STATE OF WISCONSIN

PERSONNEL COMMISSION

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PAUL G. SANNES,	*	
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Appellant,	*	
	*	
v.	*	INTERIM
	*	DECISION
Secretary, DEPARTMENT OF	*	AND
EMPLOYMENT RELATIONS,	*	ORDER
	*	
Respondent.	*	
•	*	
Case No. 92-0085-PC	*	
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This matter is before the Commission as an appeal from a reallocation decision. It was consolidated for hearing purposes with three other related matters, <u>Wigglesworth v. DER</u>, 92-0150-PC, <u>Smith v. DER</u>, 92-0093-PC and <u>Sine v.</u> <u>DER</u>, 92-0103-PC. The issue for hearing in this matter reads as follows:

Whether respondent's decision to reallocate appellant's position from Instrument Maker to Instrument Maker Journey rather than Instrument Maker Advanced was correct.

If the Commission determines that the appellant's position is more appropriately classified at the Instrument Maker -Advanced level, whether the incumbent should be regraded or the position opened to competition.

After hearing testimony from various witnesses at hearing, respondent agreed that upon receipt of updated position descriptions reflecting the testimony presented, it would change its decision as to the <u>Sine</u> and <u>Smith</u> matters and reallocate those two positions to the Advanced level.

FINDINGS OF FACT

1. The Physical Sciences Laboratory (PSL) is a facility operated by the University of Wisconsin. The appellant is employed in the unit of the facility entitled the "Mechanical Group." More specifically, the appellant is employed in the PSL machine shop. The function of the PSL that is relevant to this appeal is that it produces highly specialized scientific equipment.

2. Appellant's immediate supervisor at all relevant times has been Bill Cotter, Mechanical Shop Supervisor.

3. Appellant is one of two instrument makers employed by the PSL who operate the shop's Hermle 1200 Computer Numerically Controlled (CNC) 5 axis universal milling machine which was purchased in 1991 for the cost of approximately \$250,000. In order to operate the machine, appellant utilizes Computer Assisted Design (CAD) and Computer Assisted Machining (CAM) computer programs developed by MasterCAM for use with a variety of CNC milling machines. The operator prepares a program which describes the machining operation to be performed three dimensionally. The CNC milling machine allows the PSL to mill parts and instruments which it would otherwise be unable to make and to make multiple identical parts.

4. CNC is considered advanced technology in the instrument shop community. In the private sector, machinists using CNC machines are considered to have the highest level of expertise in their shop.

5. Within the University of Wisconsin System, only two instrument shops other than the PSL have CNC machining equipment. Those two shops, the Physics Shop and the Mechanical Engineering Shop, contain CNC machines which are smaller, less complex and require substantially less training than the Hermle CNC at the PSL.

6. The PSL is differentiated from other instrument shops both in terms of the capabilities of its CNC mill and in terms of the physical size of the jobs it can complete due to the much larger machining equipment it has available.

7. Prior to the purchase of the CNC machine in February of 1991, the appellant's duties were not differentiated from those duties assigned to 5 other instrument makers at the PSL. All six of the positions were classified as Instrument Maker. Appellant's position description included the following goals:

75%	А.	Using lathe, milling machine, boring mills, drill
		presses and related machines and equipment to
		produce and assemble unique, precise and accurate
		scientific parts and assemblies.

20% B. Design and build jigs, fixtures and tools by performing machining operations that cannot be done by conventional methods. This also requires the skillful operation of machines typically found in an instrument shop.

8. No one in the shop had hands-on CNC experience before the PSL decided to purchase the Hermle.

9. Mr. Cotter chose to assign the duties of operating the CNC to appellant and to Mr. Koenig from amongst the various instrument makers already employed at the PSL shop because they volunteered, they had engaged in some related training and because they were willing to put in additional time beyond the regular work day to get the machine up and running.

