U.S. Office of Personnel Management Office of Merit Systems Oversight and Effectiveness Classification Appeals and FLSA Programs

Chicago Oversight Division 230 South Dearborn Street, DPN 30-6 Chicago, IL 60604

Job Grading Appeal Decision Under Section 5346 of Title 5, United States Code	
Appellants:	[Appellants' names]
[Repr Representative]	
Agency classification:	Aircraft Engine Mechanic (Propeller) WG-8602-10
Organization:	National Guard Bureau State Adjutant General [State] Air National Guard [#] Airlift Wing [Name] Directorate [City, State]
OPM decision:	Aircraft Engine Mechanic WG-8602-10
OPM Decision Number:	C-8602-10-02

/s/

Frederick J. Boland Classification Appeals Officer October 30, 1998 As provided in section S7-8 of the Operating Manual, Federal Wage System, this decision constitutes a certificate that is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the government. There is no right of further appeal. This decision is subject to discretionary review only under conditions specified in section 532.705(f) of title 5, Code of Federal Regulations (address provided in the Introduction to the Position Classification Standards, appendix 4, section H).

Decision sent to:

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	National Guard Bureau
[name and address of appellants' servicing	4501 Ford Avenue
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INTRODUCTION

The appellants contest their agency's classification appeal decision, dated August 14, 1997. They work under position number 80218000, classified January 24, 1997, as Aircraft Engine Mechanic (Propeller), WG-8602-10. The position is located in the [Name of] Section, [Name of] Branch, [Name of] Division, [Name of] Directorate, [#] Airlift Wing, [State] Air National Guard, State Adjutant General, National Guard Bureau, [City, State]. Upon appeal of the position's classification, the Department of Defense, Civilian Personnel Management Service agreed with the National Guard Bureau that the correct classification of the appellants' position is Aircraft Engine Mechanic (Propeller), WG-8602-10. The appellants state, however, that they deserve more credit for the skill, knowledge, and responsibility required for their position:

We the members of the [#] [Name of] Section believe that the classifier did not give the members of this section a fair and just grade. We do not believe that they gave much consideration to the skill & knowledge or the responsibility area. In this section, if anything happens to an aircraft we would be held responsible because we have signed it off as Airworthy. The next three areas below are areas in which we didn't get real consideration. ... WORK ASSIGNMENT ... SKILL AND KNOWLEDGE ... (and) ... RESPONSIBILITY

The appellants note the possibly grave impact of failing to perform their duties; however, the standard credits only properly performed work and does not consider the consequences of error. The appellants also fault the WG-8602 Series position classification standard for not reflecting advancements in technology. The accuracy of grade level criteria contained in a standard is excluded by regulation from appeal. Standards are consistent with the grade level definitions established in law. While work in an occupation changes over time, the criteria used to evaluate the difficulty and responsibility of the work generally remain stable. Occupationally related work not specifically addressed in a standard can still be evaluated by comparison to similar or related duties described in the standard and the stated criteria.

JOB INFORMATION

The appellants' jobs comprise 7 of the 10 Aircraft Engine Mechanic, WG-8602-10, positions in the [Name of] Section, which is headed by an Aircraft Engine Mechanic Supervisor, WS-8602-9. The [Name of] Section is part of the [Name of] Branch, which has two other sections: Avionics and Aerospace Systems. Avionics has higher grade employees in jobs such as Electronic Integrated Systems Mechanic and Electronics Mechanic. The [#] Airlift Wing converted in 1975 from its long tradition of flying fighter aircraft to flying the C-130 Hercules cargo hauling aircraft. This unit provides worldwide air transportation for personnel and cargo. The Hercules aircraft is known for its short take off and landing capability. The C-130 is a four turboprop engine workhorse with high capacity. Each engine produces about 4,000 horse power. The [Name of] Branch supports the [#] Airlift Wing maintaining and repairing the organization's eight C-130 Hercules aircraft.

Most of the appellants' time (approximately 75 percent) is spent with line engine repairs. When the unit's small shop for propeller repair was closed in 1995, duties for propeller repair were put

together with those of the aircraft engine repair job. This consolidation of duties continues in the appellants' current work. So, in addition to doing engine repair, the appellants handle propeller repair except when the propellers have to be returned to a depot for major repair. Also, as part of the appellants' duties, they may oversee the training of Guardsmen when they are present on drill weekends or they are drilling as scheduled during the week. These Guardsmen are not present as civilian employees under the appellants' supervision but the appellants spend 15-20 percent of their time in duties which provide on-the-job training for these assigned personnel.

