

Position Classification

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REFERENCE GUIDE #2



HUMAN RESOURCES MANAGEMENT



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Position Classification

Reference Guide 2, Version 4.0

GS Classification Guides

FWS References and Standards

The classification standards and other issuances contained in this Reference Guide were obtained as is from the Office of Personnel Management Website (www.opm.gov).

Any typographical/other errors contained therein were included in the original documents.

Table of Contents

GS Classification Guides

- 1. Grade Level Guide for Clerical and Assistance Work**
- 2. Administrative Analysis Grade Evaluation Guide**
- 3. Research Grade Evaluation Guide**
- 4. General Schedule Leader Grade Evaluation Guide**
- 5. General Schedule Supervisory Guide**

FWS References and Standards

- 6. Introduction to the Federal Wage System Job Grading System**
- 7. Motor Vehicle Operator, WG-5703**
- 8. Carpenter, WG-4607**
- 9. Automotive Mechanic, WG-5823**
- 10. FWS Trades Helper**
- 11. FWS Intermediate**
- 12. Job Grading Standard for Wage Leaders**
- 13. Job Grading Standard for Wage Supervisors**

Grade Level Guide for Clerical and Assistance Work

TABLE OF CONTENTS

COVERAGE.....	2
USING THIS GUIDE	3
SUMMARY CHART OF GRADE LEVEL CONCEPTS	4
GRADE LEVEL CRITERIA.....	6
GS-1.....	6
GS-2.....	7
GS-3.....	8
GS-4.....	10
GS-5.....	11
GS-6.....	13
GS-7.....	16

GRADE LEVEL GUIDE FOR CLERICAL AND ASSISTANCE WORK

This classification guide provides general criteria for use in determining the grade level of non-supervisory clerical and assistance work from GS-1 through GS-7. Administrative support work of the kind described in the guide is performed in offices, shops, laboratories, hospitals, and numerous other settings in all Federal agencies.

This guide supersedes the General Grade Evaluation Guide for Non-supervisory Clerical Positions, TS-34, January 1979.

COVERAGE

This guide covers the work of processing transactions and performing various office support and miscellaneous clerical and assistance duties within a framework of procedures, precedents, or instructions. For the purpose of applying this guide, the terms "clerical" and "assistance" are defined as follows:

- Clerical: Performing work such as preparing, receiving, reviewing, and verifying documents; maintaining office records; locating and compiling data or information from files; compiling information for reports; keeping a calendar and informing others of deadlines and other important dates; and similar clerical support work within an organization. This work requires a knowledge of the clerical requirements and processes involved in maintaining the functional programs of the unit.
- Assistance: Performing technical work to support the administration or operation of the programs of an organizational unit. This work requires a working knowledge of the work processes and procedures of an administrative field (e.g., office administration, communications, and security) and the mission and operational requirements of the unit.

The guide does not cover:

- Administrative or other work which normally follows a two-grade interval pattern of progression.
- Work which requires a practical knowledge of scientific, engineering, medical, or other technical fields.
- Work requiring specialized skills; e.g., stenography or the operation of keyboards, computers, or other office machines.
- Secretarial work.

Positions which involve the performance of technical or specialized work may also include general administrative or support duties which can be evaluated by the criteria in this guide.

USING THIS GUIDE

This guide is intended as a source of grade level guidance for the evaluation of clerical or assistance work, as described above, which is not covered by more specific grade level criteria in other guides or standards. Depending on the mix of work involved in a particular position, this guide may be applied alone or in conjunction with other appropriate standards to determine the grade level.

This guide should not be used to determine the series of a position. To determine the series of a position graded fully or in part by this guide, it is necessary to refer to the series guide which best covers the primary duties and responsibilities involved, the qualifications required to do the work, and the career ladder for the position. To establish official position titles, refer to the classification guidance for the series or the general titling instructions in the Introduction to the Position Classification Standards.

The guide describes the general characteristics of each grade level from GS-1 through GS-7 in a three-part format:

- (1) The definition of the grade level as spelled out in the law (5 U.S.C. 5104);
- (2) A description of the grade level concept pertaining to clerical and assistance work written in narrative format in terms of two evaluation factors: Nature of Assignment (which includes the elements knowledge required and complexity of the work), and Level of Responsibility (which includes the elements of supervisory controls, guidelines, and contacts).
- (3) General work examples to illustrate each grade level.

To determine the appropriate grade, apply the total criteria (i.e., the law, the evaluation factors, and the work examples) and assign the highest level which the work being evaluated most closely matches. Consider weaknesses as well as strengths in matching work to the grade level criteria. Consider, for example, whether work is performed under the kind of supervisory controls described at that grade or is closer than normal. Supervisory control over work takes many different forms and requires careful evaluation. Routine or standardized work may appear to be performed with a high level of independence when, in fact, it is the work itself that is closely defined and prescribed. When this is the case, the employee does not have an opportunity to perform under less than general supervision. The guide does not attempt to describe all possible work situations, and any work which is the logical equivalent of that described in the total criteria for a particular grade level should be credited at that level.

NOTE: Clerical and assistance work as covered by this guide will often include the use of typewriters, word processors, computer terminals, or personal computers as tools in completing

tasks related to processing actions, records, data, or other information. In most cases, the clerical and assistance tasks represent the primary purpose of the job; and the keyboard and computer operation tasks are necessary but incidental means to carry out the work. If the keyboard or computer operation tasks appear to be of equal or greater difficulty than the clerical or assistance work, evaluate the different kinds of work separately using both this guide and the OPM standard that best covers the keyboard or computer work (e.g., Typing and Stenography Grade Evaluation Guide or the standard for the Computer Operation Series, GS-0332). If keyboard or computer operation represents the primary purpose of the job and the highest level of qualifications and responsibility, this guide is not the appropriate tool for classifying the position.

SUMMARY CHART OF GRADE LEVEL CONCEPTS

The following is a summary chart of the key grade level concepts for clerical and assistance work in a one-grade interval pattern. This chart should not be used alone for classification purposes; grade level criteria follow the chart.

GRADE	NATURE OF ASSIGNMENT	LEVEL OF RESPONSIBILITY
GS-1	Performs simple, routine, or repetitive tasks which require little or no subject-matter knowledge.	Work is closely observed, controlled and checked; few guides or instructions apply.
GS-2	Performs several related steps or tasks in varying sequence; applies knowledge of terminology and basic procedures.	Work is closely controlled and spot-checked in progress and upon completion; detailed, specific guides apply to the work.
GS-3	Performs many different tasks in processing different kinds of forms or transactions; work requires good understanding of structure and workflow in the organization served	Routine assignments are performed independently unless problems occur; supervisor gives instructions on new assignments and reviews more difficult work; a large number of procedural guides apply, some of which are memorized.

(continued)

Summary Chart (continued)

GRADE	NATURE OF ASSIGNMENT	LEVEL OF RESPONSIBILITY
GS-4	Performs a full range of assignments consisting of related steps, processes or methods; responses differ in nature and sequence; requires knowledge of an organization's programs and operations, rules and processes.	Exercises initiative in completing recurring assignments; uses judgment in selecting appropriate guidelines and procedures from among a number of specific references.
GS-5	Performs standard and non-standard assignments involving different and unrelated processes or methods in varying sequence; work requires extensive knowledge of rules, operations, or business practices.	Follows accepted practices in resolving non-recurring problems and meeting deadlines; completed products are evaluated for effectiveness in meeting goals; extensive guidelines in the form of instructions, manuals, and regulations are applied.
GS-6	a. Clerical Work: Processes a wide variety of transactions subject to different sets of rules and regulations. b. Technical Work: Performs a segment of the evaluative work of an administrative function; identifies issues or problems and seeks alternative solutions consistent with applicable regulations.	a. The employee is regarded as an expert source of information on processing transactions; completed work is reviewed for conformance with policy and regulatory requirements; numerous and varied guidelines are adapted and applied. b. Works independently in completing assignments; completed work is reviewed for effectiveness in meeting goals; guidelines such as regulations, evaluation criteria, and precedents have gaps in specificity.
GS-7	Performs specialized duties in a defined functional or program area involving a wide variety of problems or situations; develops information, identifies interrelationships, and takes actions consistent with objectives of the function or program served.	Work is assigned in terms of objectives, priorities, and deadlines; the employee works independently in resolving most conflicts; completed work is evaluated for conformance to policy; guidelines, such as regulations, precedent cases and policy statements require considerable interpretation and adaptation.

GRADE LEVEL CRITERIA

GS-1

THE LAW

Perform, under immediate supervision, with little or no latitude for the exercise of independent judgment the simplest routine work in office, business, or fiscal operations.

Nature of assignment

Work consists of simple, routine, or repetitive tasks or operations. Procedures are few and unchanging. There is little or no choice to be made in deciding what needs to be done because work normally consists of one or two clerical steps repeated in the same sequence. No significant discretion or judgment is involved in deciding what, when, or how to do the work.

No subject-matter knowledge is required beyond that included in two or three guides and instructions.

Level of Responsibility

Work is closely controlled. In many situations, the work itself is so well defined and standardized that there is little or no need for supervisory assistance. For others, the work is closely controlled by the supervisor before, during, and after completion. Normally, the supervisor checks work in progress and reviews it upon completion for quantity, quality, and adherence to instructions.

Very few guides or instructions are applicable to the work. The guides and precedents used are detailed and specific to the work, are always available, and their applicability is obvious. Guides are often committed to memory.

Contacts are usually with coworkers who provide information on the work.

WORK EXAMPLE -- Office Aid, GS-0303-01

Nature of Assignment

Works in an office which distributes informational materials. The employee places pamphlets and other publications in the appropriate size envelopes, affixes pre-printed address labels, and sets aside for mailing. The employee also checks the number of copies mailed to each address against a mailing list.

Level of Responsibility

The instructions are clear and the employee follows them exactly. There is little probability the work will vary other than in terms of the material to be enveloped, and the addressees on the mailing list. The supervisor and higher level workers are available to answer questions or provide information.

GS-2

THE LAW

Perform, under immediate supervision, with limited latitude for the exercise of independent judgment, routine work in office, business, or fiscal operations ... requiring some training.

Nature of Assignment

Work consists of several related tasks, steps, or operations. Choices regarding what needs to be done are limited because the work typically consists of a series of prescribed steps performed in the same or slightly varied sequence, such as sorting, coding, and filing documents in an established alphabetical or simple subject-matter filing system.

The work requires sufficient knowledge of the terminology and procedures of the organization to comprehend and apply guides and instructions covering the assigned tasks, or knowledge of equipment operation requiring previous training such as in the use of keyboard equipment.

Level of Responsibility

Work is closely controlled. In some situations, the control is through the structured nature of the work itself. In other cases, the supervisor maintains control through review of the work by spot checking progress and reviewing completed work for accuracy, completeness, and adherence to instructions and established procedures.

A number of detailed and specific guides apply to the work; for example, instructions, manuals, established practices and procedures.

The employee's judgment is limited to choosing the proper guide or instruction for each task or operation. Such choices are easily made because the assigned tasks recur and are limited in variety. Guides are often committed to memory.

The employee has contacts with coworkers to exchange information related to assignments.

WORK EXAMPLE -- Communications Clerk, GS-0394-02*Nature of Assignment*

Works in a communications center assisting higher level employees by posting changes to routing indicators and addresses. Receives lists of routing indicator changes from a higher level employee, chooses the routing supplement to be updated, annotates whether the indicator is added, changed, or deleted, and notes the effective date. Checks for transpositions in routing indicator letters.

Level of Responsibility

The work is assigned with detailed instructions. The supervisor is available to assist in resolving problems that arise. A few specific guides are available and the employee uses judgment in checking the accuracy of address indicators which appear wrong. Contacts are with co-workers to exchange information necessary to do the work.

GS-3

THE LAW

Perform, under immediate or general supervision, somewhat difficult and responsible work in office, business, or fiscal operations requiring:

- (i) some training or experience;
- (ii) working knowledge of a special subject matter; or
- (iii) to some extent the exercise of independent judgment in accordance with well-established policies, procedures, and techniques.

Nature of Assignment

Work consists of many different prescribed tasks steps or operations. Deciding what needs to be done requires the employee to choose from among similar procedures. The work varies primarily in factual ways, such as in the sources of information or in the kinds of forms, transactions, or entries.

Work requires good understanding of the structure of the organization served and enough knowledge of the organization's terminology and work flow to employ the correct set and sequence of tasks, steps, or operations.

Level of Responsibility

The supervisor provides individual assignments by explaining what is to be done and how to accomplish it. Routine assignments are performed independently, but problems or unfamiliar situations are referred to the supervisor. Review of the work increases with more difficult assignments.

A large number of procedural guides such as manuals and written and oral instructions apply directly to the work and are always available. Their number, however, causes problems in deciding which guide applies in some situations. Many guides are memorized, but, because of their number, the employee often refers to written guides for help.

The employee exchanges information with co-workers. Contacts outside the organization are in closely controlled or structured settings.

