

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

Dallas Field Services Group
1100 Commerce Street, Room 441
Dallas, TX 75242

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

Appellant: [appellant]

Agency classification: Mechanical Engineer
GS-830-12

Organization: [number]th Test Squadron
[number]th Test Group
[number]th Test Wing
Air Force Materiel Command
U.S. Air Force
[name] Air Force Base, [state]

OPM decision: Mechanical Engineer
GS-830-12

OPM decision number: C-0830-12-02

/s/ Judith L. Frenzel

Judith L. Frenzel
Classification Appeals Officer

June 24, 2003

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]

Chief, Personnel Management Section
[number]th Mission Support Squadron
Civilian Personnel Flight
[address]

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

Chief, Civilian Policy
HQ USAF/DPFC
U.S. Department of the Air Force
1040 Air Force Pentagon
Washington, DC 20330-1040

Director, Civilian Personnel Operations
HQ AFPC/DPC
U.S. Department of the Air Force
550 C Street West, Suite 57
Randolph Air Force Base, TX 78150-4759

Chief, Classification Appeals Adjudication Section
Civilian Personnel Management Service
Department of Defense
1400 Key Boulevard, Suite B-200
Arlington, VA 22209-5144

Introduction

On March 4, 2003, the Dallas Field Services Group of the U.S. Office of Personnel Management (OPM) accepted a classification appeal from [appellant]. His position is currently classified as Mechanical Engineer, GS-830-12, and is located in the [number]th Test Squadron, [number]th Test Group, [number]th Test Wing, Air Force Materiel Command, U.S. Air Force, [name] Air Force Base, [state]. We received the agency's administrative report on March 31, 2003. The appellant believes that his position should be graded at GS-13. We have accepted and decided this appeal under section 5112 of title 5, United States Code (U.S.C.).

Background information

The appellant previously filed a classification appeal with our office on December 4, 2002. He withdrew that appeal on January 15, 2003, pending a classification determination by the agency. The agency revised his position description and evaluated it again at the GS-12 level. [appellant] asked that his appeal be reactivated based upon the agency's classification determination. He was formally assigned to his new position description (pd), Number [number], on March 9, 2003. Both the appellant and his supervisor have stated that the appellant's revised pd adequately describes the duties and responsibilities of the position.

To help decide the appeal, an OPM representative conducted telephone interviews with the appellant on April 29, and with his supervisor on May 1, 2003.

General issues

The appellant states that his customer counterparts are GS-13 or higher. He also believes similar positions with the U.S. Army and U.S. Navy are graded at the GS-13 level. By law, we must classify positions solely by comparing the appellants' current duties and responsibilities to OPM position classification standards and guidelines (5 U.S.C. 5106, 5107, and 5112). Since comparison to the standards is the exclusive method for classifying positions, we cannot compare the appellant's current duties to other positions, which may or may not be classified correctly, as a basis for deciding an appeal.

Position information

The [number]th Test Squadron operates the [name] High Speed Test Track (HSTT), which simulates selected portions of flight environments under programmed and instrumented conditions, filling the gap between laboratory investigations and full-scale flight tests. The squadron is the Department of Defense's "Center of Expertise" for all ejection seat testing and the lead facility for all supersonic tracks. It also is the test organization for [weapons system] hypersonic warhead lethality validation.

The appellant is a Test Manager at the HSTT. He conducts rocket sled testing projects of aerospace systems and components for a variety of customers. He manages complex test projects, assisting customers and contractors in defining test requirements and recommending reliable methods of accomplishing test objectives. The appellant defines test techniques, sets

schedules, manages resources, monitors funds expenditures, and monitors project progress. He schedules, coordinates, and prepares the agenda for, and chairs project-planning meetings. He coordinates with customers and support agencies, including design, analysis, drafting, fabrication, electronics, and photo-optical support to achieve all test objectives. He also acts as test director during missions for his assigned projects. The appellant provides advice and guidance in the field of high speed track testing to management, junior test managers and others to improve track testing techniques and procedures.