10. Appellant's experience includes a 4 year apprenticeship as a machinist, experience in industry as both a machinist and a tool and die maker, and has received both formal and informal training in the areas of CAD/CAM and CNC as well as on a personal computer. Since before he began working at the PSL, the appellant has read all materials he could obtain on CAD/CAM, and considered resigning from his PSL position in order to use these skills in the event PSL did not purchase a CNC mill. Some formal training was provided the appellant by the manufacturer of the CNC equipment in February of 1991, and the appellant also obtained informal training from MATC instructors on a one-to-one basis before the CNC arrived.

11. Prior to the implementation of a classification survey effective February 9, 1992, which created a new Instrument Maker classification series, the IM classification did not include multiple levels. The leadworkers in the PSL shop, Tim. Sailor and John. Randall, along with Leon Siverling who served as the shop's vacuum specialist, were all classified at the Engineering Specialist - Senior classification prior to the implementation of the survey.

12. The relevant portion of the Instrument Maker position standard, which became effective on February 9, 1992, is attached to this decision and is included as part of this finding.

13. Appellant's duties for the period commencing in March of 1991 are accurately reflected in his position description, Appellant's Exhibit 16, which was signed on July 3, 1992. The relevant portions of that exhibit are attached hereto and made part of this finding.

14. Mr. Kocnig's responsibilities are generally similar to the appellant's except that 1) Mr. Koenig spends only 7% on design-related duties (Goal A), 2) his design-related duties do not involve CAD techniques, 3) he

spends more time (83%) on construction duties (Goal B), and 4) he has no technical liaison responsibilities.

15. If the appellant encounters difficulty with the computer software he uses when programming the CNC, he will first contact Ken Kriesel, a mechanical engineer at PSL who has expertise with these programs. If the problem cannot be resolved at that level, the appellant may contact the developer of the software.

16. Much of the consultation which the appellant has with the design engineers employed by PSL relates to providing advice on how the design may best use the CNC capabilities. In this context, the consultation may relate to design, redesign, materials selection, scheduling of CNC projects, coordinating the machining sequences, and tooling requirements.

17. A majority of the parts produced by the PSL must meet Ultra High Vacuum (UHV) specifications, whether or not they are being used in a UHV environment. Machining parts to UHV specifications does not entail using different machining equipment. Rather it means that care has to be taken to insure that the piece being produced is cleaned up properly so as to avoid the possibility of contamination.

18. All instrument makers in the PSL shop are expected to be capable of performing any job in the shop or machine operation with the exception of both CNC and specialized welding.

19. In addition to the position of Mr. Koenig, who is classified at the IM - Journey level, comparisons may be made to the following positions at PSL:

a. The position held by John Sine, with primary responsibility to perform welding procedures. Since 1988, the majority of Mr. Sine's welding time has been spent on Ultra High Vacuum (UHV) welding and necessary prep work for that welding. UHV welding is used to produce non-contaminating parts and instruments for scientific applications. Special techniques, including cleaning and leak checking, are carried out with respect to UHV welding. He coordinates with others in terms of design issues, predominantly with the instrument makers at PSL as to of how a part has to be machined in order for it to be welded to meet UHV specifications. Respondent agreed to classify Mr. Sine's position at the IM - Advanced level based upon the above described duties.

b. The position held by Tim Sailor, who is a leadworker for the PSL instrument makers and has greater responsibility for the coordination of projects and has increased level of contacts with the project client. Mr. Sailor spends a smaller percentage of his time on actual part production than does the appellant. Mr. Sailor's position was allocated to the IM - Advanced level and he appealed that decision seeking reallocation to the Engineering Specialist - Senior level.

c. The position occupied by Leon Siverling, who serves as the only "Vacuum Specialist" for PSL and has no machining or tool and die responsibilities. Mr. Siverling's responsibilities are to clean materials used to fabricate ultra high vacuum devices (30%), check UHV assemblies and devices for leaks (25%), maintain and calibrate high vacuum equipment and testing instruments (15%), clean UHV assemblies and instruments (10%), and perform other duties associated with UHV systems including serving as an information resource (20%). Mr. Siverling's position is classified at the IM - Advanced level.