WORK EXAMPLE -- Office Clerk, GS-0303-03*Nature of Assignment*

Performs a variety of clerical work in an office providing services to the public:

- Takes and delivers telephone messages for the staff and answers routine inquiries. Schedules appointments or uses judgment in referring calls to the appropriate specialist. Pages personnel when necessary and alerts personnel to unusual situations.
- Updates manuals on policies, directives and memoranda. Records and files information on specific cases, current projects, and/or studies. Maintains the bulletin board, selecting and filing deleted material for future reference.
- Monitors stock levels of a variety of office supplies. Orders common supplies as necessary and orders specific supplies requested by the staff.
- Keeps time and attendance records and coordinates their submission to the payroll office.

The employee applies a thorough knowledge of the organization's functions and procedures in performing the work and applies experience and judgment in handling situations that arise.

Level of Responsibility

Work is assigned in terms of what is to be accomplished and how to accomplish it. The supervisor is available if the daily routine should be disrupted and complications arise. Familiar situations or requests for information are handled independently.

Guidelines are normally specific and the requirements for performing the day-to-day work are memorized, but judgment is required in referring some callers to the appropriate personnel or in providing information.

Contacts are to assist coworkers and to provide information to callers and users of the services.

GS-4

THE LAW

Perform, under immediate or general supervision, moderately difficult and responsible work in office, business, or fiscal operations requiring:

- (i) a moderate amount of training and minor supervisory or other experience;
- (ii) good working knowledge of a special subject matter or a limited field of office procedure and practice; and
- (iii) the exercise of independent judgment in accordance with well-established policies, procedures and techniques.

Nature of Assignment

Work consists of performing a full range of standard clerical assignments and resolving recurring problems. Work consists of related steps, processes, or methods which require the employee to identify and recognize differences among a variety of recurring situations. Actions to be taken or responses to be made differ in nature and sequence because of differences in the particular characteristics of each case or transaction.

In addition to knowledge of how to carry out procedures, the work requires some subject-matter knowledge of an organization's programs and operations; or of a type of business practice such as maintaining inventory records and replenishing supplies; or of a body of standardized rules, processes, or operations. These knowledges are needed to determine what is being done, why the action is being taken, and how it must be accomplished.

Level of Responsibility

The supervisor provides little assistance with recurring assignments. The employee uses initiative to complete work in accordance with accepted practices. Unusual situations may require the assistance of the supervisor or a higher level employee, and the completed work may be reviewed more closely.

Procedures for doing the work have been established and a number of specific guidelines are available. The number and similarity of guidelines and work situations require the employee to

use judgment in locating and selecting the most appropriate guidelines, references, and procedures. The employee makes minor deviations to adapt the guidelines in specific cases.

The employee has contact with co-workers and those outside the organization to exchange information, and in some cases to resolve problems in connection with the immediate assignment.

WORK EXAMPLE -- Security Clerk, GS-0086-04

Nature of Assignment

Performs a variety of recordkeeping, reporting, and informational duties in support of the organization's security program. Compiles, maintains, and updates data, lists and reports of computer passwords, security violations, and employees and visitors authorized access to the building and/or its computer system.

Applies knowledge of the organization's security procedures, processes, and rules governing building access, reports of physical security violations, personnel clearances and identification, and computer access authorizations.

Level of Responsibility

Work is assigned in terms of methods to follow and results expected. The employee works independently in carrying out assignments of a continuing nature (e.g., preparing recurring reports and maintaining lists of computer passwords and persons to be admitted to buildings). Completed work is reviewed for accuracy and compliance with oral and written instructions.

Guidelines include agency administrative procedures, security handbooks, and specific instructions. The employee memorizes most guidelines, selects and interprets from a few others to fit specific situations, and exercises judgment in determining when deviations are appropriate, or when situations are not covered directly by guidelines or instructions and should be referred to the supervisor. Contacts with management personnel and their representatives at the worksite are for the purpose of obtaining and/or providing information necessary to maintain and update building and computer access lists and to prepare reports.

GS-5

THE LAW

Perform, under general supervision, difficult and responsible work in office, business, or fiscal administration requiring:

- (i) considerable training and supervisory or other experience;

- (ii) broad working knowledge of a special subject matter or of office procedure and practice; and
- (iii) the exercise of independent judgment in a limited field.

Nature of Assignment

Work consists of performing a full range of standard and non-standard clerical assignments and resolving a variety of non-recurring problems. Work includes a variety of assignments involving different and unrelated steps, processes, or methods. The employee must identify and understand the issues involved in each assignment and determine what steps and procedures are necessary and the order of their performance. Completion of each transaction typically involves selecting a course of action from a number of possibilities.

The work requires extensive knowledge of an organization's rules, procedures, operations, or business practices to perform the more complex, interrelated, or one-of-a-kind clerical processing procedures.

Level of Responsibility

The supervisor assigns work by defining objectives, priorities, and deadlines and provides guidance on assignments which do not have clear precedents. The employee works in accordance with accepted practices and completed work is evaluated for technical soundness, appropriateness, and effectiveness in meeting goals.

Extensive guides in the form of instructions, manuals, regulations, and precedents apply to the work. The number and similarity of guidelines and work situations require the employee to use judgment in locating and selecting the most appropriate guidelines for application and adapting them according to circumstances of the specific case or transaction. A number of procedural problems may arise which also require interpretation and adaptation of established guides. Often, the employee must determine which of several alternative guidelines to use. If existing guidelines cannot be applied, the employee refers the matter to the supervisor.

Contacts are with a variety of persons within and outside the agency for the purpose of receiving or providing information relating to the work or for the purpose of resolving operating problems in connection with recurring responsibilities.

WORK EXAMPLE -- Inspectional Aid, GS-1897-05

Nature of Assignment

Provides specialized clerical assistance to several Customs Inspectors by controlling in-bound manifests for air and sea cargo, and inbound storage. Controls manifested cargo by posting a variety of entry permits and other clearance documents against corresponding bills of lading. Examines documents for completeness, discrepancies, sampling requirements, prohibited cargo,

and other special requirements and identifies entries that may involve fraud, smuggling, etc., based on available intelligence data.

The incumbent authorizes lay order extensions, obtains general order control numbers, resolves manifest and entry discrepancies, and prepares official and office workload reports for the inspection facility. Maintains office files, inventories nonexpendable equipment, prepares supply requisitions, accepts cash, and prepares daily cash transmittals.

Applies a knowledge of pertinent sections of the Tariff Act, the Inspectors Manual, and other guides and a substantial knowledge of the functions of other divisions and branches within the Customs district to accomplish the procedural and processing functions necessary to import cargo. Applies a knowledge of data in the Treasury Enforcement Computer System (TECS) and reasoned judgment to discern entries requiring further analysis by inspectors because of possible fraud, controlled substances, and prohibited cargo.

Level of Responsibility

Work is assigned in terms of objectives, priorities, and deadlines. The employee independently plans and carries out successive steps according to the specific requirements of each case. Customs Inspectors are informed of unusual situations and help with unusual problems. Completed work is evaluated for appropriateness and effectiveness.

Guidelines covering processing procedures are specific, but some guidelines such as the Tariff Act and the TECS system require judgment to select and use effectively. The employee uses judgment in discovering problems for referral to the Customs Inspectors, in authorizing lay order extensions and in answering substantive questions from importers.

Contacts with co-workers and the importing public are to exchange information and resolve problems in meeting the importing requirements of the Tariff Act.

GS-6

THE LAW

Perform, under general supervision, difficult and responsible work in office, business, or fiscal administration requiring:

- (i) considerable training and supervisory or other experience;
- (ii) broad working knowledge of a special and complex subject matter, procedure, or practice; and
- (iii) to a considerable extent the exercise of independent judgment.

CLERICAL WORK

Nature of Assignment

Work typically entails processing a wide variety of transactions for more than one type of assigned activity or functional specialization. Assignments are subject to different sets of rules, regulations, and procedures. Such issues must be examined that a course of action has substantive impact on the outcome of the assignment.

Work requires comprehensive knowledge of rules, regulations, and other guidelines relating to completing assignments in the program area assigned. This knowledge is usually attained through extensive, increasingly difficult, and practical experience and training in the subject matter field. The work also requires ability to interpret and apply regulatory and procedural requirements to process unusually difficult and complicated transactions.

Level of Responsibility

At this level, the supervisor reviews completed work for conformance with policy and requirements. The clerical employee is recognized as an authority on processing transactions or completing assignments within a complicated framework of established procedures and guidelines, often when there are no clear precedents. This recognition typically extends beyond the immediate office or work unit to the overall organization or, in some cases, outside the organization. The employee is regarded as an expert source of information on regulatory requirements for the various transactions, and is frequently called upon to provide accurate information rapidly on short notice.

Guidelines for the work are numerous and varied, making it difficult for the employee to choose the most appropriate instruction and decide how the various transactions are to be completed. Guidelines often do not apply directly, requiring the employee to make adaptations to cover new and unusual work situations. This may involve deviating from established procedures to process transactions which cannot be completed through regular channels or involve actions where guidelines are conflicting or unusable.

Contacts are with employees in the agency, in other agencies, or with management or users or providers of agency services. The employee provides information, explains the application of regulations, or resolves problems relating to the assignment.

TECHNICAL ASSISTANCE WORK

Nature of Assignment

Technical or assistance work at this level requires considerable evaluative judgment within well-defined, commonly occurring aspects of an administrative program or function. The work may involve providing direct assistance to specialists or analysts by performing a segment of their work, or it may involve responsibility for a stream of products or continuing processes based on direct application of established policies, practices, and criteria. Assignments involve a

relatively narrow range of case situations that occur in a broad administrative program or function. This work typically involves identifying issues, problems, or conditions and seeking alternative solutions based on evaluation of the intent of applicable rules, regulations, and procedures.

Assignments requiring evaluative judgment are narrowly focused, address a single product or action, and are relatively clear cut. The employee usually deals with problems or situations that remain stable, and resemble past problems or situations. Assignments often involve problems or situations where there is not one absolutely correct solution, only a best or most appropriate one.

Work requires practical knowledge of guidelines and precedent case actions relating to a particular program area equal to that acquired through considerable work experience or specialized training. The work also requires skill to recognize the dimensions of a problem and express ideas in writing.

Level of Responsibility

The supervisor assists with precedent assignments by providing an interpretation of policy or the concepts and theories of the occupation. Completed work is evaluated for appropriateness and effectiveness in meeting goals.

Guidelines such as regulations, instructions, evaluation criteria, and prior case or action files are available, but they are often not completely applicable to the assignment or have gaps in specificity. The employee uses judgment in interpreting and adapting guidelines for application to specific cases or problems. The employee bases decisions and recommendations on facts and conventional interpretations of guidelines rather than on theory or opinion.

The employee contacts others, as described above under clerical work, to provide, receive, or develop information in order to identify problems, needs or issues, and/or to coordinate work efforts or resolve problems.

WORK EXAMPLE -- Reports and Financial Assistant, GS-0303-06

Nature of Assignment

The employee runs a statistical reporting and records systems for a major division of a regional office. The division is a relatively stable organization that does not have widely diverse functions. The employee works by: analyzing feeder reports from various branches and units; preparing divisionwide reports: designing detailed charts and graphs; and conducting special management studies requiring written presentations of findings, recommendations, forecasts, and justifications.

The employee also reviews work measurement functions for the division to ensure that basic reporting requirements and procedures are being followed and that reports provide clear and concise information; analyzes data to determine and evaluate results, trends, and developments; and writes instructions as needed to implement changes in reporting procedures.

The employee consolidates annual funding estimates from subordinate offices into a complete budget request for the division; organizes estimates by appropriation, object class, and line item following current budget instructions; and prepares required supporting documentation for expenditures such as employee travel, training, and office equipment and supplies. Funding requirements for the division's are relatively stable from year to year.

Work requires an in-depth practical knowledge of the division's activities, operations, and established guidelines relating to work measurement functions, statistical reporting and records systems, and the budget process. The work also requires skill to compile and summarize information and data, identify inaccuracies or anomalies in the information, and make written recommendations to resolve discrepancies based on interpretation of applicable regulations and procedures. The employee must extract and analyze a considerable volume of information to arrive at an end product.

Level of Responsibility

The supervisor makes assignments by defining objectives, priorities, and deadlines. The employee independently gathers data, prepares reports, and makes recommendations consistent with normal practice, using experience in solving problems and handling unusual occurrences. Completed work is evaluated for appropriateness and effectiveness. The supervisor and users of the data are available to provide advice if significant changes in operations or data requirements occur.

The guidelines include manuals on the budget process as well as general guidance on management reporting techniques. The employee uses judgment in interpreting rather general guidelines to prepare reports, evaluate compliance with work measurement requirements, and develop findings, recommendations, and justifications.

Contacts are with co-workers and users of the information to exchange information, present findings, and improve reporting and budget development methods. Contacts are usually cooperative.

GS-7

THE LAW

Perform, under general supervision, work of considerable difficulty and responsibility along special technical or supervisory lines in office, business, or fiscal administration requiring:

- (i) considerable specialized or supervisory training and experience;
- (ii) comprehensive working knowledge of a special and complex subject matter, procedures, or practice; and

- (iii) to a considerable extent the exercise of independent judgment.