The appellant is assigned to the Program Management Flight, which is part of the [number]th Test Squadron. The Squadron has three Flights. The Applied Mechanical Flight designs and analyzes the tests, and oversees the construction of the sleds and fixtures. The Operations Flight constructs, modifies, and sets up the sleds, fixtures, rocket motors, and track. The primary safety point-of-contact is also in this Flight. The Program Management Flight coordinates the technical requirements throughout the Squadron. The Program Management Flight has nine members: a Mechanical Engineer, GS-830-13; three Mechanical Engineers, GS-830-12; three military positions (two equivalent to General Engineer, GS-801-9, and one equivalent to a Mechanical Engineer, GS-830-7); an Office Automation Assistant, GS-326-6; and a Supervisory Aerospace Engineer, GS-861-14, who supervises the group.

Series, title, and standard determination

The appellant does not question the series or title of his position. We concur with the agency's determination that the position is properly assigned to the GS-830 series and titled Mechanical Engineer.

The Grade Level Guide for Test and Evaluation Work in Engineering and Science Occupations (Guide) 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. We agree that the Guide is appropriate for grading the appellant's position.

Grade determination

The Guide is written in the Factor Evaluation System (FES) format, which uses nine factors for grade level determination. Under the FES, each factor level description describes the minimum characteristics needed to receive credit for the described level. Therefore, if a position fails to meet the criteria in a factor level description in any significant aspect, it must be credited at the next lower level. Conversely, the position may exceed those criteria in some aspects and still not be credited at a higher level. A point value is assigned to each factor level, and the total number of points for all nine factors is converted to a grade by use of the standard's grade conversion table.

The appellant challenges the agency's evaluation of Factors 1 through 5 and Factor 9. We have reviewed the agency's evaluation of Factors 6 through 8 and found them to be correctly evaluated. As a result, we have confined our detailed analysis only to Factors 1 through 5 and Factor 9.

Factor 1, Knowledge required

This factor is used to evaluate the information a test and evaluation engineer must understand and the skills needed to apply this knowledge to do competent, productive work.

Level 1-7 requires professional knowledge of a wide variety of test and evaluation activities in a specialized area within an engineering or scientific discipline; knowledge of the state-of-the-art in the specialized area; and skill to apply the standard practices of related engineering and scientific disciplines to the specialized area.

As at Level 1-7, the appellant's position requires state-of-the-art knowledge of advanced concepts, theories, principles, and techniques in mechanical and aerospace engineering disciplines. He needs such knowledge to perform overall management and coordination of all phases (i.e. planning, designing, funding, conducting, evaluating, and reporting) involved in the test and evaluation of test articles, aerospace systems, and components. He applies knowledge of scientific and engineering principles related to thermodynamics, mechanics, and other physical, mathematical, and engineering sciences. His position also requires the ability to translate customer requirements into test parameters for aerospace systems and components such as missiles, guidance packages, nose cones, fusing systems, crew escape systems, and airfoils. His assignments are not limited in scope and depth as indicative of Level 1-6, but rather require modification of standard practices, adaptation of precedents or ability to significantly vary from previous approaches and ability to apply standard practices of related engineering disciplines as they relate to the mechanical engineering area typical of Level 1-7.

The appellant's position does not meet Level 1-8, which requires in-depth knowledge of testing and evaluation in an engineering or scientific discipline which is sufficient to modify and extend theories and/or practices in the specialty field (e.g., marine air traffic control and landing systems) including related engineering and scientific disciplines as they apply. In staff positions, equivalent knowledge is used to make recommendations which result in significant changes to important areas of test and evaluation programs. The engineer is considered a technical expert in the specialized area by the organization.

