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

Dallas Oversight Division 1100 Commerce Street, Room 4C22 Dallas, TX 75242

Job Grading Appeal Decision Under Section 5346 of Title 5, United States Code

Appellants: [appellants' names]

Agency classification: WG-3705-9

Nondestructive Tester

Organization: [organization]

Department of the Air Force

OPM decision: WG-3705-9

Title at Agency Discretion

OPM decision number: C-3705-09-01

/ 5/	
Bonnie J. Brandon	
Classification Appeals Officer	
9/17/99	
_Date	

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:

[appellants' names]

Civilian Personnel Officer [installation]

c/o [representative's address]

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

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

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Introduction

On May 20, 1999, the Dallas Oversight Division of the U.S. Office of Personnel Management (OPM) accepted an appeal from [the appellants]. The appealed position is assigned to the [organizational location at the installation]. The agency has classified the position as Nondestructive Tester, WG-3507-9. The appellants believe their position should be classified as Nondestructive Tester, WG-3507-10, and have filed an appeal with this office under the provisions of section 5346 of title 5, United States Code.

The appellants certified to the accuracy of the duties described in position number [position number], dated August 6, 1997. However, they believe that the agency's evaluation of their position does not adequately reflect their various certifications, increase in duties and responsibilities, and the scope and complexity of their current responsibilities.

The appellants' supervisor certified that position number [position number] accurately reflects the duties performed by the appellants. We find that position number [position number] is adequate for job classification purposes. In reaching our classification decision, we considered information submitted in writing by the appellants and their agency, and information obtained by telephone from the appellants and their supervisor. As required by law, we classified the job based upon its duties, responsibilities, and qualification requirements as compared to the criteria specified in the appropriate OPM classification standards and guidelines (sections 5103, and 5346 of title 5, United States Code).

General issues

The appellants believe their jobs are graded incorrectly because of the job grading standards used to evaluate the nondestructive test work at [the installation]. They believe the agency is not uniform in their choice of standards for grading what they believe to be comparable work. The appellants state they are required to take the same examinations and have the same ultrasonic and eddy current testing certification as the WG-10 positions in other shop areas at [the installation]. By law, jobs must be graded solely by comparing their current duties and responsibilities to OPM job grading standards (JGS's), guidelines, and instructions. Other methods of evaluation, such as comparison to other jobs that may or may not have been graded correctly, are not authorized for use in grading a job.

Like OPM, the appellant's agency must grade jobs based on comparison to OPM JGS's and guidelines. In managing their job grading programs, agencies have the primary responsibility for ensuring jobs are graded consistently with OPM appeal decisions. If the appellants consider their jobs so similar to others that they warrant the same classification, they may pursue this matter by writing to their agency's personnel office. In doing so, they should specify the precise organizational location, series, title, grade, duties, and responsibilities of the jobs in question. The agency should explain to them the differences between their jobs and the others, or take action to correct their classification to be consistent with this decision.

The appellants state their workload has increased on a consistent basis. However, work volume cannot be considered in determining the grade of a position (*The Classifier's Handbook*, chapter 5). Duties and responsibilities assigned to jobs flow from the mission assigned to the organization in which they are located. The jobs created to perform that assigned mission must be considered in relation to one another; i.e., each job reflects a portion of the work assigned to the organization. It is an established job grading principle that duties performed in the absence of another employee, to meet emergency workloads, or for training purposes to gain qualifying experience for higher graded jobs may not be considered "regular and recurring" for job grading purposes.

Job information

The appellants are responsible for inspecting a variety of jet engine blades (e.g., first stage, compressor, or high pressure turbine / low pressure turbine section) on a variety of engines. The inspection methods consist of visual, dimensional, liquid penetrant, magnetic particle, ultrasonic, and eddy current. The appellants set up various nondestructive ultrasonic or eddy inspection methods designated in the technical orders (TO), applicable time compliance technical orders (TCTO), or the work control documents (WCD). He or she attaches the appropriate probes or transducers, and uses a given test standard to calibrate equipment in accordance with inspection guidelines, engineering drawings, workbooks, nondestructive inspection (NDI), technical literature, and calibration templates, and manipulates the probe or transducer over specified areas. Test results may be represented by cathode ray tube (CRT), visual presentation, digital caliper readouts, alarm system or a combination thereof. The appellants interpret test results based on appropriate guidelines.