Nature of Assignment

Work consists of specialized duties with continuing responsibility for projects, questions, or problems that arise within an area of a program or functional specialty as defined by management. Work assignments involve a wide variety of problems or situations common to the segment of the program or function for which the employee is responsible. Each assignment typically consists of a series of related actions or decisions prior to final completion. Decisions or recommendations are based on the development and evaluation of information that comes from various sources. The work involves identifying and studying factors or conditions and determining their interrelationships as appropriate to the defined area of work. The employee must be concerned about taking or recommending actions that are consistent with the objectives and requirements of the program or functions.

The work requires knowledge and skill to recognize the dimensions of the problems involved, collect the necessary information, establish the facts, and take or recommend action based upon application or interpretation of established guidelines. The work also requires practical knowledge, developed through increasingly difficult, on-the-job training or experience dealing with the operations, regulations, principles, and peculiarities of the assigned program, function, or activity.

Level of Responsibility

The supervisor makes assignments in terms of objectives, priorities, and deadlines. The employee independently completes assignments in accordance with accepted practices, resolving most conflicts that arise. Completed work is evaluated for appropriateness and conformance to policy.

Guidelines for the work are more complex than at the next lower grade because the employee encounters a wider variety of problems and situations which require choosing alternative responses. Guides, such as regulations, policy statements, and precedent cases, tend to be general and descriptive of intent, but do not specifically cover all aspects of the assignments. Guidelines apply less to specific actions and more to the operational characteristics and procedural requirements of the program or function. Employees must use significant judgment and interpretation to apply the guides to specific cases and adapt or improvise procedures to accommodate unusual or one-of-a-kind situations.

The contacts and purpose of contacts are usually the same as at the next lower level. However, to a greater degree, the employee serves as a central point of contact to provide authoritative explanations of requirements, regulations, and procedures, and to resolve operational problems or disagreements affecting assigned areas.

WORK EXAMPLE -- Administrative Support Assistant, GS-0303-7

Nature of Assignment

Advises the manager of a single-function field office on the practical and technical aspects of office administration, to include budgeting, purchasing, supply management, personnel administration, data processing, and files management, and performs staff support work in each of these areas. The employee collects data for the office operating budget, reviews submissions of office staff assistants for proper format and compliance with agency budget requirements, and consolidates material into an annual office budget; sets up controls to monitor expenses during the year; and recommends budget adjustments including restructuring budget allocations or work plans to deal with changing situations such as varying costs for equipment parts, or services, and changes in the availability of funds.

The employee also updates the office's supply sources catalogues; purchases supplies, equipment, and services through open market purchase by blanket agreement, cash or field purchase order, or similar methods; processes and tracks purchase documents; completes requests for personnel actions and writes position descriptions; and distributes forms and instructions for annual performance ratings and ensures timely, proper completion. Conducts local recruitment and holds new employee orientation sessions. Maintains and revises the office filing system. Collects program information from technical specialists, enters it into electronic or manual information systems, and searches for it as requested; schedules use and maintenance of computer equipment; enters and retrieves information from a variety of systems; and helps field office employees to use the various computer systems.

The employee must maintain, and transfer funds between several unrelated appropriated fund accounts and several revolving fund accounts. The accounts are subject to different regulations and procedures. The work also involves initiating personnel actions as needed by the office. The employee tracks virtually all financial, personnel, supply, and other administrative transactions as the documentation flows through the office in both electronic form and on paper.

Work requires general knowledge of the mission and functions of the field office. The employee must understand how the office's various administrative services relate to one another and how they relate to the office's mission. The work also requires broad understanding and detailed procedural knowledge of budget, purchasing, personnel, and information processing functions of the field office.

Level of Responsibility

The supervisor makes assignments by defining objectives, priorities, and deadlines. The employee works independently, using a general understanding of the expected outcomes and the scope of the assignments, and draws upon experience in resolving the more difficult situations that occasionally arise. The work is reviewed for technical accuracy, soundness of judgment, and adherence to program requirements and objectives.

The employee has available for use a large number of guidelines covering the various aspects of the total job. The employee uses judgment to select the correct part of the most appropriate guideline to apply to each of a large variety of actions, such as budget estimates, tracking annual spending, and initiating personnel actions. When guidelines change, the employee may obtain

assistance, as needed, from staff specialists at a higher echelon. Most of the time, the employee follows procedures, formats, and practices specified in agency supplements to broad, Governmentwide guidelines. However, situations often arise which are not specifically covered by guidelines, requiring the employee to apply general principles to specific situations.

Contacts are with co-workers, managers in the organization for which services are performed, and staff specialists at higher echelons.

The employee develops and exchanges information, resolves operating problems and makes recommendations. Contacts are usually cooperative, but there may be disagreements as to the facts in a case, or disagreements on the interpretation or application of regulations and guidelines to specific situations.

Administrative Analysis Grade Evaluation Guide

TABLE OF CONTENTS

COVERAGE.....	2
EXCLUSIONS.....	2
BACKGROUND INFORMATION.....	3
HOW TO USE THIS GUIDE.....	3
GRADE CONVERSION TABLE.....	4
FACTOR LEVEL RELATIONSHIPS.....	5
FACTOR LEVEL DESCRIPTIONS.....	5
FACTOR 1, KNOWLEDGE REQUIRED BY THE POSITION.....	5
FACTOR 2, SUPERVISORY CONTROLS.....	9
FACTOR 3, GUIDELINES.....	11
FACTOR 4, COMPLEXITY.....	12
FACTOR 5, SCOPE AND EFFECT.....	16
FACTOR 6, PERSONAL CONTACTS AND	
FACTOR 7, PURPOSE OF CONTACTS.....	20
FACTOR 8, PHYSICAL DEMANDS.....	21
FACTOR 9, WORK ENVIRONMENT.....	21

COVERAGE

This guide provides grade level criteria for nonsupervisory staff administrative analytical, planning, and evaluative work, at grade GS-09 and above. Work covered by the guide is administrative in nature and does not require specialized subject matter knowledge and skills. While such work does not require specialized educational preparation, it does require a high degree of qualitative and/or quantitative analytical skills, the ability to research problems and issues, written and oral communication skills, and the application of mature judgment in problem solving.

EXCLUSIONS

1. Full performance level (nontrainee) positions below grade GS-09 involved in the performance of one-grade interval technician or assistant work in a support capacity. Such positions should be graded using standards and guides for clerical, assistant, and technician work.
2. Position which consists solely of duties and responsibilities related to the line management or delivery of agency programs. Such work typically requires specialized subject matter knowledge and skills and should be graded through reference to the appropriate subject matter standard.
3. Positions for which specialized technical skills or educational qualifications are of paramount importance to satisfactory performance of the work (e.g., education of the type usually gained through completion of specified academic course-work or extensive experience in an occupation). Such positions should be evaluated through reference to an appropriate subject matter standard.
4. Professional and scientific positions primarily concerned with the analysis of public policy issues and their impact on social, economic, scientific, legal, diplomatic, environmental, and other issues of national and international significance. Such positions are evaluated by the Policy Analysis Grade-Evaluation Guide.
5. Positions involving financial or other specialized administrative duties and responsibilities which are more thoroughly covered by criteria in specific occupational standards (e.g., the Financial Management Series, GS-0505; series covered in the Job Family Position Classification Standard for Professional and Administrative Work in the Accounting and Budget Group, GS-0500). Such positions should be evaluated through reference to the appropriate subject matter standard.

BACKGROUND INFORMATION

This guide is designed specifically to evaluate staff analytical, planning, and evaluative work concerned with the administrative and operational aspects of agency programs and management. Although line work is excluded from coverage, the guide may also be used for evaluating staff analytical duties of positions primarily engaged in line management or program administration.

Typical positions covered by this guide require knowledge of: (1) the overall mission, functions, and organization of the agency or component; (2) the principles, functions, and processes of management and the organization of work; (3) agency program operations, processes, goals, and objectives; and (4) evaluative, planning, and analytical processes and techniques (quantitative and qualitative). Knowledge is applied in a staff advisory capacity to line management in support of: planning, development, and execution of agency programs; the administrative management of agencies and their component organizations; or the performance of related functions requiring comparable knowledge and skills.

The guide is intended primarily for use in evaluating two-grade interval positions in the General Administrative, Clerical, and Office Services Group, GS-0300. Since this is a functional guide, it may also be used as an additional source of classification guidance for two grade-interval administrative work in other occupational groups not covered by published grade level criteria, and where the positions involved require knowledge and skill in the application of analytical and evaluative concepts, methods, and techniques comparable to those described in this guide.

HOW TO USE THIS GUIDE

Positions should be evaluated on a factor-by-factor basis using the (FES) factor level descriptions contained in this guide. Total points for all factors are converted to grade level using the table below. The basic instructions and concepts contained in the Instructions for the Factor Evaluation System (May 1977) should be applied in the evaluation of positions.

The guide contains work illustrations designed to assist users in selecting the proper levels for Factors 1, 4, and 5. The illustrations provide an expanded frame of reference for identifying the concepts of these factor levels. Users should not rely solely on the illustrations in evaluating positions, since they reflect a rather narrow range of actual work examples for positions covered by this guide. Instead, users should attempt to match the intent of the various factor levels, and within the illustrations, find concepts and examples which are comparable to those of the position being evaluated.

The guide does not provide criteria for trainee or developmental work below grade GS-09. Agencies may establish positions at these levels as needed for entry and development using the (FES) primary standard for factor levels falling below those described in the guide, related classification standards, and sound classification and position management practices.

The series of a position classified in whole or in part by this guide is determined by the assigned duties and responsibilities and the qualifications required for the work. Official position titles are established by published classification standards for the series or by the general instructions for titling in the Introduction to the Position Classification Standards.

GRADE CONVERSION TABLE

Total points on all evaluation factors are converted to GS grade as follows:

GS Grade	Point Range
9	1855-2100
10	2105-2350
11	2355-2750
12	2755-3150
13	3155-3600
14	3605-4050
15	4055- up

FACTOR LEVEL RELATIONSHIPS

The following table illustrates how the FES factor levels combine in typical administrative analytical positions at grades GS-09 through GS-13. The table is provided to aid users in understanding the most common factor relationships at each grade; i.e., the level of knowledge required to perform work of a particular level of complexity. However, other combinations of factors may be appropriate for particular positions.

Factors/Grade Levels	GS-09	GS-11	GS-12	GS-13
Knowledge	1-6	1-7	1-7	1-8
Supervisory Controls	2-3	2-4	2-4	2-4
Guidelines	3-3	3-3	3-4	3-4 or 3-5
Complexity	4-3	4-4 or 4-5	4-5	4-5
Scope and Effect	5-3	5-3 or 5-4	5-4	5-4 or 5-5
Personal Contacts	2 or 3	2 or 3	3	3
Purpose of Contacts	b or c	b or c	c	c
Physical Demands	8-1	8-1	8-1	8-1
Work Environment	9-1	9-1	9-1	9-1

FACTOR LEVEL DESCRIPTIONS

FACTOR 1, KNOWLEDGE REQUIRED BY THE POSITION

NOTE: In evaluating this factor, the knowledge and skills required in the application of analytical and evaluative methods and techniques to organizational and program issues or studies is of greater significance than knowledge of the techniques themselves. Many of the methods and techniques used by positions covered by this guide will have application over a wide range of assignments.

Level 1-6 -- 950 Points

This level of knowledge is appropriate for analytical and evaluative positions at the first full-performance level.

Positions with this level of knowledge require skill in applying analytical and evaluative techniques to the identification, consideration, and resolution of issues or problems of a procedural or factual nature. The issues or problems deal with readily observable conditions (e.g., office or shop layout, work-flow, or working conditions), written guidelines covering work methods and procedures such as performance and production standards, and information of a factual nature (e.g., number and type of units actually produced or capability of equipment). Included at this level is knowledge of the theory and principles of management and organization, including administrative practices and procedures common to organizations, such as those pertaining to areas of responsibility, channels of communication, delegation of authority, routing of correspondence, filing systems, and storage of files and records.

Assignments typically involve using qualitative and quantitative analytical techniques such as: literature search; work measurement; task analysis and job structuring; productivity charting; determining staff to workload ratios (e.g., span of control); organization design; space planning; development and administration of questionnaires; flowcharting of work processes; graphing; and calculation of means, modes, standard deviations, or similar statistical measures.

Assignments require skill in conducting interviews with supervisors and employees to obtain information about organizational missions, functions, and work procedures.

ILLUSTRATIONS:

- Knowledge of management principles, organizational theory, and techniques of analysis and evaluation, along with knowledge of standardized administrative practices and procedures to conduct studies of clerical work processes in various organizations to identify, analyze, and recommend solutions to problems in organizational structure, staffing, administrative procedures, work processes, or workload distribution.
- Knowledge of administrative regulations and operating procedures plus skill in applying fact-finding and investigative techniques (e.g., employee/supervisor interviews, review of work procedures, instructions, records, and files) to gather clear-cut factual evidence of administrative waste and abuse, or compliance with regulations.
- Knowledge of established management principles, pertinent administrative regulations, and staffing guidelines plus skill in applying fact-finding and work measurement techniques to conduct position management studies of clerical, trades, technician, and administrative support positions within a single organizational component at the operating (installation) level. Assignments require skill in preparing and delivering briefings to managers on study findings and recommendations.

