



United States Office of Personnel Management

Office of Merit Systems Oversight and Effectiveness
Digest of Significant Classification Decisions and Opinions
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Standard: N/A
Factor: N/A
Issue: Pay Category Determination

Identification of the Classification Issue

This issue arose in three appeals filed with OPM oversight divisions. The first case was a group of employees occupying Biomedical Engineering Technician, GS-802, positions who appealed for a higher grade. OPM determined that they were performing work properly covered by the Federal Wage System (FWS). The second case was from an employee in an Engineering Technician, GS-802, position performing equipment calibration work who also appealed for a higher grade. OPM found that work properly covered by the FWS. The third case was from a group of employees whose positions were reclassified to the FWS because of a consistency review flowing from the second case. OPM found their positions also were excluded from the General Schedule (GS).

Resolution

Section 5102(c)(7) of title 5, United States Code (U.S.C.), exempts from coverage under the GS those “employees in recognized trades or crafts, or other skilled mechanical crafts, or in unskilled, semi-skilled, or skilled manual-labor occupations, and other employees including foremen and supervisors in positions having trade, craft, or laboring experience and knowledge as the paramount requirement.” The “paramount requirement” of a position refers to the essential, prerequisite knowledge, skills, and abilities needed to perform the primary duty or responsibility for which the position has been established. Whether particular types of positions are trades, crafts, or manual labor occupations within the meaning of title 5 of the United States Code depends primarily on the facts of duties, responsibilities, and qualification requirements, i.e., the most important, or chief, requirement for the performance of a primary duty or responsibility for which the position exists. If a position clearly requires trades, crafts, or laboring experience and

knowledge as a requirement for the performance of its primary duty, and this requirement is paramount, the position is under the FWS regardless of its organizational location or the nature of the activity in which it exists.

In the first case, the primary duties and responsibilities included medical equipment maintenance, installation, evaluation, minor modification, inspection, and testing. The appellants' performance plan identified the following elements for appraisal: preventive maintenance, electrical safety, and incoming inspections; maintenance and repair; and responding to equipment failures in an emergency. Work orders and preventive maintenance logs showed that the appellants spent approximately 30 percent of their time on preventive maintenance and 45 percent of their time on equipment repair. The regular and recurring work of their position required a knowledge of mechanics, electronics, pneumatics, electromechanics, optical repair, and electrical, mechanical, and solid state circuitry. They had to be familiar with a variety of test equipment such as analog and digital multimeters, integrated circuit testers, and pneumatic analyzers. They tested and repaired a wide variety of medical equipment such as radiographic units, electrocardiographs, blood gas analyzers, film processors, defibrillators, laser imagers, ventilators, patient monitors, audiometers, etc. Records showed that less than two percent of their work involved modification to or redesign of equipment. These only involved minor modifications, e.g., changing out parts of equipment using kits furnished by the manufacturer, installing check valves to prevent the overflow of waste, or placing antistatic mats around equipment to prevent static.

The GS-802 series includes technical positions that primarily require applying practical knowledge of the methods and techniques of engineering and the construction, application, properties, operation, and limitations of engineering systems, processes, structures, machinery, devices, and materials in the performance of technical work in research, development, design, evaluation, construction, inspection, application, standardization, and test or operation of systems, equipment, and devices. In comparison, the Medical Equipment Repairer, WG-4805, occupation includes work involved in the installation, maintenance, overhaul, repair, and testing of various medical and dental equipment used in patient diagnosis and treatment and in research laboratories. This work requires a knowledge and application of mechanical, electrical, and electronic principles and circuitry, the ability to determine malfunctions, and the skill to repair and maintain a variety of medical, dental, and laboratory equipment.

In discussing whether the Engineering Technician, GS-802, series covered the appellants' work, OPM noted that engineering technician positions and FWS jobs sometimes involve overlapping activities. A skilled trades person should possess many of the same knowledges, skills, and abilities as a technician. Occasionally, the technical aspects of the work of a position requiring competence in a trade may be significant in evaluating the level of difficulty, responsibility, and qualifications required for the work, but these technical features do not automatically place the jobs under the General Schedule.

The decision further noted that the difference between the General Schedule engineering technician position and the Federal Wage System medical equipment repairer jobs is not so much

in types of skills, knowledges, and abilities possessed as in the degree to which they are possessed and the manner in which they are used. A basic difference is in the mental approach to the problem faced. For example, the technician uses knowledge to solve practical engineering problems. By comparison, the person repairing the equipment uses knowledge to follow and understand the design concepts of others and the purpose and operations of parts and circuits to tune the equipment for optimum performance and to find and correct malfunctions. In practice, this distinction may become blurred somewhat by innovative mechanics who are able to develop shortcut procedures to make their work faster and easier, to recognize and recommend the correction of errors in documentation, or to recommend design or method changes to remedy a deficiency. In such cases, it is important to be mindful that the random performance of such work should not be construed as reflecting the paramount requirement for a position's existence.

Regular and recurring assignments determine the job's classification. OPM determined that the appellants' usual and recurring work assignments and the limited degree to which they performed modification and fabrication work did not provide an opportunity to apply the type of knowledge typically necessary in an engineering technician position. The decision concluded that the paramount requirement for the job's existence was the performance of work that required the application of knowledge and experience typical of the FWS. The job was, therefore, excluded from the GS.