The duties of the appealed job require knowledge to interpret test results to determine if blades are acceptable, repairable, or condemned based on TOs, TCTOs, quality standards, and Nondestructive Inspector (NDI) guidelines. The appellants are required to mark defective areas and dimensions, and record test results on repairable blades; initiate repair work control documents, and reinspect all repaired components returned to the NDI shop. They set up different nondestructive fluorescent penetrant or magnetic particle methods required in the TO, TCTO, or WCD; perform inspections by dipping items into penetrant or magnetic particle baths, and apply special lighting to penetrant to identify fatigue cracks, welding overlaps, cold shuts, surface cracks, pipes, inclusions, or forging laps. They wash, dry, magnetize, or demagnetize blades; and notify supervisors of abnormal defects for which no repair inspection instructions are available, where failure of parts that might result in an unsafe flight condition, or of parts failure attributable to faulty design.

Occupation and title determination

The WG-3705 Nondestructive Testing occupation includes jobs involved in the nondestructive examination of metals, composites, ceramics, plastics and materials for internal and external structural defects, delaminations, corrosion, and moisture penetration using magnetic particle,

liquid penetrant, eddy current, radiographic, ultrasonic, or other types of nondestructive test processes and equipment. The work includes equipment setup, operation, adjustment, and evaluation or interpretation of test reading or results within established parameters for acceptance or rejection. This occupation does not include jobs which primarily require (1) full performance level knowledge and skill of the work processes involved in producing or repairing the items or materials tested; or (2) technical knowledge of engineering, physical, or other sciences.

As indicated previously, the purpose of the appealed position is to perform visual, dimensional, liquid penetrant, magnetic particle, ultrasonic, and eddy current inspections on a variety of jet engine blades. The appellants use various nondestructive inspection methods prescribed for each production run, and perform tests to identify the serviceability of the blades; evaluate the identified flaws found in the prescribed critical area or areas of the blades, and determine the acceptability, repairability or condemnation of each blade. On repairable blades, they record test results and mark defective areas and dimensions; initiate work control documents that specify the needed repairs; reinspect blades once repairs have been accomplished; and determine if the blades are acceptable, need further repairs, or are condemned. The appealed position is correctly placed in the Nondestructive Testing Series, WG-3705.

The WG-3705 occupation is not covered by an OPM job grading standard. Therefore, according to section III.B of the Job Grading System, Part 1, the appellants' agency may choose the official title for their job. In doing so, the agency should follow the titling guidance in that section.

Standards determination

As indicated above, there is no published job grading standard for the WG-3705 occupation. When there are no published standards, jobs are classified by comparison with OPM standards covering other occupations. The standards selected should be as similar as possible in terms of similar work and work processes, the knowledge and skills required, and the level of difficulty and responsibility.

The appeal record indicates that consideration was given to four standards to provide grading criteria: WG-3414 Machinist, WG-3710 Welder, WG-3711 Electroplater, and the WG-8602 Aircraft Engine Mechanics series. The new standard for Machinist incorporates the 3441 Machine Tool Operator work into the 3414 Machinist occupation. The 1973 standards for both occupations have been canceled and replaced by the new 3414 Machinist standard.

The Aircraft Engine Mechanic standard covers work involving maintenance, trouble shooting, repair, overhaul, modification, and test of aircraft turbine and reciprocating engines. Generally, they must have knowledge of aircraft engine parts, components, and accessory systems; assembly and disassembly practices; and the mechanical systems in order to assemble parts to close tolerances, make adjustments, etc. At the WG-9 level, Aircraft Engine Repairers assemble major components and accessories, such as compressor sections, rotors, combustion chambers, turbine wheels, and accessory drive gear boxes, and complete the final assembly build up of the total

engine by installing accessories such as fuel regulators, ignition systems, and pumps. The appellants' position does not perform the full range of engine assembly work. The appellants must have knowledge of assembled engine configurations to determine the location of blade damage when using borescope procedures on complete engines. They are not required to have a thorough knowledge of aircraft engine assembly practices and the mechanical systems and measuring instruments common to the occupation.

Welding work involves the welding of metals and alloys. It requires knowledge of electric, gas, and other welding processes and the skill to apply these processes in manufacturing, repairing, modifying, rebuilding, and assembling various types of metal and alloy parts, equipment, systems, and structures. Welders must have knowledge to determine the appropriate techniques for welding different metals and skill in using those techniques to prevent burning or distortion and to produce a product that meets accepted standards. The appealed position is not required to have knowledge of the different gas torch and electric welding processes to weld all types of commonly used metals and alloys.