The appellants maintain, troubleshoot, remove, repair, install, inspect, test, and perform operational checks on the turboprop engines and auxiliary power units of C-130 aircraft. They remove, install, repair, modify, and overhaul engines, reduction gear boxes, turbine modules, compressor modules, and auxiliary power units in accordance with directives. They perform operational checks of engines, auxiliary power units and subsystems during aircraft maintenance ground runs; perform isochronal and special inspections on engines and auxiliary power units; and operate engines in test cell facilities and record test data. Typical engine repairs involve work such as inspections of engines, bore scoping turbines, taking engines off aircraft wings and replacing them with spare ones, replacing gear boxes, oil filters, and fuel filters.

The appellants operate, inspect, and maintain computerized engine test/trim automated systems (ETTAS) on the engine test cell. They evaluate, identify and correct propeller and engine components causing vibration or impending failure using the ETTAS system and vibration analyzer. They evaluate engine and propeller performance by computing engine torque and specific fuel consumption. The appellants also troubleshoot engine electrical problems, such as stray voltage and bad circuit boards.

The appellants inspect and clean propeller parts and blades; disassemble and assemble propellers; test propeller assemblies for serviceability, install propeller assemblies on aircraft; evaluate propeller performance; and accept or reject the individual components. They operationally check propeller assemblies using test cell facilities and record test data. They test propellers using electric and hydraulic test stands to check for proper operation and evidence of oil leakage. They modify propellers in accordance with Time Compliance Technical Order directives. They perform operational checks of installed propellers during aircraft maintenance ground runs in accordance with approved checklists. They perform isochronal and special inspections on propellers. They perform dynamic propeller balancing and test the propeller integrated synchrophasing.

The test cells for engines and auxiliary power units are subject to periodic inspections. In the more frequent inspections the appellants inspect the test cell and run diagnostics tests to find faults that are indicated by technical orders and computer diagnosis. Appellants check wiring, solder connections, and may change circuit boards. Less frequent inspections require dismantling of units except for the computerized unit or "cab". The cab is calibrated every six months through a contract with a vendor. The inspections additionally involve the appellants checking for physical integrity of metals and parts, accuracy of readings, line deterioration, and wiring continuity.

ANALYSIS AND FINDINGS

PAY SYSTEM DETERMINATION

A job is exempt from the General Schedule if its primary duty involves the performance of physical work that requires knowledge or experience of a trade, craft, or manual labor nature. The appellants' primary duty involves mechanical work and consequently falls under the Federal Wage System (FWS).

CODE AND TITLE DETERMINATION

An FWS job is coded to the occupation which represents the best match between the content of the job and the definitions of the various occupations. Jobs requiring the performance of work in two or more occupations are coded to the occupation which is most important for recruitment, selection, placement, promotion, or reduction-in-force purposes. This is ordinarily the occupation having the highest skill and knowledge requirements, as long as that occupation's duties are regular and recurring.

The appellants state:

... With today's turboprop aircraft, the electronic and integrated systems like that which is on the C-130 aircraft engine and propeller systems, work with and independently of each other ... 3) Grading Standard 8602 does not explain the complexity of today's aircraft. The electronic and integrated systems as explained in 2610 Electronic Integrated System Mechanic gives a portion of the skill and knowledge we are required to maintain. 4) Grading Standard 8602 does not mention anything about the propeller system except to check as a source of vibration. The propeller system is a very complex system and is integrated to the engine. At a certain position of the throttle, the engine drives the propeller and at a different position, the propeller controls the engine ...

The related duties as represented by the electronics knowledge requirements involved in the computerized ETTAS, turboprop engine, temperature data system, propeller assemblies and synchrophasing system do not require the level of skill and knowledge requirements involved in the complex multiplicity of electronic systems and equivalents in the WG-2610 Electronic Integrated Systems Mechanic occupation. This occupation involves electronic integrated systems such as fire control, flight/landing control, automatic test equipment, flight simulators, bombing navigation, and electronic warfare. Even though the C-130 engine and propeller are coupled, they share few of the characteristics (scope, operation, complexity of theory and design) of the systems described in the WG-2610 standard.

Work on such systems demands an extensive knowledge of electronics (such as the development and propagation of signals, measurement of forces, computation of data) and control systems, as well as mechanical and hydraulic knowledge. The appellants' electronics related work, in contrast, concerns electrical and electronic engine components and the operation and maintenance of automatic test stations, which fall under other occupational areas and demand no higher skill than their mechanical work. For example, troubleshooting and repairing test stations and their associated peripherals falls under the Electronics Mechanic, WG-2604, occupation. Even here, the WG-10 level of electronics knowledge and range of repairs exceeds the demands of the appellants' work. Unlike the appellants, WG-10 Electronics Mechanics apply a thorough knowledge of operating electronic principles such as microminiaturized digital and solid state integrated circuits, transistors, diodes, tube circuits, antennas, signal transmission, oscillation, and amplification. Electronics Mechanics apply this knowledge to troubleshoot and repair malfunctions where circuit theory must be used to understand the operation, not only of individual circuits but also the interaction of other circuits to create a malfunction. They evaluate and perform functional tests on items to determine the extent of repair required, make repairs, and replace defective components and parts. They use oscilloscopes, multimeters, etc. to isolate component defects that the automated test equipment cannot detect.

