assigned to a position by a responsible management official; i.e., a person with authority to assign work to a position. A position is the duties and responsibilities that make up the work performed by an employee. Classification appeal regulations permit OPM to investigate or audit a position and decide an appeal on the basis of the duties assigned by management and performed by the employee. We classify a real operating position, and not simply the PD. We find that the PD of record contains the major duties assigned to and performed by the appellant and we incorporate it by reference into this decision.

The [name] Branch advances technology in prediction and knowledge of flight dynamics characteristics, identifies and provides solutions to difficult atmospheric flight dynamics problems, and supports development of new vehicle technologies for atmospheric flight. The branch performs research using a wide range of methods including static and dynamic wind tunnel tests, computational aerodynamics studies, dynamically-scaled model tests, analytical analyses, piloted simulation studies, and flight tests. Through model experimentation, researchers are able to measure airflow around a model or specific parts of a model, pressure exerted on the model, lift, drag, thrust, etc. They use a number of techniques to obtain measurements, e.g., small ports with pressure transducers that measure pressures on the model at specific locations, a wake rake, or a row of transducers, to measure drag.

The appellant serves as a member of a research test team and provides technical, mechanical, and operational support primarily to wind tunnel testing in aerospace flight dynamics research accomplished by the branch. He works in one of several different tunnel facilities at the center based on the nature of the tests and models being tested. The appellant's support work includes testing, installation, repair, modification and maintenance of equipment and systems for aerospace engineering projects. It also includes design and development work as required by an assignment or project. The appellant performs assignments of an independent nature or others that are a significant part of a larger effort relating to agency projects. He may serve as the senior technician in performing test article and facility preparation for larger branch evaluation projects. Preparation includes installation and checkout of a wide variety of model and facility

instrumentation. As a senior technician, the appellant provides technical leadership to other technicians who might assist with his project and guidance and oversight to contractors engaged in manufacture or other project support activities required to prepare the test article or test facility. The appellant also assists other technicians with projects.

Prior to development of a design package and specifications by responsible engineers, the appellant participates with the supervisor and test team engineers in test project planning to explore the scope and timeframe of the project and feasibility of experimental approach and to assess alternatives. In preparing the test article and facilities, he incorporates quasi-professional designs, modifications, assemblies, fabrications, and installations, as necessary, to achieve required test parameters. The appellant designs and develops experimental research instruments, devices, and system components in combinations and applications that differ from normal and documented uses to accommodate unprecedented test setups. He designs, develops alternate layouts, and implements unique solutions to model and facility requirements. The appellant generates engineering drawings or sketches for arrangement and design configurations for component installations, support systems, and related equipment for systems. He initiates contacts with the design engineer, test team and support engineers, technicians, contractors, and others to discuss recommended modifications or changes to project specifications and acquire necessary engineering approval.

In performing his duties, the appellant operates complex systems controlling models for static, forced oscillation, free flight, and other test assignments. He may use a variety of equipment, e.g., drill press, band saw, grinder; optical devices, such as cameras, pyrometers, and schlieren systems; cathometers, spectrometers, and dew point recorders; digital and analog data acquisition systems; and flow visualization equipment. The appellant provides technical support to ensure continued operational readiness of all support equipment and performs facility or equipment inspections to identify necessary repairs to facility or test articles.

During the past year, the appellant's primary assignments involved serving as the senior technician supporting both the static and the free flight testing for a five percent scale model of a blended wing body aircraft. These were accomplished in the space center's 30 X 60 foot full-scale wind tunnel, owned by the space center and operated by a nearby university. Other blended wing body tests have been performed previously. Over the past several years, researchers at the center have assessed five wind tunnel models of three versions of the blended wing body to evaluate the concept's aerodynamic, noise, stability and control, and spin and tumble characteristics. The most recent free flight test, with which the appellant was involved, was performed to assess the best combination of control surfaces and control limits required to control and maneuver the airplane. The appellant installed instrumentation and performed dynamic scaling ballasting of the model. This included instrumentation troubleshooting, configuration changes, and model repairs as needed. The appellant is also involved in preparing a commercial transport damage assessment model for static testing which has and will require instrumentation troubleshooting, configuration changes, and model repairs.