The appellant's position does not require modifying and extending theories and/or practices in rocket sled testing of aerospace systems and components to the extent intended at Level 1-8. Generally, there is previous work on which to base new projects. His role is primarily project management, although he does apply and significantly modify standard methods and techniques in order to obtain valid test results for a particular system and to devise new approaches to problems encountered. While the appellant has developed expertise in his line of work, he is not tasked with responsibility for serving as an organizational expert. The GS-13 Mechanical Engineer is the person charged with assisting on unusually difficult and demanding issues. He

serves on national boards within the Department of Defense, developing standards for testing an aspect of weapons systems. Also, the supervisor of the Flight has a pd that describes him as “a recognized engineering authority in the field of rocket sled track testing....”

Level 1-7 is credited for 1250 points.

Factor 2 - Supervisory controls

Select the level which best describes the nature and extent of direct and indirect controls exercised by the supervisor, project leader, senior engineer or scientist, or other designated employee. This factor is generally evaluated on three major aspects: how the work is assigned to the employee; the employee's responsibility, independence, and authority in carrying out the work; and the extent and purpose of the review of the employee's work.

At Level 2-4, the supervisor sets the overall objectives and resources available. The employee and supervisor, in consultation, develop the deadlines, projects, and work to be done. At this level the employee, having developed expertise in the line of work, is responsible for planning and carrying out the assignment; resolving most of the conflicts which arise; coordinating the work with others as necessary, and interpreting agency and activity test and evaluation policy on own initiative in relation to established objectives. In some assignments, the employee also determines the approach to be taken and the methodology to be used. The employee keeps the supervisor informed of progress, potentially controversial matters, far reaching implications, or intractable problems. Completed work is reviewed only from an overall standpoint in terms of feasibility, compatibility with other work, or effectiveness in meeting requirements or expected results.

The appellant's position is comparable to Level 2-4. The supervisor indicates general responsibilities and problems, points out overall objectives, and furnishes guidance on critical policy and budgetary issues. As at Level 2-4, the appellant accomplishes the work independently, selecting the appropriate methods and techniques to carry out the assignment and solving most of his technical problems. Assignments are reviewed primarily for the overall results of the assignments rather than on day-to-day actions.

The appellant's position does not meet Level 2-5. At that level, the supervisor provides administrative direction with assignments in terms of broadly defined testing/evaluation missions or functions. The employee has responsibility for planning, designing, and carrying out test/evaluation programs, projects, studies, or other work independently. At Level 2-5, results of the work are considered technically authoritative and are normally accepted without significant change. If the work is reviewed, the review concerns such matters as fulfillment of test and evaluation program objectives, effect of advice and influence on the overall program, or the contribution to the advancement of technology. Recommendations for new projects and alteration of objectives are usually evaluated for such considerations as availability of funds and other resources, broad program goals, or agency priorities.

Although the appellant exercises independence in planning and executing his work, his work is more closely reviewed than just for fulfillment of test and evaluation program objectives. He

manages tests that are part of the overall test track mission. Further, the supervisor and the Test Squadron Technical Director review and approve project documentation. Additional review is accomplished through periodic staff meetings and formal monthly reviews.

Level 2-4 is credited for 450 points.

Factor 3 - Guidelines

This factor covers the nature of guidelines and the judgment, initiative, or ingenuity needed to apply, adapt, or develop them. Test and evaluation guidelines either provide reference data, outline work processes and procedures, or impose constraints on the use of knowledge. Use this factor to evaluate: the kind, specificity, availability and applicability of documentary, schematic, precedential, and similar guidelines for the work; and the constraints and judgmental demands placed upon the employee, e.g., in selecting, applying, adapting, or researching existing guidelines, or developing new guidelines.

Test and evaluation guidelines include, but are not limited to: scientific, engineering, and technical textbooks, handbooks, and publications; manuals of test and evaluation instructions and procedures; manufacturers' and contractors' catalogs, contracts, and documentation; reports of previous tests conducted by the activity, agency, developer, contractor, or others; systems test plans, specifications, and checklists; test and evaluation methods as taught in engineering courses, or generally accepted by professionals in the area of application; governing policies, requirements, and regulations of the activity, command, agency, customer, and/or public law.