20. Appellant's design responsibilities are more comparable to that of the non-leadworkers, rather than to that of Sailor and Randall.

21. Appellant's role as a consultant to users is typically in terms of what can be done on the CNC (i.e., what is feasible) and with respect to programming.

22. Appellant's role in coordinating, assembling and testing projects with a duration of 6 months or more is the same as that of the other journey level IM's rather than that of the leadworkers, Sailor or Randall.

23. Appellant is considered an expert in the area of CNC and CAD/CAM.

24. Respondent has, in the Wisconsin Personnel Manual (WPM), issued policies and procedures relating to job classification. In §332.040, the WPM includes the following provisions relating to analyzing a reclassification or reallocation request

C Determine the types of changes which have occurred in the duties and responsibilities of the position

If changes have occurred in the duties or responsibilities of the position and such changes are the reason for changing the classification of the position, determine whether the changes

were logical and if the changes were logical, were they also gradual.

1. Were the changes <u>logical?</u>

a. Logical changes are changes which are reasonably related to the previous duties or responsibilities of the position....

b. If more than 50% of the duties or responsibilities of a position have changes since written notice was last given to the administrator and the employe of changes in assigned duties and responsibilities which may affect the classification of the position, the changes are not a logical change to a position but are the creation of a new position....

2. Were the changes gradual?

* * *

b. Generally, changes are not gradual if they:

* * *

2) result from a reorganization, changes in the equipment used to perform the work, or a reassignment of duties from a vacant or abolished position....

D. Determine the appropriate type of position classification action to be taken if a change in classification is appropriate.

* * *

E. Determine whether the incumbent should be regraded or the position opened to competition.

In order to make this determination, apply the following guidelines and rule provisions.

* * *

2. Where changes in a position support a reallocation [due to a logical change in the duties and responsibilities of a position, or a change in the level of accountability] or reclassification, regrade the incumbent unless:

* * *

a. The administrator has determined that the position should be filled by competition, even though changes in the position may have been logical and qualify as a reallocation

[due to a logical change in the duties and responsibilities of a position, or a change in the level of accountability]....

Competition is appropriate under conditions such as the following:

1) A position was selected to be assigned duties and responsibilities which warrant a higher or lower classification level where such assignments could reasonably have been assigned to other positions.

CONCLUSIONS OF LAW

1. This matter is properly before the Commission pursuant to \$230.44(1)(b), Stats.

2. Appellant has the burden of proving by a preponderance of the evidence that a) respondents erred by reallocating the appellant's position to the Instrument Maker - Journey level rather than the Instrument Maker - Advanced level, and b) he is entitled to be regraded.

Appellant has sustained his burden of proof as to the classification issue and the Commission concludes that respondent's decision allocating the appellant's position to the IM - Journey level rather than the IM - Advanced level was incorrect.

4. Appellant has failed to meet his burden of establishing that he is entitled to be regraded.

OPINION

The initial question raised by this appeal is essentially whether the CNC responsibilities, which require the use of CAD and CAM programming skills and which are not specifically referenced in the IM series, are more appropriately placed at the Journey or Advanced level. The development of CAD/CAM and CNC technology represent a significant change in the concept of a machinist/tool and die maker. With the CNC machine, a key skill now is how well the operator can program the CNC which, when it is being controlled by that program, produces the desired parts. Obviously there is still a great deal of knowledge arising from traditional/conventional instrument maker responsibilities applicable to instrument makers using a CNC machine, including knowledge of materials and tolerances. However the additional

programming skill is a new responsibility that extends beyond the traditional concept of an instrument maker. This development was not reflected in the class specifications which arose from the survey process.

The Commission recognizes that some technological advancement is implicit in any set of duties. For example, the fact that a word processing operator is given an updated and more powerful version of a word processing program is not a significant change from a classification standpoint. However, there can be technological developments which have a dramatic effect on the set of responsibilities assigned to a particular position.

