

United States

# Office of Personnel Management

Philadelphia Oversight Division William J. Green, Jr. Federal Building 600 Arch Street Philadelphia, Pennsylvania 19106-1596 1.

In Reply Refer To:

Your Reference:

**OPM Decision Number:** C-5306-10-02, 10/24/97

PH:OD:97-6

PERSONAL [appellant's name] [appellant's address]

Dear [appellant's name]

This is our decision on the job grading appeal filed with our office, which we accepted under the authority contained in section 5346 of title 5, United States Code (U.S.C.).

This appellate decision constitutes a certificate that is mandatory and binding on administrative, certifying, payroll, disbursing, and accounting officials of the Government. It is the final administrative decision on the classification of this job, and is not subject to further appeal. It is subject to review only under the limited conditions specified in 5 Code of Federal Regulations (CFR) 532.705 and in the Introduction to the Position Classification Standards, Appendix 4. It must be implemented according to the provisions contained in 5 CFR 511.612 for executing the requirements stipulated in 5 U.S.C. 5346.

Position Information

Appellant:	[appellant's name]
Current Classification: Job Description No.: Requested Classification:	Utility Systems Repairer-Operator, WG-4742-10 8-01233-0 Utility Systems Repairer-Operator, WL-4742-11
OPM Decision:	Air Conditioning Equipment Mechanic, WG-5306-10
Organizational Information	<ul> <li>U.S. Department of the Air Force</li> <li>[activity]</li> <li>[city, state]</li> </ul>

#### Analysis and Decision

In considering your appeal, we carefully reviewed all the information that you submitted; information obtained during a telephone audit with you on September 5, 1997 and a telephone interview with your supervisor, [supervisor's name], on October 15, 1997; and, other pertinent information provided by you and your employing activity at our request.

It is our decision that your job is graded properly as Air Conditioning Equipment Mechanic, WG-5306-10. Accordingly, your appeal is denied.

The job grading appeal record forwarded to this office for adjudication shows that you believe: (1) the Electronic Industrial Controls Mechanic, WG-2606 job grading standard (JGS) should be applied to your job; (2) your job warrants an additional grade level based on boiler plant shift responsibility as provided in the WG-5402 JGS; (3) your position warrants an additional grade based on "extraordinary independence"; (4) you should be given extra credit for "occupational expertise" for developing welding certification procedures and that the Welder, WG-3703 JGS should be applied to your job; and, (5) your position should be considered a leader job based on your involvement in planning work operations and providing guidance to other unit employees.

Section 5346 of title 5, U.S.C., requires that agencies classify their Federal Wage System (FWS) jobs in conformance with the JGS's published by the U.S. Office of Personnel Management (OPM) or, if there are no directly applicable JGS's, consistently with published JGS's for related kinds of work. The job grading appeal process for positions in the FWS is a <u>de novo</u> review that includes a determination as to the actual duties and responsibilities assigned by management and performed by the appellant, and the proper classification of those duties and responsibilities by application of the appropriate OPM JGS's.

The grading of a job requires that only those skills, knowledge, and qualifications that are of significance in performing the grade controlling work of a job be considered in the classification analysis process. Possession of certificates or licenses may be considered only to the extent that the skill and knowledge gained from those experiences is required to perform the grade controlling work of the job. It is presumed in all JGS's that the work will be performed properly according to all applicable laws, rules, and regulations. The requirement for licensing has potential for classification impact only if it requires skill and knowledge significantly above that described in the JGS at specific grade levels.

Our telephone audit with you revealed that your job description (JD) of record contains the major duties and responsibilities that you perform and is hereby

incorporated by reference into this decision. You operate, maintain, repair, install and modify various refrigeration, heating, ventilating, and air conditioning, (RHVAC) equipment and systems in all buildings on the base. These systems include centralized and non-centralized systems serving many buildings and consist of chillers, package units, split systems, heat pumps, specialized units and window units. You perform boiler plant operator-repairer duties in support of the installation's 27 gas fired hot water boilers, one gas fired high pressure power boiler, and various auxiliary equipment and controls. Boilers are automatically controlled, but on occasion, may have to be manually operated. All boilers are fueled by natural gas and do not have specific pollution controls. Six of the boilers are dual fire boilers, but are now exclusively run on natural gas, as fuel (#2 fuel oil) tanks have been removed to meet environmental requirements. You install, replace, repair, adjust and connect power and non-power boilers and their associated equipment and various electric. electronic, pneumatic and microprocessor controls. You occasionally perform miscellaneous trades work such as welding, plumbing, and sheet metal work. Your work is performed independently, and is subject to review for quality and completeness.