We have selected the WG-3711 Electroplater, and the WG-3414 Machinist standards as being the most appropriate to grade the appellants' position.

Grade determination

The Federal Wage System uses four factors to determine the grade level of Wage Grade jobs: Skill and knowledge, Responsibility, Physical effort, and Working conditions. Grade levels of wage jobs are determined by the highest grade of work that is regular and recurring as defined by established OPM job grading guidance. To be credited, a level in a JGS must be met fully. The appealed position is evaluated based on the duties contained in the following series:

Evaluation using Electroplater Series, WG-3711

This series covers nonsupervisory work involving the use of electrolytic and chemical processes to plate, coat, and treat surfaces of metals and metal alloys for purposes of protection, repair, maintenance, and fabrication of parts and equipment. The work requires a knowledge of the preparation, testing, and maintenance of various electrolytic and chemical solutions and skill in controlling and using them in the processes required to prepare, plate, coat, or otherwise treat various types of surfaces.

Skill and Knowledge

The WG-9 electroplater is skilled at using a variety of electrolytic and chemical processes to accomplish precision, protective, and decorative metallic or nonmetallic finishes on a wide array of metal and alloy objects. Grade 9 electroplaters use an extensive knowledge of the plating process to identify basic problems such as inefficient cleaning, spotty stripping, low cathode efficiency, pitting, poor throwing power, faulty adhesion, nonuniform plating, or corrosion

failure. They use their knowledge of treating solutions to neutralize chemicals and replenish solutions by adding various agents such as brighteners, wetting agents, and other compounds in order to produce desired characteristics of deposited metal, crystal size, brittleness, or ductility. They apply skill in using precision instruments such as: magnetic thickness gages, electronic thickness testers, dial bore gages, micrometers, and calipers to ensure required plating thickness before removing parts from holding devices.

Similar to the knowledge and skill required for grade 9 electroplaters, the appealed NDI tester position must have knowledge to perform inspections by dipping items into penetrant or magnetic particle baths, and applying special lighting to penetrant to identify fatigue cracks, welding overlaps, cold shut, surface cracks, pipes, inclusions or forging laps. Comparable to grade 9 electroplaters, the appellants use knowledge of nondestructive inspection methods to identify inferior casting, inferior fabrication by manufacturing processes, cracks, surface/subsurface flaws, corrosion, separation in bonded structures, integrity of welds, hardness or volume of materials. The appealed position has direct correlation to grade 9 electroplaters, in that, the appellants use knowledge of treatment chemicals to select the appropriate magnetic particle solution from several different formulas.

The WG-9 level is the highest level described by the standard. If jobs differ substantially from the skill, knowledge, and other work requirements described in the grade levels of the standard, they may be graded above or below these grades on the application of sound grading methods. The appealed position equals but does not substantially exceed the level of knowledge and skill for grade 9 electroplaters, therefore, further comparisons are not required.

Responsibility

At the WG-9 level, electroplaters receive work assignments from the supervisor through technical job orders that normally include blueprints or sketches, or through oral or written general instruction. They plan their own work and determine the procedures and processes to be used, and frequently organize their own work so as to handle several jobs or processes simultaneously. Grade 9 electroplaters are responsible for determining the cause of equipment process failure and for making corrections or adjustments; and determine the need for special adaptation or modification of standard operating methods, procedures, and techniques to insure quality workmanship on new or unusual jobs. At this level, the work is normally checked after completion for conformance with job specifications and acceptable trade practices.

The level of responsibility for the appellants' position is comparable to the WG-9 electroplaters. Like grade 9 electroplaters, the appellants receive work assignments from the supervisor or higher grade engineers, and set up the equipment in accordance with inspection guidelines (TO's, TCO's, quality standards, engineering drawings, workbooks, or NDI technical literature). The appellants are responsible for obtaining all required equipment to complete the inspections; interpret test results based on TO's, TCO's, quality standards and NDI guidelines; and are responsible for marking defective areas and dimensions on the engine blades. They determine if the blades are

acceptable upon return to the NDI shop or needs further repairs. The work is normally checked by the supervisor upon completion for compliance to the TO and other applicable guidelines.