In this case, the technological developments have effectively established a specialized area of expertise within the PSL and, based upon the testimony, within instrument shops generally. Mr. Vinje, PSL Personnel Director testified that in the private sector, machinists using CNC machines are considered to have the highest level of expertise in their shop. Appellant did not offer extensive evidence relating to the complexity of the programming skills required to utilize the capabilities of the Hermle CNC at the PSL. However, there is sufficient evidence to find that he studied CAD/CAM and CNC over a lengthy period of time and that his training included work with MATC instructors, with the software developers and on the job.¹

The specifications at the Advanced level, as they are applied by respondent, are broad enough to permit the classification of the appellant's position at that level The key comparison here is to the Siverling position which, respondent admitted, met only the "expert in a specialized area" aspect of the IM - Advanced definition. Respondent justified placing the Siverling position at the Advanced level solely on the basis of Mr. Siverling's role as an "expert in the field of vacuum technology," even though respondent admitted that Mr. Siverling does not perform any of the duties identified at the Entry or Journey level. Respondent acknowledged that Mr. Siverling did not meet the other portions of the IM - Advanced definition. High vacuum welding is specifically mentioned in the Advanced definition, and the processes carried out by Mr. Siverling are identified in the Advanced level work examples. The appellant's position requires expertise which is comparable, from a

¹The record also includes Appellant's Exhibit 30, which is a 100 line example of appellant's programming.

classification standpoint, to that required of the Siverling position, even though neither the Advanced level work examples nor the definition specifically refer to CNC and CAD/CAM responsibilities.

The Commission notes that there are also similarities between the appellant's position and the position occupied by Mr. Sine, who has responsibility for UHV welding and related processes, and whose duties more closely parallel the appellant's in terms of their role in design issues, contacts with users and responsibilities for coordinating, assembling and testing projects. The Sine position is also classified at the Advanced level based upon the UHV specialty.

The PSL has recognized the existence of appellant's specialty area in its organization chart which places the appellant and Mr. Koenig in a box entitled CNC/Cam Specialists, Mr. Sine and Mr. Smith in a separate box entitled Welders, and the remaining employes with machine shop and tool and die responsibilities, including Mr. Sailor and Mr. Randall as leadworkers, in a third box.

The second issue raised by this appeal is whether the appellant, as the position incumbent, should be regraded, or whether competition is required. "Regrade" is defined in §ER 1.02(40), Wis. Adm. Code, as the determination that the "incumbent of a filled position which has been reallocated... should remain in the position without opening the position to other candidates."

Pursuant to §ER 3.015:

(2) Incumbents of filled positions which will be reallocated or reclassified may not be regraded if:

* * *

(c) The secretary determines that the position should be filled by competitive examination under s. 230.15(1), Stats.

The respondent has clearly taken the position that if appellant's position is more appropriately classified at the IM - Advanced level, the position must be opened up for competition. Section 230.15(1), Stats., provides:

Appointments to, and promotions in the classified service, shall be made only according to merit and fitness, which shall be ascertained so far as practicable by competitive examination.

An important factor in terms of determining whether competition should be required rather than regrading the appellant is whether, based upon the assignment of CNC duties in 1991, classification above the Instrument Maker class would have been justified at that time. If the new duties were still consistent with the existing Instrument Maker class level, it would tend to support a regrade. However, if the CNC duties would have justified classification of the position at the Engineering Specialist - Senior level, then competition would be an appropriate result. Here, the record does not include copies of the relevant specifications which were in existence in 1991. In light of the appellant's overall burden of proof in this matter, the absence of this information makes it difficult to conclude that regrading of the appellant is justified.

The Commission notes that the language of §230.15, Stats., as well as of §332.040 of the Wisconsin Personnel Manual, reflect strong policy considerations in favor of using the competitive examination process when there has been an assignment of duties which amount to a wholesale change in a position. The change in the present case required a new set of abilities beyond those associated with the traditional duties of an instrument maker. The change occurred all at once rather than gradually. If the PSL had a personnel director on staff at the time, a certification process for determining the proper classification of the newly constituted position might well have been initiated.