At Level 3-4, guidelines are available, but are often inadequate, very general, or contain critical gaps; or are of only limited use for major test segments, complex problems in the project, minor differences from past test items, or facilities available. The engineer makes major changes, additions, and extensive adaptations to guidelines, and uses judgment in analyzing costs/benefits of various alternatives and selecting the best combinations.

At Level 3-4, some projects require the engineer or scientist to design and execute novel testing procedures or to resolve problems where precedents are not applicable; or to obtain needed information within tight time frames and cost constraints; or to utilize new products, techniques, or facilities for the first time at the test facility; or to develop new technical methods or criteria; or to develop proposed new local policies for a major test facility of specialty area; or to supplement, explain, or adapt agency headquarters guidelines for use throughout field activities.

Comparable to Level 3-4, the appellant's guidelines include agency policies and regulations, operating instructions, technical handbooks and journals and past precedents. However, the guidelines are often inadequate for unusual tests. This requires the appellant to assess the situation, based on coordination and compilation of information, and execute novel test set-up or procedures to obtain useful information.

Level 3-5 guidelines consist of broad, nonspecific policy statements or basic laws which require extensive interpretation, judgment, and ingenuity in developing applications to specific work areas; or in developing new test and evaluation hypotheses, approaches, and concepts; or in

developing nationwide test and evaluation standards, policies, and instructions. At this level, the employee is typically recognized as a technical authority in the development of test and evaluation guidelines for the area of specialization, and is regularly called upon to use this expertise and judgment to resolve extremely complex, intractable problems for a major testing laboratory, command, or agency.

The guidance available to the appellant is much more specific than the “broad, nonspecific policy statements or basic laws” applicable at Factor 3-5. While the appellant’s position requires resourcefulness, initiative, and judgment to deviate from or extend traditional test methods and practices to obtain the required data, it does not require extensive interpretation, judgment, and ingenuity in developing applications to specific work areas, new test and evaluation hypotheses or national standards, policies, and instructions typical of Factor 3-5. Other positions on the staff are vested with the responsibility for serving as the technical authority.

Level 3-4 is credited for 450 points

Factor 4 - Complexity

This factor is used to evaluate the nature, number, variety, intricacy, and relatedness of steps, processes, and techniques used in the work; the degree of difficulty in identifying what needs to be done, and in planning and organizing work; the complexity inherent in the assignment, including: problem-solving difficulty; breadth, depth and intensity of mental, coordinative, or project management effort required; and originality or creativity involved.

At Level 4-4, the engineer or scientist plans, coordinates, and monitors test projects that frequently require significant modification of standard practices or adaptation of instrumentation to obtain valid results. The engineer plans, monitors, and evaluates tests, including those of considerable complexity, which: (1) involve new or novel devices, equipment, or systems, requiring a need for increased innovation, or (2) require increased engineering skills and imagination as, for example, in simulating unusual operational conditions, or (3) involve conventional test engineering practices, but include several complex features (e.g., various modifications of precedent, special considerations in planning, conflicting test requirements, unsuitability of conventional materials, and difficult test coordination requirements).

At Level 4-4, the employee assesses the feasibility and soundness of proposed engineering evaluation tests when necessary data are insufficient or confirmation by additional testing is advisable. Originality is required at this level because there is a greater need to modify standard methods and techniques. The engineer makes recommendations and commitments on the conventional aspects of the testing assignments.

The appellant’s assignments cover the full range of activities involved in managing/directing complex tests. As at Level 4-4, he must deviate from or extend traditional test methods and practices to obtain the required data, interfacing with other specializations and choosing between different approaches used in past projects. The appellant must make difficult choices when determining a cost-effective means of obtaining the desired test result and when considering the planning and scheduling needed to integrate other aspects of a project. Choices must be made

quickly, in the face of sudden changes in customer requirements and scheduling conflicts. The complexity of the appellant's work is comparable to Level 4-4.