The appellants' engine repair work, which occupies most of their time, falls under the Aircraft Engine Mechanic, WG-8602, occupation, which includes the maintenance, troubleshooting, repair, overhaul, modification, and test of aircraft turbine and reciprocating engines. This work demands a level of knowledge and skill significantly exceeding their electronics related work. Their propeller repair work falls under the Aircraft Propeller Mechanic, WG-8810, occupation, which includes troubleshooting, repairing, adjusting, overhauling, modifying, testing, and servicing aircraft propeller assemblies and their components. It requires no higher level knowledge and skill than their engine repair work and is of no more importance for recruitment, selection, placement, promotion, or reduction-in-force purposes. The Aircraft Engine Mechanic, WG-8602, occupation, therefore, best reflects the primary demands of the job, the work operations performed, and the skills utilized.

The prescribed title for WG-10 and above jobs in the WG-8602 occupation is *Aircraft Engine Mechanic*.

GRADE DETERMINATION

FWS work is graded based on the regular duties of the job that involve the highest skill and qualification requirements, even though the duties may not be performed most of the time. (Duties performed only in the absence of another employee, to meet emergency workloads, or for development are not considered regular and recurring.) Work in two or more occupations is graded at the highest skill level required, but no extra credit is given for skill in more than one occupation.

A job is graded as a whole against the level of demands found at differing grades. These demands are expressed in the job grading standard as four factors: 1) skill and knowledge, 2) responsibility, 3) physical effort, and 4) working conditions. No single factor is considered by itself, but only in relation to its impact on the other factors. The job is classified to the grade that best represents the overall demands of the work. The WG-8602 occupation describes work at the

WG-8, WG-9 and WG-10 levels. Higher graded work in the occupation is unusual and therefore not covered under the standard.

FACTOR 1: SKILL AND KNOWLEDGE

This factor covers the nature and level of skill, knowledge, and mental application required to perform the work.

The appellants state:

... Grading Standard 8602 does not recognize the skill, knowledge or responsibility involved with being aircraft run certified, red X certified, or being engine/apu test cell certified. When you perform any of the afore mentioned items, you the worker are held as the sole person responsible for what happens to the equipment or peoples involved. The standard does not reflect the knowledge or training needed to acquire this level and to remain current.

Trades and labor jobs are graded considering the actual skill, knowledge, and other requirements of the work performed. The requirement that employees be licensed or certified to perform work, or that they certify with their signatures that standards of quality and safety have been met in performing work, does not in itself affect the grades of their jobs. Although not specifically mentioned in the general description of Aircraft Engine Mechanic work, the appellants indicated items are covered by the WG-8602 job code. Aircraft Engine Mechanics such as the appellants troubleshoot malfunctioning engines. In doing so, they are described as determining the degree of repair. These repairs may or may not involve a red-X, which means that the correction of a major deficiency needs to take place before the aircraft or component leaves the shop and entails the use of appropriate procedures and inspection of the work. In the job code, Aircraft Engine Mechanics are also described as performing assignments such as troubleshooting and repairing operational engines in aircraft on the flight line.

The appellants state:

Above a 10 level would be Red X certified and inspect other subordinates work. Must supervise and train up to 3 subordinates. Must be able to comprehensively troubleshoot all systems of the power plant as now they are integrated as engine and propeller system on C-130 Aircraft. Must be engine run certified which gives your taxi qualifications. You also must be recertified each year, which requires you to attend an engine run simulator school.

As the need arises, the appellants describe to other specialists in their Branch the work required of them in relation to work done by the appellants. For example, in order to complete a repair a technical order may require a hydropic specialist to change the hoses on a hydraulic pump that the aircraft mechanic is repairing. While the appellants' activity contributes to instructions about the work to be completed, it is not supervisory. As mentioned earlier, the appellants also plan and conduct formal classes of instruction in techniques of repair and maintenance of aircraft engine, propeller, auxiliary power unit, and related equipment for Guardsmen. They evaluate the effectiveness of this training by observation and through written or oral examinations. They

advise supervisors of the experience and skill levels of assigned personnel and maintain training documentation. The appellants' work with these Guardsmen in training is not supervisory. Instead, it is typical of the advice and instruction journey level workers traditionally provide to aid in the development of other workers in the trade.

WG-10 level employees must have the ability to repair and rework engine parts and components and replace accessories such as portions of electrical, pneumatic, and hydraulic systems, and to reassemble and trim the unit to maximum operating capability; the ability to troubleshoot engine malfunctions, including the ability to interpret trouble reports from instrument readings or from observed appearance, and to make a tentative diagnosis; and the ability to select needed tools and test equipment, disassemble the engine or accessory systems to locate defects, determine the cause of defects, and determine the repairs needed.