ORDER

The respondent's decision reallocating the appellant's position to the Instrument Maker - Journey classification is rejected and this matter is remanded for action in accordance with this decision.

1993 STATE PERSONNEL COMMISSION ٨٨٥ Dated: En KMS:kms K:D:Merits-reall (Sannes) DONALD R. MURPHY, Commission

M. AOGERS, Commissioner

Sannes v. DER 92-0085-PC

INSTRUMENT MAKER CAM/CNC SPECIALIST

Position

Summary: This position carries responsibilities involving the design, construction, assembly, and testing of highly specialized scientific equipment which is produced by the Physical Sciences Laboratory for use at research institutions around the world. These responsibilities are carried out primarily through the use of advanced computer techniques (Computer Aided Design (CAD), Computer Aided Manufacturing (CAM)) and Computer Numerically Controlled (CNC) machining equipment.

20% DESIGN

- A. This position provides unique expertise that impacts the design, creation, testing, inspection, construction and installation of scientific apparatus through the use of conventional and advanced instrument making processes which include Computer Numerically Controlled (CNC) machining centers, off line programming, CAD (Computer Aided Design), and CAM (Computer Aided Manufacturing) techniques.
 - A.1. This position assists faculty, researchers, and engineers in the design process by reviewing requirements and limitations of the proposed design and suggesting alternatives in materials and design parameters that will impact quality and cost considerations, and functionality.
 - A.2. This position involves the review of design parameters to determine impact on: tooling characteristics, machine capabilities, tolerance requirements in relation to materials characteristics and machining processes, component relationships and interfaces, and manufacturability to specifications.
 - A.3. This position is also responsible for determining fabrication methods, dimensional details and other details of construction of non-engineered projects, through the use of CAM, CAD and CNC techniques.
 - A.4. Through the use of a PC and Mastercam or similar software, this position is responsible for selecting the tooling geometry, manufacturing sequences, tool speeds and feeds utilizing CAD and CAM techniques for instrument fabrication on state of the art CNC equipment (5 Axis Universal Milling Machine and Wire Feed Electrical Discharge Machining Center).

70% CONSTRUCTION

B. This position is responsible for fabricating, assembling and testing highly complex, precision mechanical components and assemblies using advanced CNC machine tools and processes and some conventional equipment.

- B.1. This position requires the application of advanced knowledge of CNC, CAD, and CAM equipment and processes to take full advantage of the precision, repeatability and cost savings attributes of advanced machining equipment.
- B.2 This position has responsibility for fabricating instruments using advanced instrument making techniques and processes. These responsibilities are carried out primarily through the use of CAD, CAM, CNC 5 Axis Universal Milling Machine and Electrical Discharge Machining.
- B.3. This position requires the set up and operation of all CNC tooling and equipment and must research and request specialized CNC tooling and accessories.
- B.4. This position also fabricates instruments using conventional machine tools and processes requiring a high degree of mental/physical coordination and skill. Responsibilities include the set up, operation, and selection of all necessary tooling.
- B.5. This position requires design and fabrication of unique tools, fixtures, jigs and test devices to aid in the fabrication of highly complex parts.
- B.6. This position is also responsible for repairing, modifying and installing improvements to apparatus, shop laboratory equipment and machine shop tools.

5% INSPECTION, ASSEMBLY AND TESTING

- C. This position is responsible for the inspection, assembly and testing of apparatus components to determine conformance with design and functionality requirements.
 - C.1. This position is responsible for correcting or modifying parts to attain functionality when deficiencies are found.
 - C.2. This position is also responsible for designing and building special test devices to check the accuracy and performance of parts and assemblies.

