

**OFFICE OF PERSONNEL MANAGEMENT  
ATLANTA OVERSIGHT DIVISION  
ATLANTA, GEORGIA**

**CLASSIFICATION APPEAL DECISION**

Under section 5112(b) of title 5, United States Code

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

**Position:** General Engineer  
GS-801-11

**Organization:** Projects Section  
Engineering Service  
Department of Veterans Affairs  
[city, state]

**Decision:** GS-801-12 (Title at agency discretion)  
(Appeal granted)

**OPM decision number:** C-0801-12-01

Kathy W. Day  
Classification Appeals Officer

Date:5/13/97

RD# 080112A.AT

## **Background**

On January 29, 1997, the Atlanta Oversight Division, Office of Personnel Management, accepted an appeal for the position of General Engineer, GS-801-11, Projects Section, Engineering Service, Department of Veterans Affairs, [city, state]. The appellant is requesting that his position be changed to General Engineer, GS-801-12.

The appeal has been accepted and processed under section 5112(b) of title 5, United States Code. This is the final administrative decision on the classification of the position subject to discretionary review only under the limited conditions and time outlined in part 511, subpart F, of title 5, Code of Federal Regulations.

## **Sources of Information**

This appeal decision is based on information from the following sources:

1. A letter from [the appellant's representative], dated December 18, 1996, appealing the classification of the appellant's position.
2. The agency's letter dated February 14, 1997, providing position and organizational information.
3. The appellant's letters dated February 11, 1997, and February 20, 1997, providing additional position and organizational information.
4. An interview with [the servicing personnel specialist], on April 11, 1997.
5. An interview with the appellant on April 17, 1997.
6. An interview with [the appellant's immediate supervisor], on April 28, 1997.

## **Position Information**

The appellant is assigned to [position number]. The appellant, supervisor, and agency have certified to the accuracy of the position description.

The appellant serves as a General Project Engineer responsible for the engineering analysis, development, design, and preparation of complete contract plans and specifications for renovation, retrofits, and new construction projects. Work includes the extension, alteration, and maintenance and repair for two medical centers, three national cemeteries, and engineering support responsibility for two outpatient clinics.

The appellant coordinates design teams which include architect/engineers (A/E's) and determines the action necessary in the development and completion of design projects. He serves as a member of the A/E Review Board and makes recommendations for the selection of A/E firms developing the

scope of project work and engineering requirements for A/E contracts. He performs detailed review of A/E design submissions and final contract documents, and makes revisions to the A/E's design.

As a Resident Engineer, he evaluates contractors' questions posed during the bidding period, prepares amendments of solicitation, reviews submittal/shop drawings for compliance with contract drawings and specifications, reviews contractors' schedules and payment requests, and recommends change orders to the Program Manager. He resolves interpretation of or conflicts in plans and specifications with contractors; performs daily, partial-final and final inspection of contractors' work; and makes recommendations for payment.

The appellant assists in the development of annual Nonrecurring Maintenance projects and Minor Miscellaneous and Minor Construction Programs. He develops project feasibility and scope of work, as well as detailed engineering calculations and cost estimates for the annual Five Year Facility Plan and the Five Year Energy Plan. He provides professional engineering support and acts as an advisor and consultant to the maintenance and operations personnel, safety section, management, and other services.

The appellant maintains a complete, accurate, and up-to-date technical reference library of codes, standards, and Master Construction Specifications. He also serves as the Computer Automated Design (CAD/CAFM) coordinator maintaining up-to-date computer as-built drawings, assisting staff members, maintaining and developing required standard details, and keeping abreast of the latest CAD/CAFM changes and developments.

The appellant receives direction from the Program Manager. Work is assigned in terms of broad, general objectives and relative priority for completion of work. The appellant performs his assignment with considerable freedom from technical support. He determines the scope of work and resolves complex assignments, adapting, modifying, or making compromises with standard guides, precedents, and specifications to complete assigned projects. The supervisor reviews the work for accuracy in terms of broad objectives and for compliance with agency policies and regulations. The appellant's performance is based primarily on overall results of the assignments rather than day to day actions.

