Classification Appeal Decision
Under Section 5112 of Title 5, United States Code

Appellant: [appellant’s name]

Agency classification: Civil Engineering Technician
GS-802-11

Organization: [appellant’s organization]
Department of the Air Force
[geographic location]

OPM decision: Civil Engineering Technician
GS-802-11

OPM decision number: C-0802-11-05

/s/ Bonnie J. Brandon
Bonnie J. Brandon
Classification Appeals Officer

2/5/99
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 and address]  
Civilian Personnel Officer  
[appellant’s servicing personnel office]  
[geographic location of personnel office]

Director, Civilian Personnel Operations  
U.S. Department of the Air Force  
AFPC/DPC  
550 C Street West  
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Director of Civilian Personnel  
HQ USAF/DPCC  
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Chief, Classification Branch  
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1400 Key Boulevard, Suite B-200  
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Introduction

The Dallas Oversight Division of the U.S. Office Personnel Management (OPM) received a classification appeal from [appellant’s name] on October 19, 1998. [appellant’s name] is a Civil Engineering Technician, GS-802-11, assigned to the [appellant’s organization], Department of the Air Force, [geographic location]. [appellant’s name] believes that his position should be classified as Civil Engineering Technician, GS-802-12. The appellant also questions whether the title of the position should include a designation of team leader. We have accepted and decided the appeal under section 5112 of title 5, United States Code.

In reaching our classification decision, we have carefully reviewed all information furnished by the appellant and his agency, including the official position description [number of position description]. Both the appellant and his supervisor agree that the official position description is accurate. We also considered information obtained during telephone interviews with the appellant and his supervisor.

Position information

The appellant serves as a civil engineering technician under the supervision of the Chief, [a subordinate organization]. The appellant is responsible for the pavements and traffic engineering design and construction for [an Air Force base and two other Air Force] facilities. This work includes airfield pavements, roads and grounds systems, and traffic signal systems. The appellant prepares contract documents including drawings and specifications for repair, replacement, or new construction projects. He certifies that all pavement construction meets applicable Department of Defense, base, and engineering standards. The position description and other material of record furnish more information about the appellant’s duties and responsibilities.

Series, title, and standard determination

The classification standard for the Engineering Technician Series, GS-802, is used to classify this position. This standard includes technical positions that primarily require application of a practical knowledge of the methods and techniques of engineering and of the construction, application, properties, operation, and limitations of engineering systems, processes, structures, machinery, devices, and materials. The positions do not require professional knowledges and abilities for full performance and are not classified utilizing criteria specified for professional engineering positions.

This standard authorizes certain subject-matter specializations and associated position titles. The civil engineering specialization includes work concerned with buildings, structures, dams, soil mechanics, tunnels, highways, water resources, bridges, airports, railways, and other phases of civil engineering. This specialization is appropriate to the appellant’s position.

The General Schedule Leader Grade Evaluation Guide is also used to determine the correct title of the position. Part I of this guide is used to classify positions of work leaders who, as a regular and recurring part of their assignment, lead three or more employees in one-grade interval occupations in the General Schedule in accomplishing work. Work leaders also perform work that is usually of the same kind and level as that done by the team led.
Two enlisted military personnel are assigned to assist in accomplishing the pavements and traffic work. One of these two also serves as the noncommissioned officer-in-charge of the Maintenance Engineering Flight, reporting directly to the Chief for those responsibilities. The assigned individuals perform tasks that would make up part of the work for which the appellant has overall responsibility. While the appellant has led as many as four military personnel in the past, his supervisor indicated that these individuals came from staff within the Maintenance Engineering Flight who were assigned to pavements and traffic projects as needed. Since the appellant does not lead three or more employees on a regular and recurring basis, the designation of team leader is not appropriate to this position.

We find that the appellant’s position is properly assigned to the GS-802 series with a title of Civil Engineering Technician.

Grade determination

Evaluation using the engineering technician standard

The engineering technician standard defines grade levels under two classification criteria: nature of assignments and level of responsibility. Our evaluation with respect to these criteria follows.

Nature of assignment

This criterion includes the scope and difficulty of the project and the skills and knowledges required to complete the assignment. At the GS-11 level, engineering technicians perform work of a broad scope and complexity that requires application of (1) a demonstrated ability to interpret, select, adapt, and apply guidelines, precedents, and engineering principles and practices which relate to the area of specialization; and (2) some knowledge of related scientific and engineering fields. GS-11 technicians plan and accomplish complete projects or studies of a conventional nature requiring the independent adaptation of a general fund of background data and information and the interpretation and use of precedents. They are typically confronted with a variety of complex problems in which considerable judgement is needed to make sound engineering compromises and decisions. Other related interests must often be considered, entailing frequent coordination with personnel in the fields concerned. There is a continuing requirement for contact work.

Initiative, resourcefulness, and sound judgement are needed in planning and coordinating phases of assignments and in selecting which of several sound alternatives is to be used in arriving at acceptable engineering compromises. Ingenuity and creative thinking are required in devising new ways of accomplishing objectives and in adapting existing equipment or current techniques to new uses.