Level 1-7 -- 1250 Points

In addition to knowledge of the previous level, assignments require knowledge and skill in applying analytical and evaluative methods and techniques to issues or studies concerning the efficiency and effectiveness of program operations carried out by administrative or professional personnel, or substantive administrative support functions (i.e., internal activities or functions such as supply, budget, procurement, or personnel which serve to facilitate line or program operations). This level includes knowledge of pertinent laws, regulations, policies and precedents which affect the use of program and related support resources (people, money, or equipment) in the area studied. Projects and studies typically require knowledge of the major issues, program goals and objectives, work processes, and administrative operations of the organization.

Knowledge is used to plan, schedule, and conduct projects and studies to evaluate and recommend ways to improve the effectiveness and efficiency of work operations in a program or support setting. The assignments require knowledge and skill in adapting analytical techniques and evaluation criteria to the measurement and improvement of program effectiveness and/or organizational productivity. Knowledge is applied in developing new or modified work methods, organizational structures, records and files, management processes, staffing patterns, procedures for administering program services, guidelines and procedures, and automating work processes for the conduct of administrative support functions or program operations. Knowledge may also be applied in analyzing and making recommendations concerning the centralization or decentralization of operations.

ILLUSTRATIONS:

- Knowledge of qualitative and quantitative techniques for analyzing and measuring the effectiveness, efficiency, and productivity of administrative and technical programs, along with knowledge of the mission, organization, and work processes of programs throughout a military command, complex multi-mission local installation, or equivalent, and the relationships of administrative support activities (e.g., data processing, accounting, budget) to such missions. Knowledge is applied in conducting studies, analyzing findings and making recommendations on substantive operating programs; e.g., weapons testing or commodity management. The work requires skill in preparing project papers and staff reports and skill in organizing and delivering briefings to managers to encourage understanding and acceptance of findings and recommendations.

- Knowledge of organization, programs, missions, and functions of the parent military command along with knowledge of analytical and investigative techniques to conduct staffing requirements and utilizations and/or field installations. Assignments require skill in conducting detailed analyses of complex functions and work processes including: examination of production standards; past, present, and programmed workloads; nonproductive time; and deviations from standards to determine validated staffing requirements for the

function studied. Work requires considerable inter-personal skills in presenting staffing recommendations and negotiating solutions to disputed recommendations.

- Thorough knowledge of the service or bureau benefit programs, operations, objectives, and policies along with a comprehensive knowledge of management and organizational techniques, systems, and procedures is applied in performing a wide variety of analytical studies and projects related to management improvement, productivity improvement, management controls, and long-range planning. Assignments include: developing guidance on techniques for management and methods improvement; analyzing and advising on proposed reorganizations or realignment of functions; and developing manuals and directives covering the administrative aspects of field station operations.

Level 1-8 -- 1550 Points

This is the level of the expert analyst who has mastered the application of a wide range of qualitative and/or quantitative methods for the assessment and improvement of program effectiveness or the improvement of complex management processes and systems. In addition to knowledge of the next lower level, this level requires comprehensive knowledge of the range of administrative laws, policies, regulations, and precedents applicable to the administration of one or more important public programs. Typically, this includes knowledge of agency program goals and objectives, the sequence and timing of key program events and milestones, and methods of evaluating the worth of program accomplishments. Work requires knowledge of relationships with other programs and key administrative support functions within the employing agency or in other agencies.

Knowledge characteristic of this level are applied to a variety of ways. For example, knowledge is applied to the design and conduct of comprehensive management studies where the boundaries of the studies are extremely broad and difficult to determine in advance; i.e., the actual limits of the project are developed as the study proceeds. Study objectives are to identify and propose solutions to management problems which are characterized by their breadth, importance, and severity, and for which previous studies and established management techniques are frequently inadequate.

For other assignments, knowledge may be applied in preparing recommendations for legislation to change the way programs are carried out; in evaluating the content of new or modified legislation for projected impact upon agency programs and resources; and/or in translating basic legislation into program goals, actions, and services.

Also included at this level is skill to plan, organize, and direct team study work and to negotiate effectively with management to accept and implement recommendations, where the proposals involve substantial agency resources, require extensive changes in established procedures, or may be in conflict with the desires of the activity studied.

ILLUSTRATIONS:

- Expert knowledge of analytical and evaluative methods plus a thorough understanding of how regulatory or enforcement programs are administered to select and apply appropriate program evaluation and measurement techniques in determining the extent of compliance with rules and regulations issued by the agency, or in measuring and evaluating program accomplishments. This may include evaluating the content of new or modified legislation for projected impact upon the agency's programs or resources.

- Mastery of advanced management and organizational principles and practices along with a comprehensive knowledge of planning, programming, and budgeting regulations, guidelines and process, and thorough knowledge of the military command's facilities planning, acquisition, and management process to prepare long-range (5 year) and short-range planning guidance in accordance with broad agency program policies and objectives. Develops resource (staffing and funding) guidance for subordinate activities, and performs continuous appraisal of the utilization of command resources in accomplishing program objectives and goals. The work requires ability to direct complex studies requiring application of advanced analytical and statistical methods and techniques.

- Knowledge of military command structure, missions, programs, and organizational relationships plus a thorough knowledge of quantitative and qualitative methods and techniques to develop staffing standards covering complex program functions or missions, e.g., management of agency research operations, or staffing requirements for new or substantially altered training or operational missions and programs. Studies and analyses are of such scope that they frequently require a team effort. Projects typically involve development of new approaches to identifying meaningful workload factors and performance quality levels, and determining accurate measurement techniques.

FACTOR 2, SUPERVISORY CONTROLS*Level 2-3 -- 275 Points*

The supervisor assigns specific projects in terms of issues, organizations, functions, or work processes to be studied and sets deadlines for completing the work. Where two or more projects are involved, the supervisor may assign priorities among the various projects as well as deadlines for the attainment of specific milestones within a project. The supervisor or higher grade analyst provides assistance on controversial issues or on the application of qualitative or quantitative analytical methods to the study of subjects for which precedent studies are not available.

The employee plans, coordinates, and carries out the successive steps in fact-finding and analysis of issues necessary to complete each phase of assigned projects. Work problems are normally resolved by the employee without reference to the supervisor, in accordance with the body of

accepted office policies, applicable precedents, organizational concepts, management theory, and occupational training.

Work is reviewed for conformance with overall requirements as well as contribution to the objectives of the study. Complete work products such as evaluation reports and staff studies, are also reviewed for consistency of facts and figures, choice of appropriate analytical methods, and practicality of recommendations. Findings and recommendations developed by the employee are reviewed prior to release, publication, or discussion with management officials.

Level 2-4 -- 450 Points

Within a framework of priorities, funding and overall project objectives (e.g., cost reduction, improved effectiveness and efficiency, better workload distribution, or implementation of new work methods), the employee and supervisor develop a mutually acceptable project plan which typically includes identification of the work to be done, the scope of the project, and deadlines for its completion.

Within the parameters of the approved project plan, the employee is responsible for planning and organizing the study, estimating costs, coordinating with staff and line management personnel, and conducting all phases of the project. This frequently involves the definitive interpretation of regulations and study procedures, and the initial application of new methods. The employee informs the supervisor of potentially controversial findings, issues, or problems with widespread impact.

Completed projects, evaluations, reports, or recommendations are reviewed by the supervisor for compatibility with organizational goals, guidelines, and effectiveness in achieving intended objectives. Completed work is also reviewed critically outside the employee's immediate office by staff and line management officials whose programs and employees would be affected by implementation of the recommendations.

Level 2-5 -- 650 Points

As a recognized authority in the analysis and evaluation of programs and issues, the employee is subject only to administrative and policy direction concerning overall project priorities and objectives.

At this level, the employee is typically delegated complete responsibility and authority to plan, schedule, and carry out major projects concerned with the analysis and evaluation of programs or organizational effectiveness. The employee typically exercises discretion and judgment in determining whether to broaden or narrow the scope of projects or studies.

Analyses, evaluations, and recommendations developed by the employee are normally reviewed by management officials only for potential influence on broad agency policy objectives and program goals. Findings and recommendations are normally accepted without significant change.

FACTOR 3, GUIDELINES

Level 3-3 -- 275 Points

Guidelines consist of standard reference material, texts, and manuals covering the application of analytical methods and techniques (statistical, descriptive or evaluative) and instructions and manuals covering the subjects involved (e.g., organizations, equipment, procedures, policies, and regulations).

Analytical methods contained in the guidelines are not always directly applicable to specific work assignments. However, precedent studies of similar subjects are available for reference. The employee uses judgment in choosing, interpreting, or adapting available guidelines to specific issues or subjects studied. The employee analyzes the subject and the current guidelines which cover it (e.g., workflow, delegations of authority, or regulatory compliance) and makes recommendations for changes.

Included at this level are work assignments in which the subject studied is covered by a wide variety of administrative regulations and procedural guidelines. In such circumstances the employee must use judgment in researching regulations, and in determining the relationship between guidelines and organizational efficiency, program effectiveness, or employee productivity.

Level 3-4 -- 450 Points

Guidelines consist of general administrative policies and management and organizational theories which require considerable adaptation and/or interpretation for application to issues and problems studied. At this level, administrative policies and precedent studies provide a basic outline of the results desired, but do not go into detail as to the methods used to accomplish the project.

Administrative guidelines usually cover program goals and objectives of the employing organization, such as agency controls on size of work force, productivity targets, and similar objectives. Within the context of broad regulatory guidelines the employee may refine or develop more specific guidelines such as implementing regulations or methods for the measurement and improvement of effectiveness and productivity in the administration of operating programs.

Level 3-5 -- 650 Points

Guidelines consist of basic administrative policy statements concerning the issue or problem being studied, and may include reference to pertinent legislative history, related court decisions, state and local laws, or policy initiatives of agency management.

The employee uses judgment and discretion in determining intent, and in interpreting and revising existing policy and regulatory guidance for use by others within or outside the

employing organization (e.g., other analysts, line managers, or contractors). Some employees review proposed legislation or regulations which would significantly change the basic character of agency programs, the way the agency conducts its business with the public or with private industry, or which modify important inter-agency relationships. Other employees develop study formats for use by others on a project team or at subordinate echelons in the organization. At this level, the employees are recognized as experts in the development and/or interpretation of guidance on program planning and evaluation in their area of specialization (e.g., work force management, contingency/emergency planning, position management, work measurement, or productivity improvement).

FACTOR 4, COMPLEXITY

Level 4-3 -- 150 Points

The work principally involves dealing with problems and relationships of a procedural nature rather than the substance of work operations, issues, or other subjects studied. At this level, the employee analyzes the issues in the assignment, then selects and applies accepted analytical techniques such as task analysis, work simplification, work-flow charts, workload measurement, and trend analysis to the resolution of procedural problems affecting the efficiency, effectiveness, or productivity of the organization and/or workers studied.

Projects usually take place within organization with related functions and objectives, although organization and work procedures differ from one assignment to the next. Typical organizational efficiency assignments involve observing work in progress to identify and resolve problems in work-flow, work methods and procedures, task distribution, overall workload, forms and record keeping, span of control, and organizational structure. When performed, evaluative studies involve measurement of current work output, group productivity and accomplishments, or identification of current resource needs (staff, supplies, equipment, and space). Typically, the employee prepares a narrative report containing a statement of the issue or problem, background, observations, options for change, and recommendations for action.

Findings and recommendations are based upon analysis of work observations, review of production records or similar documentation, research of precedent studies, and application of standard administrative guidelines (e.g., staffing guidelines or performance and production standards).

ILLUSTRATIONS:

- Uses established analytical techniques or precedent studies to gather narrative or statistical information to develop improved organizational structures, staffing patterns, and work-flow in a vehicle maintenance and repair shop or supply warehouse. Observes operations to identify problems in work-flow and procedures, work distribution, overall workload, and skill mix of workers.

- Applies accepted techniques and systems for assessing workload and productivity (e.g., time and motion study, task analysis, flowcharting of work processes) to develop methods, forms, and procedures for performance measurement or appraisal of clerical employees in a claims processing or comparable operation.
- As a team member, conducts management surveys of clerical, blue-collar, and administrative support activities to determine compliance with applicable regulations and procedures and sound management practices. Interviews employees and supervisors to collect factual information on the operations surveyed; observes work in process; and reviews files and other record material on workload and accomplishments. Surveys deal primarily with procedural aspects rather than the substance of administrative operations.

Level 4-4 -- 225 Points

The work involves gathering information, identifying and analyzing issues, and developing recommendations to resolve substantive problems of effectiveness and efficiency of work operations in a program or program support setting. This is in addition to improving conditions of a procedural nature which relate to the efficiency of organizations and workers described at the previous level. By way of contrast with level 4-3, work at this level requires the application of qualitative and quantitative analytical techniques that frequently require modification to fit a wider range of variables.