5% MAINTENANCE AND LIAISON ACTIVITIES

D. This position is responsible for providing routine and non routine maintenance to the Hermle 1200 CNC Universal Milling Machine and acts as technical liaison with the Hermle U.S.A. organization on matters regarding the

Hermle 1200, Date: 7-3-92 nnos **Employee:** Supervisor: Date: 7-3-9と Personnel: Date: <u>--</u>-3

Instrument Maker

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II. DEFINITIONS

INSTRUMENT MAKER - ENTRY

Under limited, progressing to general supervision, performs as a highly skilled and independent machinist or tool and die maker in the design and creation of unique, highly intricate and precise scientific equipment. Recommends and aids in the layout, design and construction of research instruments utilizing their knowledge of materials, methods, and machine tools to fabricate the required item. Receives direction in the form of blueprints, sketches, and oral descriptions, which may give only details of specific components, with the remainder of the instrument design left to the initiative of the person assigned the project.

INSTRUMENT MAKER - JOURNEY

Under general supervision performs work similar to Instrument Maker-Entry positions. However, the Instrument Maker-Journey position functions more independently and with greater efficiency. This type of independence and efficiency is generally gained through one to two years of experience as an Instrument Maker or other comparable experience in machinist or tool and die work.

INSTRUMENT MAKER - ADVANCED

This is advanced level Instrument Maker work. The work performed is similar to the journey-level except that employes at this level are significantly more involved in the design phase of highly specialized parts, machinery and instruments. Advanced instrument makers are typically in constant contact with the user or client, usually graduate students, professors and researchers, functioning as a consultant to them. In addition,

Instrument Maker

advanced level instrument makers are often responsible for coordinating, assembling and testing projects. The projects may last six months to a couple of years and require thousands of individual parts. Also, employes at this level are considered experts (i.e., they have advanced knowledge, skills and experience) in a specialized area, such as, but not limited to, high vacuum welding, complex project coordination or student machine shop coordination with an emphasis on providing instruments for advanced scientific research.

III. EXAMPLES OF WORK PERFORMED

Instrument Maker - Entry & -Journey

Produce and assemble unique scientific parts using lathes, milling machines, boring mills, drill presses and other related machines and equipment.

Assist in the designing and building of jigs, fixtures and tools by performing machining operations that cannot be accomplished by conventional methods.

Repair and maintain laboratory instruments.

Design and construct laboratory, teaching and related equipment.

Performs standard welding using a variety of materials including steels, stainless steels, aluminum and other non-standard alloy metals used in the fabrication of parts and equipment.

Set up and operate machine tools for machining task at hand using standard and exotic materials and maintaining tolerances.

Instrument Maker - Advanced

With greater independence, knowledge, skill and latitude in the initiation of action, may perform any of the duties and responsibilities assigned to the Instrument Maker-Entry or -Journey, and in addition may:

Design, construct and refine sophisticated laboratory instrumentation for ultra-high vacuum, optical, particle beam and surface research.

Procure construction and supply materials for projects.

Supervise graduate students in the design and construction of specialized research instrumentation.

Function as the director of a mechanical shop facility in a large science department.

Design, construct and install complex mechanical systems; select materials to use; fabricate equipment and redesign projects.

Schedule work, maintain and calibrate machines, and manage tool, fastener and material inventories.

Maintain the machine and welding shop facility of the Synchrotron Radiation Center.

Design and construct highly specialized, complex instrumentation in the prototype phase.

Coordinate machining, welding, assembling and testing of assemblies.

Travel to facilities as required for final assembly, inspection and testing.

Direct machining and assembly work performed by other staff such as Instrument Maker-Entry and Journey positions, Mechanicians or graduate students.

Clean materials used to fabricate ultra high vacuum devices, instruments and assemblies.

Check ultra high vacuum assemblies and devices for leaks.

Maintain and calibrate high vacuum equipment and testing instruments.

Oversee and manage a department machine shop, wood shop and hydraulics laboratory.

Perform advanced design, development, construction, final assembly and testing of sophisticated equipment and precision instruments for research and instruction in the field and laboratory.