A Landis & Gyr System 600 (LAN) central environmental monitoring and control system (EMCS) was installed in 1991 and currently controls nine HVAC systems throughout the Base. Except one year manufacturers' installation warranties, no service contracts have been let to support the LAN. You are responsible for monitoring the EMCS to identify, diagnose, evaluate and resolve HVAC operating problems of varying scope. The manufacturer does provide a technical hotline to provide assistance.

Boiler operations are every day, including weekends and holidays, during the heating season that runs from October 15 - May 15. Steam boiler operations to support the dining hall kitchen are periodic year round as required to meet Unit Training Assemblies (UTA's) or other base activities. You are rotated through two daily shifts to support boiler operations as required.

The [activity's] mission is to support Air Force reserve readiness and training requirements. There is a full time permanent workforce of approximately 380 civilian and military. For UTA's, the base typically supports approximately 1,300 reservists. The base consists of approximately 50 buildings including offices, barracks, and hangars. There is also a medical training facility (base clinic), dining facility, communications center, and fuels laboratory. The communications center includes a small data processing center. The fuels laboratory conducts routine purity tests on base aviation fuel supplies.

Your agency has determined that your job is classified properly to the Utility Systems Repairer-Operator, WG-4742 series with which you have not disagreed. The WG-4742 series covers work that primarily involves repairing and operating one or more utility systems (heating, air conditioning, water, wastewater, etc.). In addition, the WG-4742 JGS requires that positions classified to this series meet the following criteria:

- 1. Work requires the application of more than one trade practice;
- 2. Grade level of work performed in utility repair and operation must be the same; and
- 3. The combined utility repair and operation must represent the highest grade level of work performed in the job.

Since the determination of Utility Systems Repairer-Operator (USRO) series coverage is based in part upon the grade level of the work performed, we will address the series and title determination of your job after we determine the grade level of your job.

### Grade Level Determination

The WG-4742 JGS does not provide grade level criteria per se. Grade level determinations for USRO positions are made based on the evaluation of each component occupation according to FWS mixed grade principles. Under the provisions of the FWS, "mixed" jobs are ordinarily allocated to the occupation that is most important for recruitment, selection, placement, promotion, or reduction in force purposes and to the occupation having the highest level skill and knowledge requirements. The <u>Digest of Significant Classification Decisions and Opinions</u>, No. 4, January 1984, provides guidance on what should be considered in determining whether a job is "mixed." The Digest cautions that if a small percentage, e.g., 15 percent of time is devoted to duties identified to another occupation or the highest grade duties within an occupation, care must be exercised because there is a tendency to:

make the following errors: (1) crediting duties which are not repetitively performed on a continuing basis and, therefore, should not be credited in any way; (2) incorrectly assuming that the duties require the full range of work and qualifications necessary to warrant the grade being considered; and (3) incorrectly assuming that the duties are performed under normal supervision for the grade being considered when they are performed under closer supervision and, therefore, overgrading the job.

Based on your JD and our fact-finding, we have determined that the following JGS's are applicable to your utility systems support work: Air Conditioning Equipment

Mechanic, WG-5306; Heating and Boiler Plant Equipment Mechanic, WG-5309; and Boiler Plant Operator, WG-5402. We have also referenced the Electronics Instrument Controls Mechanic, WG-2606 JGS to determine if it has grade impact. We will also discuss the grade level applicability of the miscellaneous trade work performed by you.

Federal Wage System (FWS) JGS's describe grade level criteria by using four factors: Skill and Knowledge; Responsibility; Physical Effort; and, Working Conditions. The grading of FWS jobs is based on the whole job concept. Thus, a job must fully meet the requirements of a level to warrant grading at that level.

JGS's do not describe all possible levels at which jobs in the series may be classified. If jobs differ substantially from the skill, knowledge, or other work requirements of the grade levels described in the standard, they may warrant grading either above or below these grades based on the application of sound job grading methods.

# Air Conditioning Equipment Mechanic, WG-5306

The WG-5306 JGS is used for grading nonsupervisory work performed to repair and modify a variety of equipment and systems that achieve regulated climatic conditions. Physical effort and working conditions are the same at the WG-10 and WG-11 levels.

# Skill and Knowledge

At the WG-10 level, air conditioning equipment mechanics install, diagnose and make repairs on large systems that provide for a variety of air conditioning functions such as heating, cooling, humidifying, cleaning, filtering and circulating. The skill and knowledge applied are those required to install and repair systems used to condition air in different kinds of structures such as warehouses, hospitals, and large office buildings, including areas that require special requirements such as communications centers, data processing centers, laboratories, operating rooms, etc. The systems use a variety of methods for air conditioning such as mechanical compression, vapor compression, absorption, steam jet or air cycle. This level requires a knowledge of air conditioning and refrigeration sufficient to diagnose and repair a full range of faulty equipment swiftly and to reduce inoperative time to a minimum and to locate trouble before dismantling, and to make repairs that insure proper functioning after assembly.