By comparison, technicians at lower levels receive assignments which are usually segments or phases of the type independently carried out at grade GS-11 or which involve less complex systems and facilities requiring design adaptation. GS-9 technicians apply standard engineering methods and techniques, whereas GS-11 technicians are typically required to be creative in devising ways to accomplish work.
The appellant’s work encompasses the full scope of managing the base pavements and traffic programs with responsibility for the accomplishment of assigned projects. His work in designing, repairing, and constructing roadways, airfield pavements, and traffic signal systems involves the planning and completion of projects of a conventional nature. Examples of projects reported by the appellant include a 26-unit recreational vehicle campground; a transportation configuration study for the base shopping mall; an asphalt cap over contaminated areas of the industrial waste treatment plant; traffic signal upgrades utilizing magnetic loop sensors and relays; runway repairs utilizing a locally determined mix of native aggregates; concrete joint treatments utilizing beveled edges to prevent corner breaks; and consultation on structural pavement requirements for the reassembly of a large domed radar unit. The appellant may make considerable adaptations of precedents or design of features for which precedents are not directly applicable. Projects involving unique design elements and demonstrating the use of judgement, initiative, and creative thinking include the reinforced concrete floor in a horizontal missile test facility (failure of the previous floor scattered debris over half a mile from the site); a road over unstable and water saturated soil at [one of the three Air Force facilities within the appellant’s area of responsibility] to support of high axle loads in transporting missiles; and a fire retardant fill station for use by Forest Service aircraft. Additionally, his unique design of beveled edges in concrete joints is being considered for adoption throughout the Air Force. He develops cost estimates for competitive bidding and performs technical reviews of designs and specifications prepared by contractors. The nature of the appellant’s assignments match those illustrated in the standard for GS-11.

Level of responsibility

This criterion includes consideration of 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. GS-11 technicians have considerable freedom in planning work and carrying out assignments. The supervisor makes assignments in terms of the major objectives, providing background information and advice on specific 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 advised informally 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 judgement. 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 as do technicians at lower grade levels and the purpose of the contacts are similar. These contacts tend to become more extensive than at lower levels because of the increased scope of GS-11 assignments. Contacts with contractors and other personnel regarding complex engineering and administrative problems are accomplished without close supervision. However, the technician generally discusses with the supervisor the approach to be taken.
The appellant independently identifies, designs, and manages projects within his assigned program areas. Considerable freedom in planning and carrying out assignments is exercised. The appellant keeps the supervisor informed of progress with little review while completing projects. His contacts with others regarding both routine and complex programmatic issues are accomplished without close supervision. This level of responsibility matches that specified for GS-11.

Summary

The appellant’s position is evaluated at GS-11 with respect to the classification criteria for the engineering technician series and is graded at GS-11 overall.

Evaluation using the civil engineering standard

The grade-level criteria in the engineering technician standard 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. The criteria and illustrations in the engineering technician standard at grade GS-11 are similar to those in the standards for professional engineering positions at the same grade. The basis of this inter-standard consistency is that each grade in the General Schedule is defined in chapter 51 of title 5, United States Code, and that individual position classification standards for specific series must conform to these universal definitions. Therefore, if a job is properly classified using the engineering technician standard, application of a professional engineering standard will not yield a different result.

The engineering technician standard permits the extension of the criteria in the standard in combination with application of criteria in standards for professional engineering positions when engineering technician positions clearly exceed the GS-11 grade level. Furthermore, the classification standard for the Engineering Group, GS-800, states that the professional engineering standards may be used with caution in classifying engineering technician positions.

The evaluation of the appellant’s position using the engineering technician standard does not indicate a need for such further analysis. However, in order to assure full consideration in evaluating this position and to demonstrate that the use of the professional engineering standard does not yield a different grade for the position, the classification standard for the Civil Engineering Series, GS-810, is also applied.

This standard consists of the following sets of grade-level criteria:

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<tr>
<th>Part</th>
<th>Criteria</th>
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</thead>
<tbody>
<tr>
<td>Part I</td>
<td>Criteria for grades GS-5 and GS-7</td>
</tr>
<tr>
<td>Part II</td>
<td>Planning and Design</td>
</tr>
<tr>
<td>Part III</td>
<td>Construction</td>
</tr>
<tr>
<td>Part IV</td>
<td>Facilities Engineering Management</td>
</tr>
<tr>
<td>Part V</td>
<td>Investigations and Survey</td>
</tr>
</tbody>
</table>
In applying these criteria, the function that is paramount is used to evaluate the position. Since the appellant performs work within both the planning and design and construction functions, it is treated as a “mixed position” and evaluated with the criteria specified under each of those applicable parts.