The appellant makes several references to work performed in a prior position. He also compares his position with a position in another medical center as being similar to his own. The Office of Personnel Management (OPM) is required by law to classify positions on the basis of their current duties, responsibilities and qualification requirements, and by the application of standards published by OPM. Since comparison to standards, not to other positions, is the exclusive method for classifying positions, we may not consider the classification of other positions as a basis for deciding an appeal.

### **Standards Referenced**

Series Definition for General Engineer Series, GS-801.

General Grade Level Guide for Nonsupervisory Professional Engineering Positions, GS-800, June 1971.

Mechanical Engineering Series, GS-830, June 1977.

Grade Level Guide for Test and Evaluation Work in Engineering and Science Occupations, March 1990.

### **Series and Title Determination**

The agency placed the position in the General Engineering Series, GS-801. The appellant does not contest the agency determination.

The GS-801 series, includes all classes of positions the duties of which are to advise on, administer, supervise, or perform research or other professional and scientific work of a special or miscellaneous character which is not specifically classifiable in any other engineering series, but which involves the application of a knowledge of such engineering fundamentals as the strength and strain analysis of engineering materials and structures, the physical and chemical characteristics of engineering materials such as elastic limits, maximum unit stresses, coefficients of expansion, workability, hardness, tendency to fatigue, resistance to corrosion, engineering adaptability, engineering methods of construction and processing, etc.; or positions involving professional work in several branches of engineering.

The appellant performs a broad range of professional engineering projects requiring knowledge of architecture, mechanical, electrical, civil, and construction engineering, including surveying techniques and methods, foundations and materials, and load and stress analysis as it relates to the design, construction, extension, renovation, maintenance and repair of facilities, utilities, grounds, and equipment at the medical centers, cemeteries and outpatient clinics. The work is properly placed in the General Engineering Series, GS-801. There are no prescribed titles in this series. Therefore, the agency may designate a title keeping with the titling practices outlined in the Introduction to the Position Classification Standards.

The position is properly coded as GS-801, with the title at the discretion of the agency.

### **Grade Determination**

The agency applied the Mechanical Engineering Series, GS-830, grade criteria and the Grade Level Guide for Test and Evaluation Work in Engineering and Science Occupations to classify this position. However, the classification determination was based on a VA Headquarters classification decision for another engineering position at the GS-11 level, and not an independent analysis of the actual duties and responsibilities performed by the appellant.

The GS-830 series includes professional positions in the field of mechanical engineering, typically requiring the application of thermo-dynamics, mechanics, and other physical, mathematical, and engineering sciences to problems concerned with the production, transmission, measurement, and use of energy, especially heat and mechanical power.

The appellant's position involves a variety of professional engineering design and construction projects requiring a broad knowledge of the theories, principles, practices and standards used in civil, mechanical, architectural and electrical engineering and related fields. Mechanical engineering design is only one part of the appellant's total design and construction project responsibilities, and does not represent the overall scope of his assignment. Exclusion 6, on page 2 of the GS-830 standard, states that positions of chemical, petroleum, electrical, and other kinds of engineers who design mechanical equipment or perform other kinds of mechanical engineering work as an incidental part of a broader assignment such as the design of an oil refinery, are excluded from coverage in this series. Since the appellant's mechanical engineering work is an incidental part of his overall assignment, his position is excluded from coverage in the GS-830 series.

The Grade Level Guide for Test and Evaluation Work in Engineering and Evaluation Work in Engineering and Science Occupations is used in determining the grade level of nonsupervisory test and evaluation engineering work performed by professional engineers in planning, monitoring, and conducting tests of equipment, materials, and systems; assessing or evaluating test data and results; and preparing reports of findings. Work covered by this Guide typically includes: (a) modifying, adapting, or extending standard test and evaluation guides, precedents, criteria, methods, and techniques; (b) designing and using new test procedures and approaches; or (c) performing staff assignments such as technical consultant, planner, evaluator-advisor, and/or program coordinator in a test and evaluation engineering organization.