At the WG-11 level, mechanics perform the same type of work as at the WG -10 level. However, units and systems include various special-purpose air conditioning units and systems that are frequently modified to provide specific and critical climatic

conditions in laboratories and other experimental or test activities. Examples would include medical research centers and bacterial or biological laboratories that require critical temperature, humidity or other climatic controls that must be maintained or adjusted to insure critical tolerances. Systems at this level are designed to meet and maintain a wider variety of extreme and critical conditions under a variety of circumstances. The systems are more complex in design and physical layout than those described at the WG-10 level, and the details of construction are more complicated than commercial and industrial systems that are designed to provide a constant set of conditions. For example, system design or modification must be made to insure critical conditions or results during testing or experimentation (i.e., determining size, shape, and location of close fitting ducts to direct heat and exhaust outside test chamber without affecting critical conditions; fabricating and installing case icing spray frames to direct moisture onto critical parts of equipment being tested, etc.).

Our fact-finding revealed that your job does not support facilities or systems that require such critical conditions typical of the WG-11 level. Although the base does have a communications center and a fuels laboratory that require certain temperature parameters to be maintained, these situations do not meet the stringent tolerances or system complexity commensurate with the WG-11 level. Therefore, your job is credited properly at the WG-10 level.

# <u>Responsibility</u>

At the WG-10 level, work is assigned through oral instructions or work orders. WG-10 mechanics plan their testing procedures, determine the proper kind and type of parts and equipment needed and installs and repairs a variety of systems. There is little or no check during the progress of assignments. At the WG-11 level, there is a similar level of independence. However, the nature of assignments may require working directly with engineering or testing personnel in the design or modification of systems to meet specific conditions necessary to the critical environmental requirements typical of WG-11 design complexity. The mechanic performs repairs and modifications to meet conditions required by technical personnel.

Your assignments are performed with the independence typical of the WG-10, but do not involve the scope and complexity required at the WG-11 level. Therefore, this factor is properly credited at the WG-10 level.

#### Heating and Boiler Plant Equipment Mechanic, WG-5309

The Heating and Boiler Plant Equipment Mechanic, WG-5309 JGS covers the installation, maintenance, repair and modification of single and multiple fuel heating

and power boilers and associated auxiliary and pollution control equipment, hot air furnaces, and similar equipment systems. The systems and equipment provide steam, heat, or hot water for use in the operations of industrial and institutional facilities and equipment. The same physical effort and working conditions are creditable at all levels in the JGS.

#### Skill and Knowledge

At the WG-8 level, repairers have a working knowledge of the standard methods of combustion, heat transfer principles, and fuel characteristics to install, repair, and maintain heating boilers and domestic heating units and systems. The heating equipment and systems maintained are usually uncomplicated and do not have complex maintenance requirements. They are typically located in administrative office, shops, warehouses, residential housing, etc. Assignments include replacing defective burners, switches, fuel lines, and examining and adjusting thermostats; repairing or replacing motors and other heating related equipment; maintaining electrical, pneumatic and mechanical controls; identifying electronic control problems; and making repairs to refractory liners in heating boilers. They may help boiler plant mechanics in installing, modifying, repairing, testing maintaining equipment such as power boilers and associated auxiliary and pollution control equipment. They are familiar with the construction and operating characteristics of the heating systems so they can install, adjust, repair, or replace components, controls devices and units. They have skill in installing, aligning, adjusting, and repairing oil, gas and coal burners and other burning mechanisms.

Boiler Plant Equipment Mechanics at the WG-10 level, install, maintain and repair a variety of complex equipment and systems involving power boilers with complicated components, critical requirements, and rigid tolerances. They repair, troubleshoot, and maintain single-and-multiple fuel power boilers and associated auxiliary and pollution control equipment such as water treatment systems, chemical dispensers, and electrostatic precipitators. Power boilers serviced at this level typically include a variety of auxiliary components such as fuel delivery systems, induced draft fans, conveyer belts, preheaters, de-aerating equipment, and air compressors that often require regular adjustment and maintenance to meet rigid tolerances. WG-10 mechanics monitor and test the operation of boiler systems to identify malfunctions and potential problems with controls and auxiliary equipment. In comparison with WG-8 repairers, who typically service and repair heating boilers and other heating systems, such as domestic heaters, the WG-10 mechanic maintains, repairs, and troubleshoots power boilers and their components using specialized test equipment. This requires a thorough knowledge of mechanical, electro-mechanical, and pneumatic principles and a working knowledge of electronics and electronic controls to identify malfunctions, assess repair requirements, and replace or coordinate repairs for state-of-the-art control systems. WG-10 mechanics also have skill in making major repairs to pollution control equipment such as bag houses and electrostatic precipitators.