In the second case, OPM found the primary and paramount work of the job was to calibrate testing, diagnostic, and measurement equipment in a production oriented environment. The appellant worked on a mobile team that calibrated and certified equipment at the transfer level. The transfer standards were calibrated and certified at an Area Calibration Laboratory (ACL) using secondary level standards calibrated at the agency's primary standards laboratory. The primary laboratory standards, in turn, are traceable to the National Institute of Standards and Technology. The workload was driven by the mission requirement to calibrate and certify most serviced equipment on a 120-day cycle. The oversight division found that 75 to 80 percent of the equipment was covered by published agency test procedures. Manufacturers' manuals and specification sheets were used to determine calibration requirements and techniques for equipment not in widespread use. Adapting and developing procedures typically consisted of substituting available calibration equipment for models specified in the manufacturer's manual based on performance requirements, or adjusting an established procedure to an updated model for which the tests, connections, and accuracies are the same. Workload records showed that over approximately 14 months 69 procedures were developed by the unit's 18 nonsupervisory employees. The only available information was the defined equipment accuracies, and the employees developed calibration procedures based on their knowledge of equipment operations and procedures covering similar types of equipment.

OPM concluded the primary and paramount work was not developing testing and maintenance procedures for use by others covered by the GS. The oversight division noted that performing testing work is an inherent part of trades functions such as repair, maintenance, installation, and fabrication. Trades work includes making measurements to diagnose malfunctions, to align and

calibrate equipment, and to assure that equipment operates within prescribed tolerances and standards. These functions were the primary and paramount requirement for the appealed job and were based on understanding and following the design concepts of others typical of innovative mechanics as discussed in the first case. The decision concluded that the paramount requirement for the job's existence was the performance of work requiring the application of knowledge and experience typical of the FWS. The job was, therefore, excluded from the GS.

The third case was a group appeal from ACL employees whose positions were changed to the FWS from the GS based on the job grading rationale in the second case. The appellants emphasized their work with engineers and other GS personnel; training, certification, and program responsibility for using radioactive sources for nucleonic radiation calibrations; and the overall creativity of their work which should result in placing their positions in the GS. They stated that their calibration of speciality equipment from research and engineering development organizations required them to adapt and develop testing and calibration procedures a substantial amount of their work time.

Published agency guidelines recognized manufacturers' manuals as approved calibration procedures when they identify the technical specifications of the instrument to be calibrated, the required measurement standards and accuracies, and the detailed technical procedures to be used to perform calibration. The oversight division found that if agency test procedures did not exist for equipment, the appellants routinely contacted the submitting activity for a copy of the manufacturer's manual. As necessary, they contacted manufacturers for that information and other documentation that would help in calibrating the equipment. The oversight division concluded this work consisted of understanding and following the design concepts of others typical of innovative mechanics as discussed in the previous two cases. The division noted that recognizing gaps in documentation or recommending changes in procedures based on hands-on experience does not make the work GS. Higher graded trades and craft personnel routinely work with scientists and engineers. Their recommendations for manufacturing approaches and material selection based on extensive practical knowledge and trades experience are given great weight and frequently are adopted.

The oversight division observed that while installation, maintenance, repair, and testing are mentioned in GS standards, e.g., Engineering Technician, GS-802, and Electronics Technician, GS-856, it is the design, development, planning, and acquisition work that is considered paramount and controls the pay category. Installation, maintenance, and other hands-on work covered by these standards are secondary and usually involve an oversight role rather than doing the work.

Allocation of work to the FWS did not, as the appellants appeared to claim, demean its difficulty or complexity. On the contrary, complex trades work is mentally demanding. The calibration and repair of complex electronics and other equipment requires applying knowledge of physical science theories to resolve difficult equipment operation problems. Higher graded electronics trade work requires knowledge of test equipment capability, standard practices for test and

operation, and theory of operations of many types of electronic circuits and their effect on each other. It requires being able to switch from one point of theory to another depending on the type of circuit, broad practical knowledge of electronics principles and their application to a wide variety of complex circuitry, and skill in applying circuit theory in the possible interaction of other circuits that may be creating a malfunction. Theoretical trades apprenticeship training is frequently provided by community college training courses, and associates degree holders are qualified to enter either a trades or a technician career path. A skilled trades and craft background may be qualifying for placement in many GS positions, e.g., Electronics Technician, GS-856; Engineering Technician, GS-856; Equipment Specialist, GS-1670; Quality Assurance Specialist, GS-1910; Production Controller, GS-1152; and Industrial Specialist, GS-1150.

The variety of equipment calibrated by the appellants did not require applying broader knowledge and skill than typical of trades work. The higher grade levels defined in OPM job grading standards are predicated on dealing with a variety of equipment, systems, and/or subsystems that require the application of practical knowledge of theoretical principles under a wide variety of conditions. More restricted work assignments would have a negative grade level effect on trades and craft jobs.

The extensive radiological training and certification requirements for some appellants' work also were not pay category controlling. Health and environmental laws have resulted in certification and licensing or equivalent requirements in some trades occupations. For example, Wastewater Treatment Plant Operators, WG-5408, test and record results in standardized reports designed to meet Federal and State regulations. Some Water Treatment Plant Operators, WG-5409, perform basic biological tests to verify the elimination of treated microorganisms. Higher graded Pest Controllers, WG-5026, require certification for applying restricted use pesticides.

OPM found the appellants' primary and paramount duties flow from the mission and function of the organization in which they worked. Those duties entailed the calibration and incidental repair of test, measurement, and diagnostic equipment in a production environment. This work required trades knowledge of calibration, and knowledge of electrical, electronic, mechanical, and/or radiological principles to calibrate equipment for optimum performance, certify its accuracy, and find and repair malfunctions. Their periodic adapting, modifying, or developing procedures to calibrate nonstandard or new test, measurement, and diagnostic equipment does not change the primary and paramount trades work they performed. Most of that work involved applying established calibration approaches and protocols using manufacturers' manuals and was typical of higher graded trades workers who use vague and incomplete instructions and procedures when developing and carrying out techniques for use on specific equipment. Therefore, OPM found the appellants' jobs were allocated properly to the Federal Wage System.