**Part II - Planning and design functions**

Grade levels are defined in terms of (1) the inherent complexity of the planning and design problems assigned and (2) the level of judgement and authority exercised. At the GS-11 level, the engineer is expected to be well-versed in the standard theory and practices in the field and to proceed without technical instruction or guidance in applying these to conventional projects or pieces of work. The engineer receives assignments of conventional work with a general indication of results expected and must identify the limits of the problems involved, the kinds of controlling data needed, and the criteria and techniques to be applied in accomplishing the assignment. Although the work is of a conventional nature, it often requires consideration of and selection from several alternative approaches or solutions to problems to arrive at the best treatment from a technical standpoint, and sometimes requires substantial adaptation of standardized guides and criteria. If there are critical or overriding problems of cost versus optimum technical solutions, determining the priority of operational needs to be accommodated, or responding to conflicting political or public interest pressures, the GS-11 engineer obtains guidance or decision from a supervisor or higher authority on selection of a course of action.

In order to arrive at mutually satisfactory approaches and solutions to problems, the GS-11 engineer is normally responsible for coordinating an area or phase of work with engineers responsible for related specialized phases. The engineer may be assisted by, and give technical guidance to, lower grade engineers and technicians who make investigations, collect data, perform detailed computations, do simple design analyses, and the like, in support of the work.

At the GS-12 level, engineers deal with systems or facilities that (a) encompass a fairly wide range of interrelated elements, some of which are conflicting and difficult to reconcile or accommodate, (b) pose critical problems of performance requirements versus costs, under application of standard materials and criteria, or (c) require designs and plans which must deal with factors of an undetermined or unprecedented nature. The GS-12 engineer must engage in intensive search and study of the approaches applied and results obtained in similar situations, the findings of research and study on related problems, manufacturer's and laboratory reports on materials and equipment, or other similar sources of information. From such study, and from firsthand investigation and observations, the engineer extends or modifies existing criteria or techniques or develops new approaches to the solution of problems.

The appellant’s work primarily involves the planning and design of conventional construction projects dealing with roadway and airfield pavements and traffic signals. The appellant’s projects previously listed are typical of those illustrated for the GS-11 level, involving independent responsibility requiring the application of standard engineering theory and practices and are not of the highly specialized nature intended by the standard for the GS-12.
The planning and design function of the appellant’s position is evaluated at GS-11.

Part III - Construction

The two elements used in evaluation of the construction function are (1) level and kind of authority exercised and (2) scope and complexity of construction operations.

Level and kind of authority exercised

This element is concerned with the kinds of functions performed or supervised by the engineer and the relative independence and authority with which the engineer carries out these functions. This element has a range of five degrees, A through E, with point values assigned to each.

Degree C indicates that the engineer is usually responsible for one of the major portions of construction activity on a project or in a geographic area and normally reports to the engineer in charge of construction. The engineer in charge exercises control mainly by establishing the organizational framework and the overall contractual requirements and interpretation under which work is to be accomplished.

At Degree E, the engineer serves as the engineer in charge of a project or of construction activities in a geographic area carrying out the full range of field and office engineering functions, usually through a staff of subordinate supervisors. On construction operations and engineering matters, the engineer makes determinations and takes action virtually without review.

The appellant is responsible for the pavements and traffic signal construction for [an Air Force base] and its associated properties. He is supervised by the Chief, [a subordinate organization], who is the engineer in charge of construction activities. The appellant does not carry out his responsibilities through a staff of subordinate supervisors nor does he carry out his responsibilities without review. The authority exercised by the appellant meets the requirements of Degree C and cannot be equated higher. Degree C has a value assigned of 40 points.

Scope and complexity of construction activities

The definitions of levels under this element encompass a number of considerations, chief among which are size of projects, diversity of structures or facilities, installation of technical or specialized facilities, problems posed by the construction site, or the presence of controversy or obstructive attitudes. This element encompasses a range of seven levels with associated point values. Levels 1, 3, 5, and 7 are described in the standard. The intermediate levels 2, 4, and 6 are to be used when the scope and complexity of assigned construction operations exceed, or do not quite measure up to, one of the defined levels.
Projects at Level 1 consist mainly of one or two types of structures, requiring several months to a year to construct using standard, commonly used equipment, materials, and methods. Level 3 projects include several kinds of structures requiring two or more years to complete. Specially adapted construction methods or equipment are required at Level 3.

The appellant’s construction projects consist primarily of airfield and roadway pavements. According to the appellant, the larger projects for which he is responsible may take up to 6 months to plan and up to 8 months to construct. The scope and complexity of these projects do not fully meet the criteria for Level 3. However, since some of the projects require specially adapted construction methods, this element is evaluated at Level 2 with a value of 25 points.

The construction function is evaluated as follows:

<table>
<thead>
<tr>
<th>Element</th>
<th>Degree/Level</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Authority exercised</td>
<td>C</td>
<td>40</td>
</tr>
<tr>
<td>2. Scope and complexity</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Total points:</td>
<td></td>
<td>65</td>
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</table>

In accordance with the grade conversion table, the construction function is evaluated at GS-11.

Summary

Utilizing the civil engineering standard, both functions applicable to the appellant’s position are evaluated at GS-11 and the position is graded at GS-11 overall.

Decision

The appellant’s position is properly classified as Civil Engineering Technician, GS-802-11.