Although your work exceeds the WG-8 level, it does not fully meet the WG-10 level. While the base does operate a power boiler and have capability for dual fuel boilers, the complexity of the equipment and systems does not meet the full intent of work at the WG-10 level where there is a variety of complex equipment and systems involving power boilers as described above. There is no specific pollution control equipment and, for the most part, boiler operation is automatic, not requiring regular adjustment and maintenance to meet rigid tolerances. Since the work does not fully meet the WG-10 level, but substantially exceeds the WG-8 level, it is credited properly at the WG-9 level.

# **Responsibility**

WG-10 boiler plant equipment mechanics make more complex technical decisions and judgments than WG-8 repairers since work is performed on the most complex boiler systems and subsystems with limited technical guidance. They generally accomplish work assignments with minimal supervision. Their completed work is reviewed by the supervisor for adherence to established practices, outlined objectives, and technical requirements. Your job meets the independence described at the WG-10 level, but as noted above the complexity of the equipment is not commensurate with the WG-10. Therefore, this factor is credited at the WG-9 level.

# **Boiler Plant Operator, WG-5402**

The Boiler Plant Operator, WG-5402 JGS covers the operation and operational maintenance of single and multiple fuel water or tube fired boilers and associated auxiliary and pollution control equipment operated at various pressures and temperatures in automatic or manual modes to produce steam or high temperature hot water to provide heat for buildings, to operate industrial and institutional facilities and equipment, and to generate electricity. The same physical effort and working conditions are creditable at all levels of the JGS.

# Skill and Knowledge

WG-8 boiler plant workers require a working knowledge of the structure and operating characteristics of boilers and associated auxiliary equipment, including the location and function of numerous pumps, valves, regulators, gauges, recording instruments, controls, power operated dampers, conveyors, and other equipment associated with clean, safe, and efficient boiler operation. WG-8 work entails: (1) a knowledge of fuel handling and distribution equipment and systems, fuel firing

mechanisms, feedwater treatment systems, electrostatic precipitators, flue gas scrubbers, and lime slurry systems; (2) a basic knowledge of the chemical and physical characteristics of fuels and principles of combustion, steam generation, and heat transfer; (3) a working knowledge of the relationship between fuel quality and efficient combustion characteristics; (4) a working knowledge of water tending, analysis, and basic chemical treatments; (5) a general understanding of the individual and combined effects of chemical additives; and, (6) a knowledge of basic operations necessary on start-up, shutdown, and re-start procedures and in casualty control. WG-8 workers have skill in: (1) adjusting various conditions such as air temperature, draft, and other furnace conditions; (2) interpreting meter and gauge readings; (3) using handtools, electric and pneumatic power tools, and specialized tools of the trade; and, (4) applying preventive maintenance procedures and performing limited operational repairs such as cleaning equipment, greasing and oiling moving parts of machinery, repainting equipment, tightening packing bonnets and glands on valves and pumps, repacking valves, replacing pumps, and assisting higher grade workers in more difficult repairs and replacements. They can recognize malfunctioning equipment and systems and potentially dangerous operating conditions. Your work exceeds the WG-8 level because it requires a greater level of knowledge and skill level in that you must possess sufficient skill and knowledge to operate and maintain all the equipment, and respond to and deal with malfunctioning equipment and potentially dangerous operating conditions, without the technical assistance of a higher graded employee since you are often the sole worker in the boiler plant.

We find, however, that your work does not fully meet the WG-10 level at which boiler plant operators apply a comprehensive knowledge of all operational phases of power boiler plant operations (e.g., water treatment, fuel systems, steam generation, and pollution control) and their interrelationships for efficient and economical generation of steam or high temperature hot water (HTHW). They apply knowledge of the principles and theories on combustion, heat transfer, and steam or HTHW generation in the operation of power boiler plants. WG-10 employees also apply a thorough knowledge of the structural and operating characteristics of single and multiple fuel power boilers and associated auxiliary and pollution control equipment or systems (e.g., computerized or micro-processor control systems, fuel handling and distribution equipment and systems, fuel firing mechanisms, feedwater and boiler water treatment systems, steam and electrical pumps, pressurization systems, compressors, electrostatic precipitators, and flue-gas desulfurization systems) to properly operate, adjust, troubleshoot, and maintain the equipment and systems. They apply a thorough knowledge of water treatment procedures and water analysis. using standard chemical tests. They have a thorough knowledge of water treatment equipment and systems (e.g., cation/anion exchange units for demineralization of feedwater). WG-10 operators have a thorough knowledge of chemical and physical aspects of sulfur-containing fuels (e.g., oil, coal, and lignite), the chemical reactions

involved in combustion, and the relationship between fuel quality and combustion efficiency. They have: (1) a practical knowledge of environmental law and a thorough knowledge of procedures or adjustments during combustion to control pollutants in flue emissions (e.g., control combustion time, stack temperature, and excess air flow); and, (2) a thorough knowledge of the steam or HTHW distribution systems, user requirements, casualty control procedures, and how to bypass a section of the system to maintain service. They are knowledgeable of maintenance requirements (e.g., cleaning fuel guns, lubricating equipment, and power cleaning water tubes) and procedures necessary to perform operational repairs of limited to moderate complexity (e.g., repair or replace valves, gauges, water pipes, and refractory linings). In some work situations, operators at this level may have basic knowledge of electricity to test and replace wires, switches, and other basic electrical components.