The appellant spends approximately 35 percent of his time testing, installing, repairing, modifying, and maintaining equipment and systems. He spends 35 percent of his time exploring sources of information for available equipment or techniques and then designing, adapting,

enhancing, and developing test instruments, devices, or system components as necessary for projects. For approximately 20 percent of the time, the appellant develops and prepares original working sketches and alternative layouts for component installations, support systems, and related equipment for systems and, for 10 percent of the time, he assists in contractor oversight.

### **Series, title, and standard determination**

The agency classified the position in the Engineering Technician Series, GS-802, and titled it Engineering Technician. The appellant does not disagree with the series or the title determination. We concur with the agency's series and title determination.

The GS-802 PCS contains grade-level criteria only up to the GS-11 level. The grade-level criteria at grades GS-9 and GS-11 are designed to provide consistency in the classification of positions of technicians and engineers who perform similar work. Engineering technician positions that clearly exceed the GS-11 grade level, both in duties assignments and level of responsibility, may be evaluated by extension of the criteria in the GS-802 standard in combination with grade-level criteria in appropriate standards for engineering positions. As discussed later in this decision, the appellant's position does not clearly exceed the GS-11 grade level by application of the grade level criteria in the GS-802 PCS. Therefore, application of other PCSs to evaluate the appellant's work is neither necessary nor appropriate.

### **Grade determination**

#### *Evaluation using the GS-802 standard*

The GS-802 PCS uses two factors to evaluate positions: *Nature of assignment* and *Level of responsibility*.

#### *Nature of assignment*

This factor includes the scope and difficulty of the project and the skills and knowledge required to complete the assignment.

At the GS-11 grade level, technicians perform work of broad scope and complexity requiring the ability to interpret, select, adapt, and apply many guidelines, precedents, and engineering principles and practices related to the area of specialization. The work also requires that the technician possess and apply some knowledge of related scientific and engineering fields. At this level, technicians plan and accomplish complete projects or studies of a conventional nature requiring the independent adaptation of background data and information and interpretation and use of precedents. They are typically confronted with a variety of complex problems that call for considerable judgment in making sound engineering compromises and decisions. The work requires ingenuity and creative thinking in devising new ways of accomplishing objectives, and in adapting existing equipment or current techniques to new uses. It often requires constant coordination with personnel in other organizations having a role in accomplishing the projects.

As an example, GS-11 technicians prepare designs and specification for various utility systems where the complexity or nonconventional nature of the buildings and facilities entails design problems requiring considerable adaptation of precedents or design of features for which precedents are not directly applicable. Some GS-11 technicians plan approach and details and conduct various experimental projects to develop electrical circuits equipment or breadboards of systems. These may be characterized by performance requirements which are somewhat difficult to achieve because of combinations of conflicting characteristics, such as versatility, reliability, size, ease of operations, and maintenance. The equipment or systems may require use of techniques or components in combinations or applications differing from previous usage. Projects may entail development of new equipment or systems, simplification and improvement of present equipment, standardization of equipment, or development of new design techniques or methods.

Like this level, the appellant typically performs complete projects of a conventional nature in preparing test articles and facilities for testing, e.g., the static and the free flight blended wing body model trials, from the project test design stage to completion. He participates in initial planning meetings and does preliminary planning and research using technical manuals, the Internet, manufacturers' catalogs and manuals, established test procedures, etc., to determine availability or applicability of any precedents, guidelines, and equipment or devices. The work requires the appellant to apply knowledge of integrated systems, engineering principles used in aerospace research wind tunnel testing, and areas of optics, hydraulics, mechanics, fabrication, or electronics. The appellant provides administrative input in identifying resources for test article and facility set up, including additional funding requirements for contractor work or manufactured items.

Comparable to the GS-11 grade level, the unique nature of a particular test often requires developing new techniques and test procedures or modifying current ones. Test projects involve different model or test characteristics. While other blended wing models have been tested and free flight testing has been done in the past, the appellant's test article development assignments frequently have few directly applicable precedents and guidelines and often incorporate new instrumentation hardware. They require modifying existing procedures and developing completely new techniques. Like this level, the tests have broad scope, impacting data collection used for subsequent development and operability of very expensive test projects, and complexity. For example, the blended wing body test projects involved 18 control surfaces, in contrast to the ailerons, rudder, elevators, and flap on a traditional vehicle, which the appellant outfitted and integrated for tests to fit the characteristics of the model involved. The appellant's determinations involve conflicting requirements since components may meet one or more operational requirements, e.g., size or speed, but may not be ideal for all requirements.