Level 4-5 assignments involve new concepts and new and varied problems to be solved, and demand technical expertise and knowledge of the state-of-the-art in testing technology. At this level, assignments are of considerable breadth, diversity, and intensity and have many varied complex features, so that it is extremely difficult to design tests and gather reliable data. Existing precedents, methods, and techniques are inadequate or contain critical gaps. A high degree of originality is required to design and employ novel testing procedures in order to obtain useful information. Problem solving may require the engineer or scientist to organize and lead teams using multi disciplinary and matrix-management techniques.

At Level 4-5, the engineer or scientist plans, coordinates, monitors, and assesses or independently evaluates unique and highly complex projects, including test and evaluation of equipment and systems of significant magnitude, scope, and difficulty. Assignments typically contain a combination of a significant number of complex features which involve serious or difficult-to-resolve conflicts between engineering and management requirements. Comprehensive, interpretive reports cover projects of major significance, extensive cost, complexity, and strategic importance. Assignments also involve test and evaluation of complex major systems and subsystems to improve service and expand capacity.

Level 4-5 is not met. The appellant's work does not involve the higher level and combination of complex features or involve serious conflicts between engineering and management requirements as described at Level 4-5. Although he must solve problems involving conflicts between management and engineering requirements, these problems primarily concern dealing with managing projects within the confines of allocated resources. While the assigned warhead penetration tests required specially formulated concrete and increased sled speeds, the project did not require the degree of originality or have critical gaps in precedents that are characteristic of Level 4-5.

Level 4-4 is credited for 225 points

Factor 5 - Scope and effect

This factor considers the general breadth, depth, and purpose of the work. The level which conveys the magnitude of the effect(s), result(s), or other impact of properly performed work is selected.

At Level 5-4, an employee plans tests, establishes criteria, assesses program effectiveness, or investigates and analyzes unusual testing conditions, problems, or questions. The work facilitates development, production, design, procurement, or manufacturing in agencies, commands, programs or industries; or affects the efficiency or productivity of a test facility or activity; or results in significant new testing techniques; or involves staff level assessments which are often the technical bases for large agency expenditures; or affects resolution of significant consumer safety issues.

Comparable to Level 5-4, the purpose of the appellant's position is to perform overall management and coordination of the planning, designing, funding, conducting, evaluating, and reporting involved in complex test projects that frequently require significant modification of standard practices. The work contributes to improving track testing techniques and procedures. Additionally, the work produces data that affects the study, assessment, design, production, maintenance, and procurement of systems and components by the track's customers.

At Level 5-5, an employee resolves critical problems. The employee isolates and defines unknown conditions, or develops new theories, or provides expert consultative advice. The work affects: development of major aspects of scientific, public safety, or military programs or missions; or large numbers of people; or work of other experts; or design or purchase of major new testing facilities or major modifications of existing facilities.

The primary purpose of the appellant's position is not to resolve critical problems, isolate and define unknown conditions, or develop new theories, or provide expert consultative advice, as described in Level 5-5. As at Level 5-4, in performing his work, the appellant is much more likely to modify standard approaches and adapt them to specific situations or difficulties. Although the appellant works with other engineering experts and frequently collaborates with them to solve problems related to the test projects he manages, his work does not affect their work as described at Level 5-5. That collaboration and coordination involves assuring customer testing needs are met within cost and time restrictions. His work does not affect development of major aspects of scientific, public safety, or military programs or missions; or large numbers of people; or design or purchase of major new testing facilities or major modifications of existing facilities to meet the magnitude of effects described at Level 5-5.

Level 5-4 is credited for 225 points.