The clearing of red-X documentation on the engine and propeller related components is part of the appellants' troubleshooting and inspection that may involve performing aircraft full power runs to complete engine and propeller efficiency checks. In the process of making the runs, the appellants taxi aircraft in accordance with applicable directives. The checks are subject to the review of the supervisor and are part of the troubleshooting and decision making that is comparable to that performed at the Aircraft Engine Mechanic WG-10 level.

The appellants also state:

Above a 10 level must have a comprehensive knowledge of the operation and repair of conventional aircraft engines and propeller systems and subsystems. This includes interrelationships of all systems making up the power plant system. We also operate and maintain the engine run test cell and auxiliary power unit test cell.

At the WG-10 level employees must have a thorough knowledge of the installation, operation, and repair of gas turbine or reciprocating aircraft engines and accessory systems to maintain, repair, or test different types of engines in aircraft test cells or maintenance shops, to determine methods of repair to use; and a thorough knowledge of engine repair practices to identify and choose correctly between alternative methods and trade techniques, and to adapt accepted repair procedures to new or unfamiliar engines or accessory systems.

The appellants' job description along with information obtained from the audits conducted with the appellants' representative and their supervisor support crediting the WG-10 level for skill and knowledge. The appellants' knowledges are used in troubleshooting and repairing engines from the flight line to the test cell. The appellants' skills and knowledges used in work with the total engine system when troubleshooting or evaluating engine performance are comparable to those at the Aircraft Engine Mechanic WG-10 level.

We evaluate this factor work at WG-10.

FACTOR 2: RESPONSIBILITY

This factor covers the nature and degree of responsibility involved in the work, given its complexity and scope, the difficulty and frequency of judgments and decisions made, the supervisory controls, and the work instructions and technical guides used.

The appellants state:

Above a 10 level has the responsibility for guiding and controlling the maintenance efforts on assigned engines and propellers systems. Responsibility includes the following items 1) determining the nature and extent of required repairs 2) aircraft grounding decisions 3) getting the right specialist support when required 4) assigning picific operations to personnel assigned to work on the engine and propeller. 5) clearing red X's 6) over all control of work performed on aircraft engines and propellers.

In regard to the above responsibilities the appellants work independently but still under general supervision. They are expected to plan work sequences, select tools and repair parts and otherwise carry assignments through to completion, referring only unusual and difficult problems to the supervisor. At the WG-10 level, in addition to receiving assignments orally or through work orders, Aircraft Engine Mechanics independently determine the type and extent of repairs needed and go on to complete repairs with occasional spot checks during progress. They refer to operations logs, trouble reports, and technical manuals. Their supervisor ensures that overall work meets accepted trade standards and provides assistance on unusual problems when requested.

The appellants furnished a memorandum concerning the classification of crew chief jobs which included other responsibilities in addition to those claimed by the appellants. The crew chiefs' work is responsible for the overall maintenance, servicing and documentation for aircraft and is covered by the job standard for Aircraft Mechanic, WG-8852. The crew chiefs' responsibilities differed for assigning specific operations to personnel assigned to work on the aircraft, inspecting the work completed, and overall control of work on the aircraft.

The level of responsibility described by the appellants for guiding and controlling their work efforts falls within the WG-10 level description. The job fully meets the WG-10 level.

We evaluate this factor at WG-10.

FACTOR 3: PHYSICAL EFFORT

This factor assesses the physical effort involved in the work according to its nature, degree, frequency, and duration of exertion.

As common to most workers in the occupation, regardless of grade level, the appellants frequently lift equipment and components weighing from 20 to 50 pounds and, with assistance, lift up to 100 pounds.

We evaluate this factor at WG-10.

FACTOR 4: WORKING CONDITIONS

This factor covers the usual hazards, physical hardships, and conditions to which workers are exposed. Exposure to unusually sever conditions (hazards, physical hardships, or working conditions, such as working with or in close proximity to virulent micro-organisms) is compensated by environmental pay differentials. Related demands on skill, knowledge, and responsibility are accounted for in the standard.

As common to most workers in the occupation, regardless of grade level, the appellants are subject to the dangers from exposure to toxic fumes, high pressure air and fluids, engine noise, rotating propellers, heat blast, intake suction, liquid oxygen, electrical voltage, fire or explosion of aircraft fuels, lubricant, paints and solvents, and fast actuating metal surfaces such as landing gears and flaps.

We evaluate this factor at WG-10.

DECISION

The appellants' work equates to the WG-10 level in all four factors. Overall, the work is most like that found at the WG-10 level. Consequently, the proper grading of the appellants' job is Aircraft Engine Mechanic, WG-8602-10.