Test and evaluation assignments involve performance of, or responsibility for: study and interpretation of operational requirements, specifications, military characteristics, or other types of requirements for the item/system to ascertain the specific investigations to be conducted and the specific data to be obtained; overall planning of test projects, including assignment of personnel, facilities, and equipment; planning test limits, and instrumentation; setup and interconnection of test equipment and item/system undergoing test; development, modification, or adaptation of test equipment as appropriate; conduct of test experiments, including directions for recording data; analysis, interpretation, and evaluation of test data and results; and preparation of test reports outlining test procedures used, data and results obtained, conclusions, and pertinent recommendations and suggestions relative to the acceptability or application of item/system tested or the validity of test data when controversial test methods are applied. Work normally involves test design, coordination, direction, data evaluation, and report preparation. It may also involve establishing and maintaining working relationships with contractors and computer related knowledge.

The appellant's design and construction project duties and responsibilities do not involve test and evaluation work as described above. Therefore, this guide is not appropriate for grade determination purposes.

The GS-801 series does not contain grade level criteria. The General Grade Evaluation Guide for Nonsupervisory Professional Engineering Positions provides grade level criteria for work allocated to the General Engineering Series, GS-801. The Guide uses two factors, Nature of Assignments and Level of Responsibility, which are expressed in terms of three broad types of nonsupervisory work performed by engineers, i.e., Type I, Type II, and Type III. These types of work are described throughout the Guide at various grade levels.

Type I work is conventional in nature and is accomplished primarily by application, modification, or adaptation of, or compromise with standard guides, precedents, methods, and techniques. Work of this type is described in the Guide at grades GS-9 through GS-13.

Type II work includes assignments or functions with such objectives as solving novel and unusual problems, extending the boundaries of existing knowledge, or improving the state-of-the art. Grades GS-9 through GS-15 are covered.

Type III work involves staff assignments as technical consultants and advisors and/or program coordinator-reviewers in engineering organizations engaged in Type I and/or Type II work. These positions typically occur at GS-12 and above, although they may occur at the GS-11 level according to the Guide.

The majority of the appellant's time, approximately 80 percent, is spent performing engineering planning and design and construction management functions. His projects involve the renovation, construction, extension, alteration, maintenance and repair of facilities and/or systems at the two medical centers, cemeteries and outpatient clinics. His work is accomplished by application, improvement, extension or validation of precedents, data, methods and techniques, and compromises with existing guidelines. He develops new features or alternative designs due to unforeseen design problems, site conditions, or where management requirements versus cost effectiveness issues must be considered. This type of work is comparable to Type I work.

A "complex feature" criterion provides a unit of measure for the nature and variety of Type I work. A complex feature is an engineering problem, broadly defined, which requires: (1) modification or adaptation of, or compromise with, standard guides, precedents, methods, and techniques; or (2) special considerations of planning, scheduling, and coordination.

#### **Nature of Assignment:**

Type I, GS-11, engineers perform assignments that involve combinations of complex features. GS-11 engineers are fully skilled in the broad range of the conventional aspects of their subject-matter or functional area of assignment. Their assignments typically contain a few, e.g., two to five, complex features.

The GS-11 level is exceeded. The appellant provided numerous examples of projects that involved most of the complex features listed on pages 5 through 6. For example, several of his projects

required analysis and selection of two or more standard engineering methods from a standpoint of economy and engineering feasibility, stress and load analysis, modification of precedent designs due to outdated materials, utility systems and equipment that are not compatible with current standards or are no longer used, the establishment of standard specifications for new systems where none existed, complicated environmental and safety considerations due to exposure to asbestos, or specific design requirements within the medical center. The appellant was also responsible for projects where modification and alternations of medical center facilities required modification to designs for loads and stresses due to design elements that were not identified in the original drawings, systems where specifications were nonexistent, and projects requiring special planning and scheduling to integrate completion date and provide continuing use of existing facilities. Because projects are conducted for facilities in separate locations, the work requires continuous coordination with state and local agencies to ensure construction requirements, codes, and standards are met. Furthermore, projects are funded through appropriations on a five year plan. The appellant is required to prepare detailed analyses and justification of costs which are reviewed by higher echelons within the agency. Change orders for additional funding are scrutinized more cautiously by higher authorities.