WG-10 operators have skill: (1) in procedures and adjustments necessary to start, operate, and maintain a power boiler facility (i.e., power boilers and auxiliary and pollution control equipment) to meet load demands and maintain efficient levels of combustion and compliance with pollution laws; (2) in operating power boilers from cold starts through normal operation and hot or emergency shutdowns; (3) in operating and adjusting associated auxiliary and pollution control equipment; (4) in reading and analyzing information from gauges, meters, recorders, analog displays, and computer generated data to determine the operational status of the facility and necessary adjustments; (5) in specialized combustion techniques and adjustments to firebox variables such as fuel flow or feed, fuel/ air ratio, temperature, combustion time, and over air or under air feeds to control chemical pollutants in flue gas emissions and maintain combustion efficiency; (6) in setting and adjusting flame patterns in power boilers with single or multiple burners to ensure safe and efficient combustion; and, (7) in adjusting various combustion settings to compensate for varying qualities or conditions of fuels. They can: (1) stabilize boilers in a closed system when one boiler starts to go down while maintaining safe levels and efficient combustion; and, (2) make individual and sequential adjustments to a variety of controls and equipment to achieve and maintain maximum efficiency of equipment and systems being operated.

The WG-10 level is predicated on operating boilers **and** associated pollution equipment. Our fact-finding revealed that both fuels that you use; i.e., natural gas and, potentially, #2 fuel oil, do not entail operating the complex pollution control equipment described at the WG-10 level in the JGS. To deal with smoke or other pollutants, the actions available are adjusting the fuel micro-ratio valves or dampers to add more or less air to the combustion process. As a result, the full range of skill and knowledge to deal with demanding pollution control requirements found at the WG-10 level are not present at the base. Furthermore, the single power boiler you

operate does not provide the opportunity for performing the shutdown technical operations fundamental to WG-10 work. Therefore, because this factor does not fully meet the WG-10 level, but substantially exceeds the WG-8 level, it is credited properly at the WG-9 level.

#### **Responsibility**

WG-8 boiler plant workers receive work assignments from a supervisor or a higher grade worker in written or oral instructions. Instructions outline the work to be performed and the methods and materials to be used. WG-8 workers are responsible for: (1) observing meters and gauges to insure proper combustion and prescribed temperatures, pressures, and emissions and for performing routine operator maintenance and equipment: (2) understanding and responding to a variety of conditions indicated by meters and gauges; and, (3) performing work according to local, State, and Federal pollution control requirements. They are alert and recognize dangerous conditions in boilers, controls, valves, piping, and other equipment inherent to boiler operations to prevent equipment damage or explosion, and report problems to a higher grade worker or supervisor. Work is checked through observation of work methods and procedures. A higher grade worker or supervisor is available for advice and assistance on any work problem encountered and checks to see that assignments are completed according to instructions and established practices.

You work with greater responsibility in that you regularly operate the full boiler plant according to accepted operating procedures on shifts where your supervisor is not present. Your work approaches the WG-10 level where boiler plant operators receive work assignments from a supervisor or a higher grade operator who is in charge of the facility or work shift. They provide written or oral instructions that may be accompanied by diagrams, drawings, operating manuals, or special facility procedures to be followed during an emergeny, equipment failure, or system malfunction. WG-10 operators are familiar with the total plant layout including drawings and circuit diagrams of the boilers and auxiliary and pollution control equipment, to locate problems and determine appropriate action necessary to maintain adequate steam or high temperature hot water production. As compared to the predetermined methods and procedures at the WG-8 level, WG-10 boiler plant operators make more independent decisions and judgments regarding boiler plant operations (e.g., combustion and pollution control adjustments, troubleshooting techniques, and equipment maintenance and repair procedures). In maintenance and repair operations, they complete all work according to required specifications and use a variety of standard mechanical and basic electrical processes. They typically have primary responsibility for checking boilers and auxiliary and pollution control equipment to insure the operational efficiency of equipment and safety of personnel. They take immediate action to prevent interruptions to plant operations

and report all emergencies or dangerous conditions. The supervisor or a higher grade operator with shift level responsibility is usually available to provide technical assistance on difficult or unusual problems. Work is checked through occasional observation of operational efficiency, production reports, and adherence to established operating techniques and procedures.