Subjects and projects assigned at this level usually consist of issues, problems, or concepts that are not always susceptible to direct observation and analysis (e.g., projected missions and functions). Difficulty is encountered in measuring effectiveness and productivity due to variations in the nature of administrative processes studied (e.g., those associated with processing information, reorganizing to meet changes in mission, or providing support services). Information about the subject is often conflicting or incomplete, cannot readily be obtained by direct means, or is otherwise difficult to document. For example, assignments may involve compiling, reconciling, and correlating voluminous workload data from a variety of sources with different reporting requirements and formats, or the data must be carefully cross-checked, analyzed, and interpreted to obtain accurate and relevant information.

Characteristic of this level is originality in refining existing work methods and techniques for application to the analysis of specific issues or resolution of problems. For example, the employee may revise methods for collecting data on workload, adopt new measures of productivity, or develop new approaches to relate productivity measurements to a performance appraisal system.

ILLUSTRATIONS:

- Studies, analyzes, and develops methods to improve the accuracy, adequacy, and timeliness of information and systems for disseminating information about the agency's programs and work force to managers at many organizational echelons and/or geographic locations. Employee must consider the information needs,

interests, and level of detail needed to satisfy a wide variety of user requirements. Potential sources of data must be cross-checked, analyzed, and interpreted by the employee to obtain accurate, relevant information.

- Serves as management advisor in the bureau headquarters of an agency (or equivalent organization) with responsibility for performing a range of analytical studies and projects related to field program operations in the areas of management and productivity improvement (including effectiveness of work methods, manpower utilization, and distribution of functions); management controls; and work planning. Assignments typically involve the study of organizations, work processes, or functions that are interrelated. The work requires detailed planning to conduct information gathering; interpretation of administrative records and reports; correlation of information to corroborate facts; and coordination with management representatives.

- Provides advice to management on the distribution of work among positions and organizations, and the efficient utilization of positions and employees in programs and program support areas staffed by employees in professional, technical, clerical, and blue-collar occupations. The nature of the work is such that the employee must continually gather, interpret, analyze, and correlate large amounts of narrative and statistical information about organizational functions, workload, and productivity. Studies involve consideration of relationships among tasks, positions, organizations, workload, and productivity. Studies involve consideration of relationships among tasks, positions, organizations, workload distribution, employee capabilities, and requirements of applicable staffing guides.

Level 4-5 -- 325 Points

The work consists of projects and studies which require analysis of interrelated issues of effectiveness, efficiency, and productivity of substantive mission-oriented programs. Typical assignments require developing detailed plans, goals, and objectives for the long-range implementation and administration of the program, and/or developing criteria for evaluating the effectiveness of the program.

Decisions about how to proceed in planning, organizing and conducting studies are complicated by conflicting program goals and objectives which may derive from changes in legislative or regulatory guidelines, productivity, and/or variations in the demand for program services. Assignments are further complicated by: the need to deal with subjective concepts such as value judgments; the quality and quantity of actions are measurable primarily in predictive terms; and findings and conclusions are highly subjective and not readily susceptible to verification through replication of study methods or reevaluation of results.

Options, recommendations, and conclusions developed by the employee take into account and give appropriate weight to uncertainties about the data and other variables which affect long-range program performance. For example, the employee may need to consider and assess

the relative advantages and disadvantages of centralizing or decentralizing work operations in organizations with several echelons of geographically separated components. In some instances, work is complicated by the need to develop data about workload and program accomplishments which is currently unavailable. Current measurements of program effectiveness may be ambiguous and susceptible to widely varying interpretations. Under these circumstances the employee develops new information about the subject studied and establishes criteria to identify and measure program accomplishments, develops methods to improve the effectiveness with which programs are administered, or develops new approaches to program evaluation which serve as precedents for others.

ILLUSTRATIONS:

- Assignments require analysis of interrelated issues of effectiveness, efficiency, and productivity affecting major administrative programs of an agency. Studies are often complicated by the need to consider and evaluate the impact of changes in legislative and regulatory requirements; long-range program goals and objectives; political, economic, and social consequences of changes in the type or amount of services provided; or the changing nature of the program's clients and beneficiaries. Difficulty characteristic of this level is encountered in planning and establishing the long-range (more than 5 year) program goals, objectives, and measurement criteria.

- Analyzes and formulates agency requirements for resource management information systems to support resource allocation targets for a nationwide medical care program including inpatient care, long-term care, and outpatient care, and an extensive medical education program. The work involves developing the overall systems concepts for the resources management systems data base, providing input on state-of-the-art systems design, defining new information requirements, and developing procedures and formats for timely and accurate reporting. Leads evaluations of the output of information system components (e.g., outpatient care) to insure that resource allocation objectives are being met and to assess effectiveness from a systems standpoint.

Level 4-6 -- 450 Points

The employee plans, organizes, and carries through to completion analytical studies involving the substance of key agency programs. Studies are of such breadth and intensity that they often require input and assistance from other analysts and subject-matter specialists in fields appropriate to the subject. Where the assistance of other analysts is required, the incumbent typically serves as the team leader responsible for assigning segments of the study to various participants, coordinating the efforts of the group, and consolidating findings into a completed product (e.g., evaluation report, proposed changes in legislation or regulations, or recommended course of action).

At this level, there is extreme difficulty in identifying the nature of the issues or problems to be studied, and in planning, organizing, and determining the scope and depth of the study. The

nature and scope of the issues are largely undefined. Difficulty is encountered in separating the substantive nature of the programs or issues studied into their administrative, technical, political, economic, fiscal and other components, and determining the nature and magnitude of the interactions. Difficulty is also encountered in discerning the intent of legislation and policy statements, and determining how to translate the intent into program actions.

The work typically involves efforts to develop and implement programs based upon new or revised legislation requiring consideration of the immediate sequential, and long-range effects, both direct and indirect, or proposed actions on the public, other government programs, and/or private industry. The employee doing program evaluation studies is normally faced with the need to develop new ways to measure program accomplishments, results, and effectiveness.

ILLUSTRATION:

- Analytical assignments involve efforts to develop and implement broad programs based on new or revised legislation. The work typically requires efforts to develop new program objectives or legislative and regulatory initiatives to facilitate achievement of program goals and objectives to facilitate achievement of program goals and objectives (e.g., reducing pollution, improving safety, providing health care, or improving productivity). Assignments are usually without precedent, of long duration and of such scope that they frequently require directing a team effort. Such work requires consideration of the immediate as well as long-range effect of proposed actions on the public or other Government programs (e.g., changes in levels of benefits or services). Considers a wide range of issues which affect the program, such as changing information technology and comparable conditions of a highly variable nature.

FACTOR 5, SCOPE AND EFFECT

Level 5-3 -- 150 Points

The purpose of the work is to plan and carry out projects to improve the efficiency and productivity of organizations and employees in administrative support activities. Employees at this level identify, analyze, and make recommendations to resolve conventional problems and situations in work-flow, work distribution, staffing, performance appraisal, organizational structure, and/or administration. Employees may be assigned portions of broader studies of largely administrative organizations or participate in the evaluation of program effectiveness at the operating level. Work may also involve developing detailed procedures and guidelines to supplement established administrative regulations or program guidance.

Completed reports and recommendations influence decisions by managers concerning the internal administrative operations of the organizations and activities studied. The work may involve identifying problems, studying, analyzing and making recommendations concerning the efficiency and productivity of administrative operations in different components of an organization.

ILLUSTRATIONS:

- Analyzes and evaluates current management and organizational practices to determine the most efficient way to organize work within a word processing center, records holding area, or comparable clerical organization (e.g., a claims processing or record keeping operation), including the number and skills mix of positions needed to staff the office. Recommendations result in increased productivity and efficiency in providing service to users.
- Applies accepted principles, methods, and guidelines for qualitative analysis to administrative support issues and problems or to the clerical aspects of program implementation at the operating or installation level. Study conclusions and recommendations form the basis for management decisions affecting the efficiency and economy of operations internal to the installation.
- Develops standard procedures for records management (i.e., storing, retrieving, and routing records and files) for use in organizations at the same echelon with similar missions and functions. Recommendations result in cost savings and improved service to the organization.

Level 5-4 -- 225 Points

The purpose of the work is to assess the productivity, effectiveness, and efficiency of program operations or to analyze and resolve problems in the staffing, effectiveness and efficiency of administrative support and staff activities. Work involves establishing criteria to measure and/or predict the attainment of program or organizational goals and objectives. Work at this level may also include developing related administrative regulations, such as those governing the allocation and distribution of personnel, supplies, equipment, and other resources, or promulgating program guidance for application across organizational lines or in varied geographic locations. Work that involves the evaluation of program effectiveness usually focuses on the delivery of program benefits or services at the operating level.

Work contributes to the improvement of productivity, effectiveness, and efficiency in program operations and/or administrative support activities at different echelons and/or geographical locations within the organization. Work affects the plans, goals, and effectiveness of missions and programs at these various echelons or locations. Work may affect the nature of administrative work done in components of other agencies (e.g., in preparation and submission of reports, in gathering and evaluating workload statistics, or in routing and storing official correspondence or files).

ILLUSTRATIONS:

- Studies, analyzes, and develops ways to improve the accuracy, adequacy, timeliness, and validity of data and systems for disseminating information about the agency's programs and work force to managers in many echelons and/or

geographic locations. Completed work contributes to the effectiveness, efficiency, and productivity of large organizations within an agency.

- Conducts interviews with employees who carry out administrative programs and performs non-financial audits of program and administrative records to determine compliance with agency program and administrative policies and regulations, to assess staff utilization, and to evaluate effectiveness of program administration. Prepares formal reports of violations detected involving possible fraud, waste, or abuse. Completed assignments contribute to effectiveness and economy of a range of agency activities.

- Advises on changes to organizational structures, organizational charts, and mission and function statements to implement reorganizations or changes in program administration in order to reduce or eliminate functional overlap among the agency's substantive programs. Work contributes to the optimum organization and distribution of functions, organizational structure and staffing of activities.

Level 5-5 -- 325 Points

The purpose of the work is to analyze and evaluate major administrative aspects of substantive, mission-oriented programs. This may involve, for example, the development of long-range program plans, goals, objectives, and milestones, or to evaluating the effectiveness of programs conducted throughout a bureau or service of an independent agency, a regional structure of equivalent scope, or a large complex multi-mission field activity. The work involves identifying and developing ways to resolve problems or cope with issues which directly affect the accomplishment of principal program goals and objectives (e.g., the delivery of program benefits or services). Some employees develop new ways to resolve major administrative problems or plan the most significant administrative management aspects of professional or scientific programs, while some employees at this level develop administrative regulations or guidelines for the conduct of program operations, while others develop new criteria for measuring program accomplishments (e.g., the level, costs, or intrinsic value of benefits and services provided) and the extent to which program goals and objectives are attained.

Study reports typically contain findings and recommendations of major significance to top management of the agency, and often serve as the basis for new administrative systems, legislation, regulations, or programs. Typical of work products prepared by employees at this level are complete decision packages, staff studies, and recommendations which upon implementation would significantly change major administrative aspects of missions and programs, or substantially affect the quality and quantity of benefits and services provided to the agency's clients.

ILLUSTRATIONS:

- Conducts region-wide studies and evaluations of social programs administered by different organizations within the agency. The work involves isolating, identifying, and recommending solutions to critical problems affecting the

administration of important national social programs and the attainment of agency program goals and objectives. Program evaluations often serve as the basis for substantive changes in the organization and administration of programs affecting substantial numbers of people.

- Serves as project officer responsible for the evaluation of the effectiveness and efficiency of major program operations throughout an agency (e.g., shipbuilding, aircraft overhaul and repair, or health care). Evaluations take into consideration factors such as cost-effectiveness, attainment of program goals and objectives, and compliance with pertinent legal and regulatory guidelines. Recommendations made by the employees usually result in changes in the way service and benefits are distributed to the public, or the way business is conducted with major industrial concerns.

Level 5-6 -- 450 Points

The purpose of the work is to perform very broad and extensive study assignments related to government programs which are of significant interest to the public and Congress. The programs studied typically cut across or strongly influence a number of agencies (e.g., public assistance programs or the effects of international petroleum pricing on national energy policy). In many cases, the study assignments are of major importance to each of several departments and agencies, and because legislation may be conflicting or unclear, there may be disagreements about which department or agency has primary responsibility for significant aspects of the function studied. Studies frequently involve extensive problems of coordination in fact-finding and in reviewing and testing recommendations in interested agencies or with outside groups.

Recommendations resulting from study assignments involve highly significant programs or policy matters and may have an impact on several departments or agencies. Analytical studies often lead to recommendations for the realignment of functional responsibilities, the expansion or contraction of key governmental functions or other equally significant changes in the future direction of programs. Thus, the analyst's findings and recommendations may result in substantial redirection of Federal efforts or policy related to major national issues. Results of work are critical to the mission of the agency or affect large numbers of people on a long term, continuing basis.