Type I, GS-12, engineers perform work characterized by many, varied complex features due to the breadth, diversity, or intensity of assignments. They are broadly trained specialists who are especially versatile and innovative in adapting, modifying, or making compromises with standard guides, precedents, methods, and techniques. Their assignments typically contain a combination of complex features involving serious conflicts between engineering and management requirements.

The GS-12 level is met. The appellant is responsible for a variety of architectural, mechanical, electrical, and civil engineering projects for renovation, retrofit, and new construction including incremental maintenance necessary to prevent physical deterioration or to offset current deterioration of real or personal property and operations, building service equipment, utility and distribution systems; replacement of complete or major segments of utility systems, building components (e.g., doors, windows, flooring, roofing, waterproofing, oxygen and vacuum sprinkler and fire alarm systems); replacement of units or items which can no longer be economically maintained; and minor miscellaneous construction ranging from \$150,000-\$750, 000.

Renovation and maintenance and repair program work is complicated by a variety of factors. For example, the age of the facilities, equipment installed, and construction material used when the facility was first constructed are not up to current engineering standards or codes and require replacement with the most up-to-date technological equipment or systems. The appellant deals with a variety of compatibility issues such as existing systems or utilities that cannot be replaced or modified or that require the development of new features to meet engineering standards. There are hidden design features which are not in the original design plans, and aesthetic and structural problems which must be balanced to ensure the proper load and stress analysis factors are incorporated in designs. In addition, funds for projects are pre-allocated for projects in the Five Year Facility Plan. Changes or modifications to original designs are further complicated by the necessity to work within allocated funds.

Construction work requires innovation and versatility to develop alternative methods to resolve unforeseen design and construction problems affected by site or environmental conditions or obstacles that were not identified in the original plans. The appellant makes compromises with engineering standards, adapts, modifies and extends design precedents and master specifications, methods and techniques to resolve problems in the design and construction phases of engineering projects.

The appellant provided numerous examples of projects involving a variety of complex features including the upgrade of electrical distribution system and irrigation systems, construction of female locker room, remodeling of patient rooms for Tuberculosis Isolation, relocation of bulk oxygen storage tanks, correction of architectural barriers, installation of Fiber Optics, retrofitting of a generator, and refurbishment of a water tower. For example:

Project [number], Upgrade of Electrical Distribution, required the installation of a new switching station adjacent to the main hospital building, utilizing an existing manhole for splicing, which would allow switching capability between three incoming circuits feeding the buildings. The existing conditions made it impossible to pull cable into and splice in the existing manhole. The appellant had two possible options from a standpoint of economy and engineering feasibility but after research and site investigation, he discovered the area would not accept the manhole due to existing utility obstructions. He developed a third option which was to install the switching station “upstream” from the main hospital building almost halfway between the main distribution high voltage switching station and the main hospital. The centrally located switching station allowed switching capability between three incoming circuits and two outgoing in case of emergency, allowed for testing, and prevented the sole use of one circuit continuously.

Project [number], Female Locker Room, involved complex features which required consideration of several engineering alternatives due to site conditions and factors which were not apparent prior to design. During construction, the appellant discovered that existing floor beams would not allow installation of floor toilet drains, as designed, and an existing main load break elbow was found behind a demolished wall feeding the area electric panel. The appellant redesigned the area to add a chase wall behind the toilets which would conceal extended toilet drain lines and the load break elbow/conduit. To further complicate the project, the exorbitant cost to contain and abate asbestos-containing duct work insulation in the building required the design of a HVAC layout utilizing existing duct work which could not be removed/modified due to the inability to remove the ceiling which could possibly make existing asbestos insulation crumble.