The appellant's design work compares to the GS-11 grade level examples of experimental projects involving development of new equipment or systems and simplification and improvement of present equipment and the nonconventional facilities involving difficult design problems. His work requires comparable ingenuity and creativity to devise new ways of accomplishing objectives by designing or developing new equipment and devices or special test techniques and in adapting equipment or current techniques for new uses or enhancing current systems. For example, he developed a miniature zero-backlash servo system used as a catalyst

for remote actuation of the blended wind body control surfaces. He had to consider cost, availability, and engineering compromises in finding a motor meeting size, speed, and power requirements. For the surface control actuators, the appellant developed a design which integrated an off-the-shelf mechanism and additional fabrication. The appellant designed a controller to operate the actuators, identified required specifications, and obtained engineer approval for contractor manufacture. He also designed an angle measurement device and a trombone to absorb air pressure loads on the model. The nature of the work that the appellant performs is consistent with work characteristic of the GS-11 grade level.

This factor meets, but does not exceed, the GS-11 grade level.

#### *Level of responsibility*

This factor considers the nature and purpose of person-to-person work relationships and supervision received in terms of intensity of review of work as well as guidance received during the course of the work cycle.

At the GS-11 grade level, technicians have considerable freedom in planning work and carrying out assignments. The supervisor makes assignments in terms of the major objectives and provides background information and advice on specific unusual problems which are anticipated or on matters requiring coordination with other groups. Unusual or controversial problems, or policy questions arising in the course of a project, may be discussed with the supervisor, but technical supervisory assistance is infrequently sought or required. The supervisor is usually informally advised regarding progress, but there is little review during progress of typical assignments. Completed work in the form of recommendations, plans, designs, reports, or correspondence is reviewed for general adequacy, conformity to purpose of the assignment, and sound engineering judgment. By comparison, technicians at lower grade levels receive advice and guidance on the application of nonstandard methods and techniques or in the solution of complex problems requiring significant deviations from established practice.

GS-11 technicians customarily make contacts in the course of their work with the same groups of individuals (e.g., using agencies, contractors, and architect-engineer firms) as do technicians at lower grade levels, and the purpose of the contacts is similar. Because of the increased scope of GS-11 assignments, these contacts tend to become more extensive than at lower levels. Contacts with contractors and other personnel regarding complex engineering and administrative problems are carried out without close supervision. However, the technicians generally discuss with the supervisor the approach to be taken.

Like this level, the supervisor assigns work to the appellant in terms of major objectives and provides background information and advice on specific unusual problems that are expected. For assignments that are part of larger projects, the branch test engineer responsible for a project usually provides an overview of the work to be done. The appellant participates in early planning meetings with the research project staff to establish the feasibility of the project testing approach from a practical engineering perspective and assess alternatives. He exercises independence in planning and carrying out the assignment but functions within the assignment controls established by test objectives, the design package and blueprint specifications or



approved changes to them, and project parameters. Comparable to the GS-11 level, the appellant infrequently seeks technical assistance from the supervisor or test engineer, but due to the nature of the work, keeps them informed of problems he anticipates or encounters. The supervisor discusses the project with the appellant every few weeks and, for larger projects, receives daily briefings, including information on the appellant's work, from the test engineer. Like the GS-11 grade level, completed work is reviewed for general adequacy, conformity to the purpose of the assignment, and sound practical engineering judgment.

Typical of the GS-11 grade level, the appellant has frequent contacts with the research test engineer, other research engineering staff, facility safety personnel, university staff and other technicians assigned to wind tunnels, and contractors. He contacts them to discuss problems, situations, and approaches to be taken, to seek specialized engineering advice, to find or develop appropriate components or equipment, to develop recommendations and solutions for testing, and to coordinate test article and facility setup and usage. He also seeks approval for any procedural changes or system, component, or equipment modifications, some of which may require purchases and/or contract work.

This factor meets, but does not exceed, the GS-11 grade level.

#### *Summary*

Both the *Nature of the assignment* and the *Level of responsibility* meet the GS-11 grade level.

#### **Decision**

This position is properly evaluated as Engineering Technician, GS-802-11.