ILLUSTRATION:

- Performs or serves as project leader for very broad studies (e.g., involving several agencies) which are of significant interest to the public and the Government. Analytical studies involve programs or policies that cut across a number of agencies or affect major segments of private industry (e.g., national and local drug enforcement programs, national energy policy, or major adjustments in military force or deployment levels). Findings often lead to recommendations for the realignment of functional responsibilities between agencies or other equally significant changes in program direction or policy related to major national issues.

FACTOR 6, PERSONAL CONTACTS AND FACTOR 7, PURPOSE OF CONTACTS

Determine the appropriate level of personal contacts from levels 1 through 4 below and the corresponding purpose of the contacts from levels a through c. Credit the point value found where the selected levels intersect on the chart below.

Persons Contacted

1. Employees within the immediate office or in related administrative or support or organizations, or limited contacts with the general public.
2. Employees, supervisors, and managers of the same agency, but outside of the immediate office, or employees and representatives of private concerns in a moderately structured setting.
3. Persons outside the agency which may include consultants, contractors, or business executives in a moderately unstructured setting. This level may also include contacts with the head of the employing agency or program officials several managerial levels removed from the employee when such contacts occur on an ad-hoc basis.
4. High-ranking officials such as other agency heads, top congressional staff officials, state executive or legislative leaders, mayors of major cities, or executives of comparable private sector organizations.

Purpose of Contacts

- a. To obtain or exchange factual information.
- b. To provide advice to managers on noncontroversial organization or program related issues and concerns. Contacts typically involve such matters as: identification of decision-making alternatives; appraisals of success in meeting goals; or recommendations for resolving administrative problems.
- c. To influence managers or other officials to accept and implement findings and recommendations on organizational improvement or program effectiveness. May encounter resistance due to such issues as organizational conflict, competing objectives, or resource problems.

- d. To justify or settle matters involving significant or controversial issues; e.g., recommendations affecting major programs, dealing with substantial expenditures, or significantly changing the nature and scope of organizations.

P U R P O S E

	a	b	c	d	
C					
O	1	30	60	130*	230*
N	2	45	75	145	245
T	3	80	110	180	280
A					
C					
T	4	130*	160	230	330
S					

*These combinations are probably unrealistic.

FACTOR 8, PHYSICAL DEMANDS

Level 8-1 -- 5 Points

The work is primarily sedentary, although some slight physical effort may be required.

Level 8-2 -- 20 Points

Assignments regularly involve long periods of standing, bending, and stooping to observe and study work operations in an industrial, storage, or comparable work area.

FACTOR 9, WORK ENVIRONMENT

Level 9-1 -- 5 Points

Work is typically performed in an adequately lighted and climate controlled office. May require occasional travel.

Level 9-2 -- 20 Points

Assignments regularly require visits to manufacturing, storage, or other industrial areas, and involve moderate risks or discomforts. Protective clothing and gear and observance of safety precautions are required.

TABLE OF CONTENTS

INTRODUCTION..... 2

COVERAGE 2

SUPERSEDING THE EXISTING FUNCTIONAL GUIDE 3

PART I – RESEARCH 4

THE RESEARCH ENVIRONMENT 4

RESEARCH VERSUS DEVELOPMENT 4

PART II – GRADING INFORMATION 6

EVALUATION SYSTEM..... 6

POINTS BY FACTOR AND LEVEL 7

GRADE CONVERSION TABLE 7

GRADING CRITERIA 8

FACTOR 1 - RESEARCH ASSIGNMENT 8

FACTOR 2 - SUPERVISORY CONTROLS 11

FACTOR 3 - GUIDELINES AND ORIGINALITY..... 14

FACTOR 4 - CONTRIBUTIONS, IMPACT, AND STATURE..... 16

PART III – ADMINISTRATIVE CONSIDERATIONS..... 19

OFFICIAL TITLING PROVISIONS 19

CROSSWALK TO THE STANDARD OCCUPATIONAL CLASSIFICATION 19

EVALUATION PROCEDURES 20

PART IV – EXPLANATORY MATERIAL..... 22

INTRODUCTION

The Research Grade Evaluation Guide (RGEG) provides grading criteria for nonsupervisory professional research work in the engineering and biological, medical, agricultural, physical, mathematical, and social sciences occupational groups for General Schedule (GS) and other “white collar” pay plans. In the General Schedule position classification system established under chapter 51 of title 5, United States Code, the positions addressed would be two-grade interval positions.

The RGEG is divided into four parts. Part I describes Federal research work. Part II provides the grading criteria for positions classified in accordance with GS grade definitions. Part III provides information on administrative considerations, including official titling provisions and evaluation procedures. Part IV includes explanatory material about the development of this Guide.

The RGEG does not provide information to determine a position’s occupational series. For guidance on selecting the appropriate series for the position see the **Introduction to the Position Classification Standards** or the **Classifier’s Handbook**.

Coverage

This Guide applies to work in professional scientific and engineering positions that satisfies both the definition of research and research responsibility as described below. If the definition of either research or research responsibility is not satisfied, use the standard or guide applicable to the position’s series to evaluate the position.

Research – Research is systematic, critical, intensive investigation directed toward discovering, disseminating, and applying new or expanded knowledge in a professional discipline. Research includes, but is not limited to, empirical and theoretical investigations with one or more of the following objectives:

- to determine the nature, magnitude, and interrelationships of physical, biological, psychological, social, and other comparable phenomena and processes;
- to create or develop empirical, theoretical, or experimental means of investigating such phenomena and processes; or
- to develop principles, criteria, methods, and data of general applicability.

Research Responsibility – Professionals engaged in research work have one or both of the following responsibilities:

- personally performing professionally responsible research for a substantial portion of time; or
- directly and personally leading and participating in the activities of a research team and/or organizational unit (when the primary basis of selection for the position is

competence and capability in performing professionally responsible research rather than capability in supervising and managing a research organization).

Professionally responsible research meets the following criteria:

- involves applying scientific methods, including exploring and defining problems, planning the approach for study, analyzing data, interpreting results, and documenting or reporting findings;
- requires creativity and critical judgment, which may materially affect the nature of the end product;
- requires research capability attainable through graduate education or demonstrated research experience;
- is performed at a level of responsibility typically associated with independent research investigation; and
- the researcher’s contributions, stature, and recognition have a direct and major impact on the level of difficulty and responsibility of the research.

Additionally, when assessing whether the position should be evaluated using the Research Grade Evaluation Guide, consider the purpose of the work as determined by assignments over time, qualifications required, management intent, and the organization’s mission.

Superseding the Existing Functional Guide

Issuance of this guide supersedes the Research Grade Evaluation Guide described in the following table:

Existing Guide	Action Taken
Research Grade Evaluation Guide	Supersedes the Research Grade Evaluation Guide , last revised January 1976.

PART I – RESEARCH

The Research Environment

In the Federal Government, researchers are typically expected to:

- identify and conceptualize research needs;
- plan and conduct experiments and studies;
- collect, analyze, manage, and document data, results, and findings;
- transfer new information and technology to users;
- publish and disseminate results;
- review, evaluate, and apply research products;
- serve as peer reviewers; and
- keep abreast of and apply new information and technology.

Researchers typically work closely with information users, managers, policy makers, and others to identify information gaps and needs; participate in strategic planning of research programs and projects; organize and lead interdisciplinary research teams; integrate new research findings and technology into policies and programs; and extend and interpret scientific information in terms relevant and useful to the public and society. In conforming to agency mandates and missions, researchers generate findings ranging from new explanations of phenomena to information useful in developing new technologies. These discoveries expand and advance scientific theories and knowledge into new and unexplored frontiers of human experience and perception.

Research Versus Development

Some activities closely resemble the activities covered by this guide, but are more appropriately evaluated with another standard or guide. Of particular relevance is distinguishing between research and development, which is sometimes difficult because they share many common characteristics, standards, and procedures. Researchers often collaborate and perform functions associated with both activities; however, there are key differences between research and development work. Development involves the continuous exploitation of basic scientific and professional knowledge to achieve fairly definable and desired results. In comparison, research is often difficult to define in terms of measurable results and expectations. It is especially difficult to distinguish research from development when application of research is direct and rapid, and development is greatly compressed.

Although research and development share many characteristics, their dissimilarities require different language and criteria for determining grade levels for GS positions. The table below describes some of the critical differences between research and development. Use the criteria in this table to decide whether the Research Grade Evaluation Guide is appropriate for evaluating the grade level of the work of the position. If it is a research position, use this guide to evaluate the grade level of the position. If the work of the position is development more than research, use the **Equipment Development Grade Evaluation Guide** to evaluate the grade of the position.

	Research	Development
Purpose	Extending knowledge and understanding	New or improved products, processes, and techniques
Assignments	<p>Problems to be solved:</p> <ul style="list-style-type: none"> • entail relative freedom to explore promising areas in relation to organizational programs; • may stem from an intent to close gaps in knowledge in a given field, or to develop new theories or explanations of phenomena; and • are difficult to define in terms of expected outcomes and measurable results. 	<p>Problems to be solved:</p> <ul style="list-style-type: none"> • are defined in advance or assigned; • may stem from an intent to exploit an understanding of phenomena and principles; or • have predictable outcomes or measurable results.
Results	<p>Products are:</p> <ul style="list-style-type: none"> • papers describing new and modified theories and principles; • explanations of phenomena; and • information to improve the understanding of techniques and processes. 	<p>Products are:</p> <ul style="list-style-type: none"> • papers describing application of theories and principles; • design concepts, models, patents, and inventions; and • equipment, techniques, and processes.

PART II – GRADING INFORMATION

Evaluation System

Part II provides grading information for use in determining the appropriate grade of nonsupervisory two-grade interval professional research positions. These grading criteria are applicable to General Schedule positions classified under chapter 51 of title 5, United States Code. They may also be used as appropriate to determine work levels for other Federal position classification systems.

The Research Grade Evaluation Guide (RGEG) provides criteria for evaluating the grade level of research work for grades 11 through 15. For work that does not meet the minimum criteria for grade 11, use the appropriate occupational or job family position classification standard or guide to determine the grade level of the position.

Factors – The factors used to evaluate research work are:

- Factor 1 – Research Assignment,
- Factor 2 – Supervisory Controls,
- Factor 3 – Guidelines and Originality, and
- Factor 4 – Contributions, Impact, and Stature.

Factor Levels – Each factor has five levels, A through E, with increasing point values, respectively. This guide provides specific criteria for factor levels A, C, and E. Assign level B when work falls between levels A and C. Assign level D when work falls between levels C and E. For example, if work exceeds level A criteria, but does not fully satisfy level C criteria, the work is awarded level B.

Factor Relationships – Evaluate and assign factor levels separately for each factor, based on the best match between the factor level criteria and the researcher's work. In making evaluations, carefully consider the balance and relationship among the factors. Sound classification judgment usually precludes more than a 2-level difference between levels assigned to different factors. For example, if work is evaluated under Factor 1 at level A, it is highly unlikely that work would warrant level D or higher under Factors 2, 3, or 4. Keep in mind that the capabilities of the researcher may markedly influence the characteristics of the work.

Point Values – Each factor level has a point value. Factor 4 is double-weighted to reflect the relative importance of the researcher's stature and impact to the grade level determination. When evaluating the work, you may award only the designated point values shown in the chart below. Work that fails to meet level A criteria should be awarded zero points.

The table below shows the point values assigned to each level of the factors.

POINTS BY FACTOR AND LEVEL

Level	Factor 1	Factor 2	Factor 3	Factor 4
A	2	2	2	4
B	4	4	4	8
C	6	6	6	12
D	8	8	8	16
E	10	10	10	20

Grade Level – To determine the grade level of a position, add the point values for all assigned factor levels. Use the Grade Conversion Table below to convert the total points to a grade.

GRADE CONVERSION TABLE

Point Values	Grade
8 – 14	GS-11
16 – 24	GS-12
26 – 34	GS-13
36 – 44	GS-14
46 – 50	GS-15

If the assigned points fall near the top or bottom of a point range, be especially careful to consider all relevant facts before making the final point assignment and grade determination.

Grading Criteria

This guide has four factors for grading the work of researchers. While there is some overlap among the factors, each focuses on a different aspect of the researcher's work and the relationship between the researcher and the research environment.

FACTOR 1 - RESEARCH ASSIGNMENT

This factor deals with the nature, scope, and characteristics of the researcher's current assignment. Award a factor level that reflects the norm of current assignments, rather than atypical projects. Research assignments are directly dependent upon the individual qualities of the researcher and the inherent difficulty of the research problems. Work commonly expands commensurate with the researcher's motivation, capability, and creativity.

Projects and Teams – For project and team members, base the factor level only on the specific projects or portion of projects for which the researcher is responsible. For project managers, base the factor level on the scope and character of the total project.

Primary Considerations – In evaluating this factor consider the following:

- assignment scope and complexity, objectives, and means of accomplishment;
- problem breadth and depth;
- availability of related research studies;
- extent to which objectives can be defined;
- number of unknowns and critical obstacles;
- variety and depth of knowledge and expertise required to solve problems;
- extent and complexity of the required validation process;
- necessity to translate abstract concepts into easily understood statements of theory or models, and to determine how best to disseminate information or transfer research findings;
- utility of the end product in solving the initial problem and in opening new areas of investigation; and
- expected impact of end results, products, or outcomes.