While you are responsible for monitoring and dealing with complete boiler plant operations as at the WG-10 level, the system that you operate does not have the pollution control equipment and the attendant decision making requirements intended at the WG-10 level. Therefore, since your job substantially exceeds the WG-8 level, but does not fully meet the WG-10 level, this factor is credited properly at the WG-9 level.

# Special Additional Responsibilities

The WG-5402 JGS describes special circumstances that warrant additional grade credit for functioning as the "operator in charge" on second and third shifts and on weekends. These conditions must be clearly met to warrant the crediting of an additional grade. The "operator in charge": (1) is responsible for following written instructions from a supervisor or the "operator in charge" on the previous shift; (2) performs additional duties that are more responsible and require a slightly higher level of skill and knowledge than full performance level operators with a supervisor available to provide specific guidance and assistance, and must have a thorough knowledge of the entire steam or hot water system and user requirements to locate problems and initiate immediate corrective action to maintain adequate steam or hot water production; (3) in the absence of written contingency procedures, has the responsibility to decide whether to shut down a boiler and, if so, whether equipment in operation can still handle the load or whether to fire up another boiler and attempt to bypass the trouble until corrective action has been completed; (4) determines what work must be done and has the authority to call in "off-duty" maintenance personnel; and, (5) relays instructions to the next shift operator, including problems encountered and action taken. "Operator in charge" shift responsibility must be assigned on a regular and recurring basis; only one operator on a shift can be assigned this responsibility.

The appeal record shows that your job meets some, but not all, of the con-ditions listed in the WG-5402 JGS. You are assigned, on a regular and recurring basis, full shift responsibility. In this capacity, you function on the basis of oral instructions from your supervisor and the previous shift operator (#1), and provide instruction to the next shift operator, including problems encountered and action taken (#5). The record shows that you possess a thorough knowledge of the entire system. However, it is not possible for you to regularly perform above the full performance level that includes, as discussed at the highest grade level described in the JGS, the

skill necessary to stabilize boilers in a closed system when one boiler starts to go down. Therefore, condition #2 is not met.

There are no written contingency plans and procedures in place. The supervisor is available on the first shift. For second shift or weekend or holiday shifts, procedures are in place to contact the Chief of Operations/Maintenance and/or your supervisor to inform them of major problems such as damage to equipment, which provides them the opportunity to take or direct action dealing with the emergency. However, it is possible that a management official may not be available (they do not carry pagers) or that situations are such that action must be taken immediately, in these cases you have the authority to take whatever action necessary to correct an emergency or critical situation. Therefore, #3 is partially met.

Our fact-finding revealed that if staff is not available, discretion is given to you to call for additional personnel. This is done through recall procedures through the base police. The record, therefore, shows that while you participate in the emergency recall and authorization of overtime process discussed in the JGS, you are not delegated the full scope of authority intended in condition #4.

In summary, we find that because all the conditions are not clearly met, your job cannot be granted additional grade credit for shift responsibility.

# **Electronic Industrial Controls Mechanic, WG-2606**

The WG-2606 JGS is used for grading nonsupervisory work performed in installation, maintenance, troubleshooting, repair, and calibration of electronic controls in electronic control systems such as energy monitoring and control systems. Physical effort and working conditions are same at all grade levels.

# Skill and Knowledge

Mechanics at the WG-10 level perform overhaul, installation, maintenance, and repair of various types of electronically controlled industrial equipment that is characterized by moderate complexity of design, construction and function. They apply knowledge of electronic theory and circuits and basic logic circuits to power, timing, and motion controls, indicating and counting mechanisms, and similar devices that are found in boiler combustion control systems; material handling equipment; in process controls; or production equipment. WG-10 mechanics apply knowledge of electronic diagrams and schematics to understand the construction and operation of the controls and troubleshoot malfunctions. They must understand and apply knowledge of simple logic diagrams to follow signal and determine appropriate voltage conditions. They must know electronics theory and simple logic

circuitry. They must be skilled in the selection and use of the proper test equipment to prevent loading of circuit and damage to delicate parts.

Mechanics at the WG-11 level work on highly complex systems of electronic sensing and control. Such equipment includes environmental monitoring control systems (EMCS) which use special purpose, dedicated computers to store operating parameters and initiate adjustments. They require a thorough knowledge of logic circuits, of electronic amplification and control circuits, and of complex electrical, mechanical, hydraulic, and/or pneumatic systems. In addition, they must be wellgrounded in the environmental control processes to be accomplished by the equipment they work on in order to properly test and coordinate portions of the system.