Physical Effort

At the WG-7 and 9 levels, electroplater work requires continual use of both hands, and frequent standing, stooping, bending, and lifting. At the grade 9 level however, physical exertion is greater because the parts and equipment handled vary in shape, size, and intricacy. Greater and more frequent effort is also required in preparing and installing a wider variety of handling and holding devices at the grade 9 level. Grade 9 electroplaters frequently handle objects weighing up to 20 pounds and occasionally as much as 80 pounds.

The level of physical effort exerted by the appellants is evaluated as comparable to grade 9 electroplaters. The appellants perform work that may require lifting objects up to 75 pounds and perform active standing, prolonged sitting, and walking. They are also subject to eye strain when using black light, and must have dexterity in both hands.

Working Conditions

At the WG-9 level, electroplaters work inside shop areas having adequate light, ventilation, and safety control. Electroplaters are frequently exposed to acid solutions, solvents, hot waxes, noxious fumes, excessive humidity, and a variety of caustic chemicals. Protection from exposure to burns, scalds, and skin irritations often require the workers to wear uncomfortable safety equipment such as rubber gloves, rubber aprons, goggles, face shields, or respirators.

The working conditions for the appealed position are evaluated as comparable to those of WG-9 electroplaters. The NDI engine blade shop is a warehouse which is noisy, dirty, and poses risks of skin irritation from processing solutions. The appellants wear aprons, safety gloves, and goggles to protect the skin against the penetrant solution.

Evaluation using Machinist Series, WG-3414

Machinist work involves manufacture of parts and items of equipment from castings, forgings, and other raw stocks made of various metals, metal alloys, and other materials, and/or machining operations required in the repair of such items. The work requires the use of various types of conventional and/or computer numerical control (CNC) machine tools and their attachments to perform machining operations in the repair and/or manufacture of parts from raw stock.

Skill and knowledge

The WG-9 machine tool operators have skill in operating a variety of conventional and CNC machine tools such as lathes, boring mills, milling machines, grinding machines, shapers, planers, or radial drills. They extend the scope of operations on these machines by applying additional skill

in using various standard machine attachments such as rotary tables, magnetic, chucks, gear changing boxes, angular drive heads, and additional drive heads and attachments. At the WG-9 level, they have skill in normal machine setups, and on CNC machines they do repetitive setups on two and three axis machines. Adjustments are performed according to preprogrammed requirements, and are limited to coolant flow, and settings necessary to establish dimensional tolerances. The grade 9 machine tool operators have knowledge of various metals, alloys, and other materials, and their machining characteristics that enable them to select the proper cutting tools, and determine correct machine feeds and speeds necessary to perform the job.

Comparable with the knowledge required for WG-9 machine tool operator, the appellants must have knowledge and skill in setting up and operating similar machines and equipment used to perform the various nondestructive tests on a variety of jet engine blades. They must have knowledge of borescope procedures and assembled engine configurations to determine the location of blade damage using eddy current and ultra sonic procedures.

Similar to WG-9 machine tool operators, the appellants must have knowledge of a variety of metals and nonmetals, e.g., steel, titanium, single crystal, rener 41, and stainless steel and their characteristics. They perform penetrant and magnetic particle bath inspections, and specialized knowledge is required to effectively wash, dry, magnetize or demagnetize blades. They use TO's, TCTO's, WCD's, engineering drawings, workbooks, NDI inspection technical literature, and calibration templates to set up, calibrate, and interpret test results. The appellants identify repairable blades, record test results, and mark defective areas and dimensions. The level of skill and knowledge for the appealed position is comparable to WG-9 machine tool operator.

At the WG-10 level, machinists must have skill and knowledge in performing the full range of machining operations on most types of conventional or CNC machine tools, and their various attachments. Grade 10 machinists must have knowledge of a greater variety of metals and other materials, and skills to plan and lay out work from blueprints, work sheets, and drawings that may have missing or incorrect information. They determine work procedures, machine tools, equipment, and attachments to be used; proper type and size of raw stock; sequence of machining operations; and the speeds and feeds necessary to attain the required finishes and tolerances.

At the WG-10 level, machinists must have a knowledge of trade mathematics including plane geometry and use of trigonometric functions and machinists handbook formulas. They have skill and knowledge in manufacturing an entire item, carrying out all machining operations necessary for completion, and performing precision handwork such as filing, scraping and lapping to fit, assemble, and finish machined parts. Machinists at this level have the knowledge and skill to setup and operate a variety of CNC machines and to debug programs developed by higher grade workers to perform machining operations involving Level 1 complexity.