Factor 1 – Level A (2 points)

Research assignments have the following characteristics:

- readily definable objectives;
- limited in scope to investigating specific phenomena or problems, or are segments of related investigations;
- require fairly conventional techniques;
- involve applying existing theory or methods to areas previously investigated, but under different conditions, or involve adapting previous studies in light of changes in theory or improved techniques and instrumentation; and
- result in contributions that add to scientific and professional knowledge or support developing new or improved methods and techniques.

The researcher typically works as a project or team member.

Factor 1 – Level C (6 points)

Research assignments have the following characteristics:

- the scope is broad and complex, requiring a series of comprehensive and conceptually related phases and studies;
- problems are difficult to define;
- require sophisticated research techniques; and
- result in contributions that:
 - answer important questions in the field;
 - account for previously unexplained phenomena;
 - open significant new avenues for further study;
 - confirm or modify a scientific theory or methodology;
 - lead to important changes in existing products, methods, techniques, processes, or practices; or
 - are definitive of a specific topic area.

The researcher typically works as a project member or as a primary investigator.

Factor 1 – Level E (10 points)

Research assignments have the following characteristics:

- the scope and complexity are at a level requiring subdivision into separate phases, some of which are considerably broad and complex;
- problems are exceptionally difficult and unyielding to investigation;
- require unconventional or novel approaches or complex research techniques; and

- results may include:
 - a major advance or opening of the way for extensive related development;
 - progress in areas of exceptional interest to the scientific and professional community;
 - important changes in theories, methods, and techniques;
 - opening significant new avenues for further study; or
 - contributions answering important questions in the field.

The researcher typically works as a primary investigator but may also be a project member.

FACTOR 2 - SUPERVISORY CONTROLS

This factor deals with the researcher's current level of independent performance and the technical and administrative guidance and control the supervisor exercises over research work. Researchers may consult frequently with colleagues and collaborators. Use caution in distinguishing between consultation and supervisory control and guidance.

Primary Considerations – In evaluating this factor, consider the following:

- manner in which the supervisor assigns work;
- researcher's freedom to determine a course of action;
- researcher's opportunity for procedural innovation; and
- degree of the supervisor's acceptance of the researcher's recommendations, decisions, and final products.

Researchers working on complex team projects not divided into smaller components exercise independent performance when they:

- participate fully as a professionally responsible team member in substantive aspects of the work; and
- make contributions equivalent to independently performing more limited research projects.

Factor 2 – Level A (2 points)

The supervisor typically assigns specific problems along with general instructions on the scope and objectives of the study. The supervisor or higher management makes any decisions to discontinue work, change emphasis, or change the research plan. The researcher may suggest studies and undertake them after receiving supervisory approval. The supervisor reviews work for adequacy of method, completeness, and appropriate interpretation of results.

The researcher confers with the supervisor regarding problem definition, the relationship of the problem to the organization's broader research goals, and developing a research plan. Supervisory or managerial direction and guidance help the researcher in the critical problem definition and planning stages, but do not negate the researcher's responsibility for adequately completing these steps.

The researcher is expected to:

- assume responsibility for the study and pursue it to completion;
- solve problems ordinarily encountered in accomplishing the work with only occasional supervisory input;
- interpret results; and
- prepare entire, or sections of, reports and papers.

Factor 2 – Level C (6 points)

The supervisor may either assign a broad problem area to the researcher or allow the researcher to work with substantial freedom within an area of primary interest. The researcher has substantial freedom to identify, define, and select specific projects, and to determine the most promising research strategies and problem approaches.

The supervisor:

- approves plans calling for considerable investments of time or resources;
- makes final decisions concerning the direction of work and changes in or discontinuance of projects involving substantial research investments;
- relies on the researcher's professional judgment to such an extent that the researcher's recommendations are ordinarily followed; and
- reviews final work and reports, principally to evaluate overall results, recommendations, and conclusions.

The researcher is responsible, with little technical direction, for:

- formulating hypotheses;
- developing and carrying out the research plan;
- determining equipment and other resource needs;
- keeping the supervisor informed of general plans and progress;

- addressing novel and difficult problems requiring modification of standard methods;
- analyzing and interpreting results;
- preparing comprehensive reports of findings; and
- working with users to interpret and implement research findings or technologies.

Factor 2 – Level E (10 points)

The supervisor provides broad administrative supervision, which is generally limited to approving staffing, funds, and facilities, and to providing broad guidance on agency policies and mandates. Technical supervision is consultative in nature. Management accepts the researcher's findings as technically authoritative, as a basis for decisions, and as acceptable for review by the scientific community.

The researcher, working within the framework of management objectives and priorities, is responsible for:

- formulating research plans and hypotheses;
- carrying out the project plan;
- interpreting findings and assessing their organizational and professional applicability; and
- locating and exploring the most promising areas of research in relation to agency program needs and the state of the science or discipline.

FACTOR 3 - GUIDELINES AND ORIGINALITY

This factor deals with the creative thinking, analysis, synthesis, evaluation, judgment, resourcefulness, and insight characterizing the work currently performed.

Guidelines usually consist of literature in the field, procedures, instructions, or precedents and may be adapted or modified to meet the requirements of the current assignment. Features to be considered are:

- the extent and nature of available written guides;
- intrinsic difficulty encountered in applying guides in terms of their ready adaptability to the current assignment; and
- the degree of judgment required in selecting, interpreting, and adapting guidelines.

In assessing the impact of creativity in the position, consider the requirement for:

- original and independent creation, analysis, reasoning, evaluation, and judgment; and
- originality in interpreting findings and translating findings into a form usable by others.

Factor 3 – Level A (2 points)

Guidelines include:

- existing theories and methods generally applicable to the research problem; or
- materials that may contain some inconsistencies, be partially defined, or provide several possible approaches to the problem.

Originality is demonstrated by:

- developing a complete and adequate research design by selecting and adapting the most appropriate approach, methods, or techniques for the problem at hand; and
- limited extension or modification of procedures or techniques, as required.

Factor 3 – Level C (6 points)

Guidelines:

- consist of existing literature in the field of limited usefulness due to contradictions, critical gaps, or limited applicability; or
- are largely absent because of the novel nature of the work.

Originality is demonstrated by:

- defining elusive or highly complex problems;
- developing productive hypotheses for testing;
- developing important new approaches, methods, and techniques;
- interpreting and relating significant results to other research findings;
- developing and applying new techniques and original methods of attack to solve important problems presenting unprecedented or novel aspects;
- isolating and defining critical problem features; and
- adapting, extending, and synthesizing theory, principles, and techniques into original or innovative combinations or configurations.

Factor 3 – Degree Level E (10 points)

Guidelines are almost nonexistent in pertinent literature.

Originality and creativity are demonstrated by:

- discovering complex theory or methodology;
- contributing significantly to the development of new theory or methodology to supplant or add new dimensions to a previous framework; and
- solving problems and delivering results that markedly influence the scientific field or society.

FACTOR 4 - CONTRIBUTIONS, IMPACT, AND STATURE

This factor focuses on the researcher's total contributions, impact, and stature as they bear on the current research assignment. It is not restricted to present and immediate past accomplishments and achievements. However, recency of accomplishment is important. Recent research or similar activity is essential to receiving full credit.

Security regulations, proprietary agreements, or other circumstances may prevent publishing research results and make it difficult to evaluate the work based on its impact on the larger professional community. Agencies should develop alternative processes to evaluate the impact of this work. In such cases, the work will have to be evaluated by means of the best possible judgment of its importance and the impact it would have if it could be published.

Contributions – The researcher's contributions reflect the knowledge, skills, and experience the incumbent brings to the position. Professional journal articles are an important product of research results for communicating scientific findings to the broader research community; however, they are not the only outlet for communicating information. Journal articles should be balanced with other forms of communication to ensure broad impact from the results of the work. Indicators of the researcher's contributions may include:

- research publications (for example, journal articles, monographs, books, reviews, agency and customer reports, models, maps, and novel interpretative materials); and
- innovations and technology transfer.

While the quantity of publications, research contributions, and professional activities represent one measurement of impact on a field, do not give undue weight to this metric. Consider primarily the quality, impact, and relevance of the researcher's contributions on the scientific community or field.

Impact – Consider whether the researcher:

- has an impact on scientific and/or societal issues;
- sets new research directions;
- develops new methods, techniques, or tools to be used by other researchers; and
- drives management and policy outcomes.

Stature – Stature is established when the researcher is recognized by the scientific field and/or society, as indicated by:

- requests for expert advice/consultation by other professionals and managers;
- requests to exercise leadership on research teams or projects;
- invitations to serve on advisory boards;

- requests to organize or chair committees, workshops, or symposia;
- invitations to address scientific or professional organizations;
- invitations to write synthesis papers;
- recognition by professional societies and external groups; or
- honors and awards.

A researcher in one field may move into a related field. Such a move does not change Factor 4 credit if, after a reasonably short period, the researcher will perform research work in the new field at substantially the same level of competence as before.

Factor 4 – Level A (4 points)

The researcher defines problems, performs background research, develops and executes a research plan, organizes and evaluates results, and prepares reports of findings. Work is expected to result in, or has resulted in:

- primary authorship of papers or reports filling narrow gaps in an existing framework of knowledge, to corroborate existing theory, or to report findings of limited scope; or co-authorship of a major paper or report of considerable interest to the scientific field;
- providing information and technical support on assigned research projects to collaborators and managers; and
- recognition for contributing to the project and communicating results outside the agency.

Factor 4 – Level C (12 Points)

The researcher has demonstrated competence and productivity as evidenced by conducting rigorous research of marked originality, soundness, and value. Work is expected to result in, or has resulted in:

- primary authorship of publications of considerable interest and value to the field;
- conceiving and formulating research ideas supporting or leading to productive studies by others;
- products that are significant in solving important scientific problems;
- selection to serve on important committees and review panels of technical groups and professional organizations;
- recognition by the scientific community as a significant contributor to the field of study;
- acknowledgement of impact by end users as evidenced by favorable reviews or citation in the work of others;
- invitations to make presentations to professional societies and others outside the organization on technical matters and management practices in the area of specialization; and
- consultation by users and other researchers who are respected in their fields of study.

Factor 4 – Level E (20 points)

The researcher has made outstanding and significant contributions by conducting research in either a broad field or a narrow but very specialized field. The researcher's accomplishments are of such importance and magnitude that they move science forward. Research is of such impact that other researchers must take note of it to keep abreast of developments in the field.

Work at this level includes many of the following:

- primary authorship of a number of important papers including seminal or synthesis publications, some of which have had a major impact on advancing the field or are accepted as authoritative in the field;
- contributions to inventions, designs, techniques, models, or theories are regarded as major advances and open the way for further developments or solving problems of great importance to the professional community, the organization, or the public;
- being sought as a consultant by colleagues who are themselves recognized experts in the field;
- recognition by the scientific community as an authority in the field;
- requests from highly-respected colleagues to collaborate with the researcher;
- attracting new researchers to the field;
- invitations to address or to assume a leadership role in national professional organizations and associated committees; and
- selection to lead research to solve large and complex problems.

In addition, researchers at this level typically perform a variety of advisory activities based on their scientific reputation and standing such as:

- contributing significantly to professional symposia defining the state of the discipline and new or emerging areas in the field;
- contributing to strategic research planning and program development;
- participating in major technology or information transfer activities of great importance to the scientific field, the agency, or the public; or
- participating in applying the research to important management and policy decisions.

PART III – ADMINISTRATIVE CONSIDERATIONS

OFFICIAL TITLING PROVISIONS

Title 5, United States Code, requires OPM to establish authorized official position titles. These include a basic title and may be appended with one or more prefixes and/or suffixes. Agencies must use the official position titles for human resources management, budget, and fiscal purposes but may establish organizational and functional titles for internal administration, public convenience, program management, or similar purposes. Organizational and functional titles do not replace, but rather complement, official position titles.

Position Titles

Titling

Follow the instructions in the occupational or job family position classification standard related to the position under consideration to assign the basic position title and suffixes, as appropriate. Basic titles may be modified with one or more of the following prefixes:

- *Research* – if work satisfies the criteria for applying this Guide;
- *Supervisory Research* – if the work satisfies the grade criteria for applying this Guide and meets the criteria for “supervisor” in the **General Schedule Supervisory Guide**; and
- *Lead Research* – if work satisfies the criteria for applying this Guide and meets the criteria for “leader” in the **General Schedule Leader Grade Evaluation Guide**.

Crosswalk to the Standard Occupational Classification

The Office of Management and Budget requires all Federal agencies collecting occupational data to use the Standard Occupational Classification (SOC) system for statistical data reporting purposes. The Bureau of Labor Statistics uses SOC codes for the National Compensation Survey and other statistical reporting. The SOC system recognizes the research function in describing many occupations, but does not identify that function in occupational titles. For that reason, the SOC code for a professional research position is the SOC code that is appropriate for the basic occupation. For example, the SOC codes for the OPM authorized occupational titles, Research Horticulturist, Research Chemist, and Research Metallurgist, are Horticulturist, Chemist, and Metallurgist, respectively. More information about the SOC is available at <http://stat.bls.gov/soc>.