WG-11 mechanics require a greater scope and depth of knowledge due to the greater complexity of the systems repaired. They must be skilled in the interpretation of engineering drawings that combine electrical and electronic schematics, logic diagrams and mechanical drawings to trace signal flow throughout the system while troubleshooting malfunctions of complex systems. They must know the characteristic voltage, current, and signal shape of input and output of a variety of microprocessors, integrated and discrete circuitry to recognize indications of improper operations and differentiate them from temporary anomalies caused by the testing itself. They must be skilled in the interpretation of installation and repair instructions that frequently describe only general applications rather than interface with the other component of the specific system, such as when EMCS controls are connected through customized interface devices to electrical, mechanical, pneumatic, or hydraulic controls of components that vary greatly in operating theories and tolerances as a result of differing in age, purpose and manufacturers' practices. Data conversion and processing units are an integral feature of controls at this level, requiring development of logic equations for analysis of logic circuits and the ability to program simple test instructions on an input console to check out particular circuits or functions.

# **Responsibility**

WG-10 mechanics work from oral or written instructions that provide a general statement of the problem. They refer to manufacturers' handbooks, technical manuals, schematics, block diagrams and, occasionally, logic diagrams which are complete and specific except in items of limited complexity, such as fuel flow test benches or engine thrust detectors, where most of the equipment is quite similar and knowledge of one make or model is easily adapted to other makes and models. They determine work sequence, select test instruments, locate the malfunction, and complete the repairs. They make operational tests of equipment to assure proper

operation. Work is spot checked by the supervisor or other higher graded employee to assure compliance with directives, specifications, and accepted trade practices.

WG-11 Electronic Industrial Controls Mechanics receive work assignments from the supervisor in written work orders and inspection reports and oral instruc-tions. They work according to available drawings, technical orders, or specifications. In comparison to the work performed by mechanics at the WG-10 level, work assignments at this level require more judgments and decisions regarding the methods and procedures for completing assignments that may involve extending the use of conventional tools and equipment, and improvising changes to techniques and procedures to reach specified parameters when aging of components or modification of circuits have changed operating conditions. The mechanics are responsible for knowing and judging the impact of repairs, i.e., the effects that changes and adjustments will have on the related integral devices of the equipment serviced. They are also responsible for making further tests and alignments to insure that the completed equipment is aligned and functioning properly.

The mechanics plan the work sequence and determine that equipment meets the requirements for serviceability, especially when working in remote user locations. They also are responsible for applying sound judgment in decisions that contribute toward greater operating life and efficient operations. The mechanics at this level must keep abreast of technological changes in the occupation, and provide technical guidance and assistance to lower grade employees. Technical advice is available on unusually difficult problems. Completed work is spot checked for compliance with accepted trade practices and specifications.

Although your work with the EMCS does approach the type of work described at the WG-11 level, the nature of your typical assignments are much more aligned to work assignments to your primary assignments and WG-2606 work at the WG-10 level. Our fact-finding revealed that you perform the following functions:

- -- Store operating parameters.
- -- Perform upload and download changes.
- -- Troubleshoot and repair the HVAC system, including replacing and repairing electronic components.
- -- Determine how the interaction of the electronics components and EMCS software affect system performance.
- -- Frequently change the control schedules for the EMCS for various functions and parameters.

- -- Perform various function tests and checks.
- -- Occasionally replace circuit boards or microchips.

You estimate that approximately 20 percent of your time is spent on EMCS work. Workload records provided by you shows that you were assigned EMCS related work for approximately 200 hours (or approximately 10 percent of the time) from July 1, 1995 to July 1, 1996. While this percentage of time may have increased over the last year and a half, the assignments are indicative of the nature of the work you perform. Of this 200 hours, 60 hours were involved with programming, reprogramming, or resetting system parameters, typical of user functions not involving actual troubleshooting and repair. In addition, many larger assignments involved use of the EMCS to identify, isolate and correct HVAC system problems, rather than repair of the EMCS. While some of these assignments have may involved determining and correcting problems in the EMCS, for the most part they involve using the EMCS incident to your Air Conditioning Equipment Mechanic and Heating and Boiler Plant Equipment Mechanic duties.

Because of the base's lack of an EMCS service contract, you do perform occasional repair work on the EMCS that approaches the WG-11 level, however, the percentage of such work does not constitute a large enough percentage to constitute grade controlling work within the meaning of the FWS. In FWS, the kind of repair work you perform is not typical of WG-11 work. Within the meaning of the FWS, JGS's must be read in concert with one another to be understood and applied correctly. The recently released JGS for Electronics Mechanic, WG-2604, provides a detailed definition of WG-11 work in the electronics group:

In comparison with grade 10 mechanics who service functionally independent components of moderate complexity or a system of limited complexity, grade 11 electronics mechanics install, modify, overhaul, maintain, troubleshoot, and repair complex electronics equipment and a complete operational system(s) consisting of numerous complex integral components which require a wide range of electronics principles and practices. . . . Grade 11 electronics mechanics apply a comprehensive knowledge of operating electronics principles such as circuit elements, digital logic, microprocessors, core memory, interface circuits, digital data transmission, microwaves, antennas, signal behavior amplification and display.