The level of knowledge required for the appealed position is not comparable to the knowledge required for grade 10 machinists. The appellants set up the equipment in accordance with inspection guidelines (TO's, TCTO's, WCD's, etc.), and are responsible for working solely with

a variety of jet engine blades and vanes. Unlike grade 10 machinists who may manufacture an entire item, carrying out all machining operations and determining the procedures and layouts to be used, the appellant's position performs specific tests on a limited variety of items for which calibrations, methods, and acceptance or rejection determinations allow little or no deviation from standards.

Responsibility

At the WG-9 level, machine tool operators receive work assignments from their supervisor or higher grade worker. Work assignments are typically supplemented with blue prints and instructions for the machine and attachments to be used, sequence of operations on each machine, and critical dimensions or unusual aspects of the job. Machine Tool operators at this level are responsible for obtaining the prescribed fixtures, tools, and materials; setting up the job in the machine; determining the proper machine speeds and feeds based on the type of material to be machined and the tolerances desired; maintaining dimensions and tolerances to meet job specifications; and ensuring that machined parts meet dimensional and finish requirements. Grade 9 machine tool operators may assist or instruct lower grade workers in setting up machines, obtaining materials, and following through to assure satisfactory completion of the job. The work may be checked during progress or upon completion, and a supervisor or higher graded worker is available for consultation or advice on any problems.

Similarly, the appellants receive work assignments from the supervisor who gives advice and assists in solving unusual problems when requested. The supervisor determines when certain processes will take place during a specific time period. The daily work procedures are listed on the shop bulletin board by the supervisor, e.g., ultrasonic or magnetic particle processes. The appellants are responsible for obtaining the appropriate equipment to complete the required inspection. The supervisor is always consulted in the event of any missing instructions or problems in the TO or other instructional guidance. The level of responsibility for the appealed position is evaluated at the WG-9 level.

At the WG-10 level, machinists receive work assignments from the supervisor that are accompanied by blue prints, sketches, drawings, models of parts, or other work specifications. In some situations, the blueprints or drawings may have missing or incorrect information. Grade 10 machinists independently determine the work procedures, machine tools and attachments to be used, and the sequence of machining operation; and are responsible for laying out their own work, accurately computing and checking dimensions and tolerances, setting up the job in the machine, and selecting the proper tools to achieve the desired dimensions, tolerances, and surface finishes.

The level of responsibility required for the appealed position does not meet that required for grade 10 machinists. The appellants set up different nondestructive inspection methods called out in the TO's, TCTO's, and WCDs, and do not have the leeway to determine the procedures used to complete work assignments. The setup guides provide the appellant with the initial startup point numbers by which to set his or her equipment. Unlike grade 10 machinists, the appellants must

follow established guidelines and verbal instructions. The appellants indicated that engineers establish the technical work sequence and testing process for all NDI operations.

Physical Effort

Physical effort described in the WG-3414 Standard is the same at all defined grade levels.

This work requires standing, stooping, bending, and reaching. Operators frequently handle, lift, and carry objects weighing up to 40 pounds. Sometimes they are required to lift and move items weighing in excess of 50 pounds with the help of weight handling equipment or with assistance with other workers.

The level of physical effort exerted by the appellants is comparable. They perform work that may require lifting baskets or parts weighing up to 75 pounds and perform active standing, prolonged sitting, and walking. They are also subject to eye strain when using black light. They must also have dexterity in both hands.

Working Conditions

Working conditions described in the WG-3414 Standard are the same at all defined grade levels.

The standard describes work that is performed inside areas that are noisy and dirty, where there is constant danger to the skin and eyes from flying metal chips and abrasive particles, skin irritation from contact with coolants, lubricants, and abrasive compounds; danger to fingers, hands, and other parts of the body from cutting tools, grinding wheels, rotating pieces, and moving parts of machines.

The working conditions for the appealed position are comparable. The NDI engine blade shop is a warehouse which is noisy, dirty, and poses safety risks from dropping of a blade or engine part. Safety gloves and glasses are worn to minimize skin irritation from processing penetrant solutions.

Summary

Based on the preceding analysis and application of the whole job grade criteria of the FWS, the appellants' work is evaluated properly at the grade 9 level by comparison to both the WG-3711 and WG-3414 standards.

Decision

The position is properly classified as WG-3705-9 with the title to be determined by the agency.