The appellant also provided two examples of projects, Project [number], Retrofit Generator, and [number], Install Fiber Optics, which required the development of new designs and specifications because no precedents were in existence. The appellant adapted and modified manufacturers’ specifications by researching the manufacturers’ generic data and current components to develop



restrictive specifications for bid advertisement, negotiation, and the development of contract drawings and specifications.

GS-12 is credited for this factor.

### **Level of Responsibility**

At the GS-11 level, supervisors make assignments in terms of the purpose of the work and possible complex features. GS-11 engineers independently determine approaches and solutions to complex features and complete assignments with little guidance from supervisors except in cases of controversial complex features and policy questions. Supervisors normally accept technical correctness of methods and techniques used in calculations, analyses, and other operations. They review completed work for overall technical adequacy and conformance with the objectives of the assignment. The GS-11 engineers initiate work relationships within the agency to exchange ideas or information concerning assignments and to assure that assigned work will tie in properly with related work of others. Field positions and positions concerned with cooperative programs affecting the public frequently involve contacts with other agencies, contractors, private industry, and public groups to explain and interpret the laws, regulations, and procedures of the agency. In dealing with the public and outside agencies, GS-11 engineers make commitments on routine matters covered by precedents, agency regulations, policies, and accepted engineering practices. Since complex features occur with more regularity and less guidance at this level, GS-11 engineers apply experienced judgment in modifying, adapting, and making compromises with standard guidelines, and in applying standard engineering practices to new situations and relating new work situations to precedent ones.

The GS-11 level is exceeded. The appellant operates with less supervision than described at this level. He is given a project with minimum information and is expected to independently develop the scope and approach of work, as well as handle any technical problems that may arise. Projects are assigned simultaneously, and involve a variety of different purposes. The work is performed in various site locations and requires a high degree of resourcefulness, initiative and energy to schedule work and conduct site inspections.

At the GS-12 level, supervisors assign work to engineers in terms of broad general objectives and relative priority for completion of work. GS-12 engineers then work with considerable freedom from technical control in selecting and establishing the proper methods for attacking and resolving complex features and otherwise carrying assignments through to completion. They resolve controversial questions by joint consideration with supervisors. Supervisors review completed work for adequacy in terms of the broad objectives and for compliance with agency policies and regulations. Decisions and recommendations based upon application of standard engineering practices are rarely changed by higher authority, except for reasons of policy, public relations, or budgetary considerations. Since GS-12 work is characterized by many complex features, GS-12 engineers adapt, modify and make compromises with guides more frequently and use more originality in planning and organizing work, devising short cut procedures, and evaluating and making compromises with a number of alternative solutions. GS-12 engineers normally have more frequent and wider contacts. In view of the larger

scope of work for which they are responsible, GS-12 engineers coordinate and maintain liaison with organizations having related assignments, other agencies, contractors, utility companies, state and local government authorities, and the general public. Such duties generally constitute a substantial portion of work of positions of this type at this level.

The GS-12 level is met. The appellant is assigned projects in terms of priorities, budget allocation, and objectives by the Program Manager. The appellant independently determines the scope of work, and develops plans, drawings, specifications, cost estimates and designs. He uses innovation and creativity to adapt, modify or extend existing guidelines (e.g., VA master specifications for x-ray room or other special medical center units and systems or components, manufacturer data, national electric codes, heating/air conditioning and plumbing codes, building codes, life and safety codes, hazardous materials requirements including state dumping and toxic waste removal, and existing guidelines to meet specific management requirements). He coordinates work with a broad range of internal and external contacts including vendors and manufacturers' representatives; other federal, state, local and municipal agencies; utility companies; A/E firms; and using services. He consults with the Program Manager and/or Chief of Engineering on projects where additional funds are required or policy issues arise.

GS-12 is credited for this factor.

### **Summary**

Since both factors are evaluated at the GS-12 level, the overall grade of this position is GS-12.

### **Decision**

This position is properly classified as GS-801-12, with the title at the discretion of the agency. This decision constitutes a classification certificate issued under the authority of section 5112(b) of title 5, United States Code. This certificate is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the Government.