The range of repairs that you perform on the ECMS, and the range of skills and knowledge to perform those repairs is more circumscribed than envisioned at the WG-11 level. Accordingly, use of the Electronics Instrument Controls Mechanic JGS

for grade controlling purposes is inappropriate based on established FWS practices and principles.

# **Extraordinary Independence**

You claim that additional credit should be given your job based on the extraordinary independence you display due to your advance knowledge and experience in several trade areas. You note that your level of expertise, particularly in the EMCS, enables you to do higher level work than the other WG-10 mechanics in your unit. As noted above, the grading of a job is based upon an evaluation of the skills, knowledge, and qualifications that are necessary to performing the grade controlling work of the job. Comparison to other jobs or the performance of other employees does not affect this determination; nor does your individual performance of your duties. That you perform your job in a skilled and independent manner is consistent with our grade evaluation of the job, and no additional credit may be given.

# **Occupational Expertise**

You claim that your preparation of welding procedures should also be considered in evaluating your job. As noted above, evaluation of mixed grade jobs must carefully consider the nature of and time spent on occasional duties. Your JD identifies the occasional performance of miscellaneous trade functions: plumbing, welding, and sheet metal. In addition, your supervisor acknowledges you perform these trades on a recurring basis. He also indicated that because of your background and experience, you were typically assigned more complex jobs (i.e., preparing the local procedures). Although these assignments may be recurring, the time spent does not meet the criteria for mixed grade evaluation. You claimed that you spent approximately 100 hours on welding (the predominant miscellaneous trade) during the last year. As this approximates 5 percent of your work year, it may not constitute grade controlling work, and no additional credit is appropriate.

# Planning Working Operations/Working Leader

Working leaders have as a regular and recurring part of their jobs, and on a substantially full time and continuing basis, lead of three or more workers to accomplish work or train them in trades work. This work must be performed on a substantially full time basis. Typical leader duties are:

- -- passing on to other workers instructions from supervisors and getting work started;
- -- demonstrating proper work methods;

- -- seeing to it that needed plans, blueprints, and tools are available;
- -- obtaining information or decisions from supervisors on problems that come up during work;
- -- seeing to it that there is enough work to keep work crew busy;
- -- checking work during progress to insure it is in keeping with supervisor's instructions and deadlines; and
- reporting to supervisor on status of work and causes of delays; and answering questions of supervisor on overall work operations and problems.

Our fact-finding revealed that, although you may be looked upon to provide expertise in particular areas in which you have a strong background, you do not represent the supervisor nor perform the critical leader duties as envisioned by the leader standard. In addition, the supervisor expects the same level of independence from all his journey level employees and does not assign anyone to be an acting leader or project lead. No additional credit is given.

#### Title and Series Determination

As noted above, the Title and Series determinations for USRO jobs are dependent upon the criteria outlined in the USRO JGS. We have determined that the mixed work for your job is graded as follows:

Air Conditioning Equipment Mechanic, WG-5306-10

Heating and Boiler Plant Equipment Mechanic, WG-5309-9

Boiler Plant Operator, WG-5402-9

Because the highest level of mechanic work (WG-10) exceeds the highest level of operator work (WG-9), your job cannot be classified to the WG-4742 series. If the highest level of work represents a single occupation, the job should be titled, coded and graded to the JGS for the occupation that represents the highest skill and qualification requirements for the predominant line of work. Accordingly, we find that your job is allocated properly as Air Conditioning Equipment Mechanic, WG-5306.

#### Summary

In summary, we find that your job is classified properly as Air Conditioning Equipment Mechanic, WG-5306-10.

This decision constitutes a classification certificate under the authority of section 5346 of title 5, U.S.C. This certificate is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the Government. It must be implemented no later than the beginning of the sixth pay period following the date of the decision. By copy of this letter, your servicing personnel office must submit a compliance report containing a copy of the action taken with respect to you, e.g., SF-50. The compliance report must be submitted no later than 20 days after the compliance action directed in this decision is taken.

Under the provision of Public Law 93-392, OPM has the responsibility to determine whether jobs are placed properly in classes and grades in conformance with and consistent with published JGS's. When misclassifications are found, we have no choice but to direct corrective action. Please be assured that this decision is not intended to reflect on your ability, qualifications, or the quality of your performance. Rather, the decision reflects our evaluation of your duties and responsibilities assigned to your job in terms of a comparison with the appropriate job grading standards.

Sincerely,

/s/ 10/24/97

Robert D. Hendler Classification Appeals Officer cc: Civilian Personnel Officer [activity]

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