Factor 9 - Work Environment

This factor covers the environmental risks, dangers, discomforts, and hardships which the employee must cope with in accomplishing work. All positions, regardless of environment, receive the minimum credit of 5 points under this factor. To receive classification credit above the minimum for this factor, the hardship, condition, risk, danger, or discomfort must: affect the work of the position/incumbent on a regular and recurring basis; and require the use of knowledge, skill, training; procedures, or protective gear described in the position description or in the occupational classification standard; and be subject to control, reduction, elimination, or prevention by the incumbent. To determine the appropriate point credit, select the highest level of Work Environment in which the employee regularly carries out assignments. This includes consideration of the knowledge, skill and training used to control, reduce, eliminate or prevent injury or discomfort resulting from exposure to physical surroundings or performance of work.

At Level 9-2, the work and/or environment regularly requires constant alertness, knowledge of special safety precautions, occupational or procedural training, and--in some instances--protective clothing or gear to prevent, control, eliminate, or reduce the effects of moderate risks, discomforts, exposure to dangerous substances (e.g., chemical, biological, or radiological), or adverse environmental conditions, such as: intermittent periods of loud noises; and/or periods of

uncomfortable temperature, altitude, wind, or humidity (simulated or real); and/or bad weather; and/or work located in the vicinity of, but not in close proximity to munitions testing; and/or work where moving parts, operating engines, weapons, or machines, or moving vehicles, craft, and test items pose limited, moderate danger; and/or nonlethal chemicals, smoke, fumes, or other irritants. At Level 9-2, the engineer or scientist typically must sometimes wear or use sound suppressors, hard hats, goggles, foul weather gear, or similar protective clothing and equipment.

At Level 9-3, the work and/or environment requires knowledge and skill in the use of extensive safety, occupational, and procedural precautions to control, reduce, eliminate, or prevent possible adverse effects from unusual environmental stress or potentially dangerous conditions, situations, or exposures, such as: repeated, protracted exposure to dangerously loud noises; and/or work with or near volatile fuels, high pressure gases, pyrotechnic explosives, or other potentially disabling or lethal chemicals, bacteria, viruses, radiation sources, and/or work on active test and duty runways, decks, towers, or test sites near fast moving vehicles, craft or dangerous machinery, or during high wind conditions. At this level, the engineer may be required to use a wide range of protective, defensive, or monitoring gear. Some gear may be extremely uncomfortable to use or wear.

Most of the appellant's work is performed in an office environment, as described in Level 9-1. However, when directing tests, the appellant works in the vicinity of, but not in close proximity to solid fuel rocket motors and other energetic devices associated with high speed track testing as described in Level 9-2. Occasionally, protective equipment is needed. He is also exposed to inclement weather. Level 9-3 is not met because the appellant is not in close proximity to danger. He monitors but does not conduct the tests. The Operations Flight constructs, modifies, and sets up the sleds, track, and fixtures. While the appellant indicates he performed the work of munitions account manager for the Flight, that is no longer a current assignment and may not be used in evaluating this factor.

Level 9-2 is credited for 20 points

Summary

| <i>Factor</i> | <i>Level</i> | <i>Points</i> |
|---|--------------|---------------|
| 1. Knowledge required by the position | 1-7 | 1250 |
| 2. Supervisory controls | 2-4 | 450 |
| 3. Guidelines | 3-4 | 450 |
| 4. Complexity | 4-4 | 225 |
| 5. Scope and effect | 5-4 | 225 |
| 6. & 7. Personal contacts and Purpose of contacts | 3.c | 180 |
| 8. Physical demands | 8-1 | 5 |
| 9. Work environment | 9-2 | 20 |
| <i>Total</i> | | 2805 |

The total points assigned to the appellant's position equals 2,805. According to the standard's grade conversion table, positions with total point values between 2,755 and 3,150 are properly graded at GS-12.

Decision

The appellant's position is properly classified as Mechanical Engineer, GS-830-12.