Evaluation Procedures

Agencies are responsible for properly applying this guide in accordance with OPM guidance and regulations. Human resources specialists play a key role in ensuring compliance and are an integral part in the evaluation process. Agencies have discretion in establishing and evaluating research positions; however, OPM recommends applying the same evaluation method to all research positions within an agency. OPM further recommends the use of evaluation panels:

- staffed by both researchers to provide critical subject matter expertise and human resources specialists to collaborate and to build consensus for the grade level determination; and
- including disciplinary diversity to provide better perspective with respect to the relationship of the specific work of the position to broader areas of research.

The nature, type, importance, and significance of various professional contributions, research products, and other scientific outputs vary across agencies and disciplines. Therefore, agencies may find it helpful to develop supplements to this guide to aid in evaluating research work in their specific research environments.

Agencies applying this guide should establish a comprehensive mechanism for gathering information relevant to the classification process. Information relevant to Factors 1, 2, and 3 is usually included on position descriptions. The researcher typically provides an information package describing professional contributions, recognition, service, impact, and stature for evaluating Factor 4.

Periodic Review

Because significant changes in research positions may occur gradually over time, agency procedures should provide for periodic review to ensure accuracy and proper classification. This classification review may result in a change in grade level or change to a non-research position.

Documentation

Part 511 of title 5, Code of Federal Regulations, permits General Schedule employees to appeal the classification of their positions. Accordingly, agencies must be able to defend their classification decisions. Agencies should retain all material relevant to the evaluation process as part of the documentation supporting their research and grade level decisions.

Vacant and New Positions

Classify vacant and new positions based on the total factor pattern consistent with the contributions, impact, and stature required of prospective candidates.

The Interaction of the Research Situation and the Researcher

The duties and responsibilities of a research position are especially dependent upon the interplay between the research situation or assignment and the individual qualities of the incumbent. For example, the research may call for creativity and originality, but the extent to which these qualities are brought into play is dependent in large part on the incumbent. Furthermore, while nonresearch situations are typically structured as to the breadth of research, the work typically expands in accordance with the incumbent's capabilities. This leads to what may be termed a "person-in-job" concept, based on the interaction of the assignment and the incumbent.

Two factors make it particularly important and desirable to recognize this person-in-job concept in research positions. First, because of its "unlimited ceiling," and "expandable breadth," the research situation is much more likely to provide opportunity for full play of the incumbent's capabilities than the frequently more structured and limited non-research situation. Second in the non-research situation, the incumbent's impact on the job is reflected in less subtle ways (such as additional duties or functions; greater authority for action; more difficult assignments where the difficulty of assignments can be predicted; less supervisory review, etc.) which can be identified and measured by more conventional means.

This guide provides for considering both the research situation or assignment, and the qualifications of the person who occupies the situation or assignment, to recognize the profound impact of the incumbent researcher's personal qualifications on the job. These factors together constitute the position actually being performed and form the basis for determining grade level.

Relationship to Grades of Supervisors

This guide recognizes the value of nonsupervisory research involving a very high degree of technical independence, a high degree of originality, and a high level of professional recognition and contribution. While supervision is one ladder to high-level responsibility in scientific work, another ladder is personal creativity and scientific contribution. A good supervisor can do much to create a favorable climate and to stimulate creativity and originality; however, in the final analysis, creativity and originality come from within the person who displays them.

It is not necessary for supervisors of research work to be in higher grades than their subordinates, because research work is personal to the incumbent, is subject to "supervision" to only a very limited degree, and provides an alternate ladder to high-level work. It may be possible for the contribution of a highly creative nonsupervisory researcher to merit the same grade (for different reasons) as the contribution of the supervisor of the organization or unit. This situation can exist where the supervision is not purely administrative in nature. Technical supervision, including overall evaluation of results and guidance as to priorities of research to be undertaken, may be present.

Thus, positions graded under this guide may, in some instances, be properly classified in the same grade as, or in rare cases, in a higher grade than the supervisor of the position. This can occur when the grade of the researcher is determined based on highly independent personal performance and personal creativity, stature, and contributions.

PART IV – EXPLANATORY MATERIAL

KEY DATES AND MILESTONES

In 1997, a group of research scientists, research science administrators, chief classifiers, and human resources specialists from several Federal agencies organized an informal “Interagency Research Evaluation Committee” (the Committee) to propose to the Office of Personnel Management (OPM) the existing Research Grade Evaluation Guide (RGEG), last revised in 1964, be revised and updated to reflect changes in the research environment.

The Committee spent several years developing its proposal. The goals of the Committee were to redefine the research environment and update terminology. For example, the RGEG focused primarily on quantitative measures of outcomes, such as the number of research papers a scientist publishes, while undervaluing the importance of “information and technology transfer.” Additionally, it assumed scientists work independently, rather than on collaborative teams.

In May 1999, the Committee met with OPM to present its proposal. Following this initial meeting, OPM formally announced to human resources directors and chiefs of classification it was initiating a study to update the RGEG. OPM thereafter conducted a series of meetings with the Committee, including representatives from the following agencies:

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Energy
- Department of Health and Human Services
- Department of Interior
- Department of Transportation
- Department of Veterans Affairs
- Environmental Protection Agency
- National Aeronautics and Space Administration
- Smithsonian Institution

The fact-finding process for this classification study differed from the way OPM customarily prepares draft documents; however, the broad representation of participants and the Committee’s extensive research in the development of its proposal supported the approach taken. OPM worked with the Committee through an iterative process to prepare a draft for agency comments. The Committee provided invaluable occupational information, while OPM provided expertise on classification principles, practices, and policy.

In February 2006, OPM released a draft RGEG for agency review, comments, and test application. The lead agencies for reviewing the draft RGEG were the Department of Health and Human Services, the Department of the Interior, and the Department of Agriculture. In addition to the lead agencies, OPM invited and encouraged all agencies to comment on the draft.

RESULTS OF AGENCY REVIEW, COMMENT, AND TEST APPLICATION

A. GENERAL INFORMATION

Agency test applications of the draft RGEG demonstrated no significant grade impact. Most agencies stated the draft RGEG was an improvement and the expanded occupational coverage will add value. There was overwhelming positive feedback regarding the format of the RGEG. Most agencies described the format as “user-friendly.”

The agency reviews, however, recommended a number of changes. Some of the changes involved editorial and formatting changes, while others were more substantive. Some agencies prefer the greater level of detail provided in the previous RGEG. They were concerned about the brevity of some factor level characteristics and commented on the difficulty of applying the short descriptions to obtain the appropriate grade level; however, agencies differed in their recommendation for describing each factor level.

B. RESEARCH GRADE EVALUATION GUIDE – SPECIFIC ISSUES

When the draft RGEG was released, OPM requested agency comments on three specific issues. This section summarizes the agency comments and describes actions taken in response to agency comments.

1. Issue - Expanded Coverage

Agency Comments: The majority of agencies supported a narrow expansion of the RGEG to cover research work in the social sciences family, so long as that work meets the criteria in the draft. They did not support expanding coverage to other professional occupations.

Our Response: OPM expanded the guide to include, in addition to psychology, other professional research work in the social sciences.

2. Issue - Definition of Research

Agency Comments: The majority of agencies felt the definition of research was adequate when linked with the scientific methods and applied to positions properly covered by the RGEG.

Our Response: No changes needed.

3. Issue - Removing Gaps in Point Ranges for Converting Factor Levels

Agency Comments: Because the Committee could not reach consensus on whether to propose retaining or eliminating the point gap feature in the draft, OPM removed the gaps in the draft RGEG and requested agency comments on this issue. Nearly all responding agencies recommended removing the point gap. One lead agency responded in favor of keeping the gap. Those agencies supporting the removal of gaps from the point range agreed the flexibility in assigning points created confusion and led to lack of consistency in the evaluation process. On the other hand, some agencies recognized the existing gaps provided management flexibility in evaluating a researcher's contribution and stature within the scientific community.

Our Response: Eliminating the gap standardizes the evaluation process in assigning points and is consistent with established methods for the Factor Evaluation System. We therefore eliminated the gap.

C. RESEARCH GRADE EVALUATION GUIDE – MISCELLANEOUS ISSUES

1. Issue – The “In Excess of Degree E” Criteria

Agency Comments: Some agencies recommended retaining the “In Excess of Degree E” criteria to assist in identifying candidates for senior-level scientific and professional (ST) positions.

Our Response: 5 CFR 319.203 requires agencies to determine ST positions are properly classified above GS-15. Additionally, 5 CFR 319.301 provides agency heads with responsibility “for establishing qualifications standards” for senior level positions, in accordance with criteria established in the regulations. For OPM to provide the “In Excess of Degree E” criteria is inconsistent with the regulatory responsibility of the agency heads. We continue to encourage agency development of supplemental criteria, consistent with applicable regulations.

2. Issue – Grade Level 9 Criteria

Agency Comments: The lead agencies recommended removing the grade level 9 criteria from the RGEG, stating work at this level is not “**professional research**” and is better described as “**advanced training.**”

Our Response: OPM accepted this recommendation and removed the grade level 9 criteria from the RGEG. Such positions should be classified by applying the appropriate classification standard or guide.

3. Issue – Unpublished Research Results

Agency Comments: Agencies stated OPM will be unable to properly adjudicate classification appeals when unpublished (e.g., classified, confidential) research results cannot be shared with OPM. They recommended inserting language about unublishable research from the previous RGEG.

Our Response: OPM accepted this recommendation and inserted the original language to clarify how to evaluate these positions in the absence of agency-specific guidance. Specifically, *“the work will have to be evaluated by means of the best possible judgment of its importance and the impact it would have if it could be published.”*

General Schedule Leader Grade Evaluation Guide

TABLE OF CONTENTS

PART I - GENERAL SCHEDULE WORK LEADER POSITIONS	2
COVERAGE OF PART I	2
EXCLUSIONS	3
NOTE TO USERS	4
GRADE LEVEL DETERMINATION	4
TITLING INSTRUCTIONS	5
SERIES DETERMINATION	5
PART II - GENERAL SCHEDULE TEAM LEADER POSITIONS	6
COVERAGE OF PART II	6
EXCLUSIONS	6
NOTE TO USERS	7
Background	7
Relationship to Bargaining Unit Status of Team Leader Positions	7
OCCUPATIONAL INFORMATION	8
Functions of Team Leaders	8
Differences Between Team Leaders and Supervisors	10
GRADE LEVEL DETERMINATION	12
Base Level of Work Led	12
TITLING INSTRUCTIONS	13
SERIES DETERMINATION	14

PART I - GENERAL SCHEDULE WORK LEADER POSITIONS

GUIDANCE FOR CLASSIFICATION OF ONE-GRADE INTERVAL GENERAL SCHEDULE WORK LEADER POSITIONS

COVERAGE OF PART I

Part I of this guide is used to classify positions of work leaders who, as a regular and recurring part of their assignment, lead three or more employees in clerical or other one-grade interval occupations in the General Schedule in accomplishing work. Work leaders also perform work that is usually of the same kind and level as that done by the team lead.

Part I of this guide supersedes the Work Leader Grade Evaluation Guide issued in January 1976.

Leaders are responsible to their supervisors for ensuring that the work assignments of the other employees of the team are carried out by performing a range of duties such as:

1. Distribute and balance the workload among employees in accordance with established work flow or job specialization, assure timely accomplishment of the assigned workload, and assure that each employee has enough work to keep busy;
2. Keep in touch with the status and progress of work, and make day- to- day adjustments in accordance with established priorities, obtaining assistance from the supervisor on problems that may arise, such as backlogs which cannot be disposed of promptly;
3. Estimate and report on expected time of completion of work, and maintain records of work accomplishments and time expended and prepare production reports as requested;
4. Instruct employees in specific tasks and job techniques and make available written instructions, reference materials and supplies;
5. Give on the job training to new employees in accordance with established procedures and practices;
6. Maintain a current knowledge and answer questions of other employees on procedures, policies, directives, etc. and obtain needed information or decisions from supervisor on problems that come up;
7. Check on work in progress or spot check work not requiring review (e. g., filing or direct services) and review completed work to see that supervisor's instruction on work sequence, procedures, methods and deadlines have been met;

8. Amend or reject work not meeting established standards, refer to supervisor questions or matters not covered by standards and problems in meeting performance standards;
9. Monitor working conditions such as seating, ventilation, lighting, safety, etc.;
10. Approve leave for a few hours or for emergencies;
11. Inform employees of available services and employee activities;
12. Resolve simple, informal complaints of employees and refer others to supervisor;
13. Report to supervisor on performance, progress and training needs of employees, and on behavior problems; and
14. Provide information to supervisor as requested concerning promotions, reassignment, recognition of outstanding performance, and personnel needs.

EXCLUSIONS

Part I of this guide should not be used for positions of:

1. Employees who are accountable as supervisors for planning, scheduling, and directing work operations, administering supervisory personnel functions, evaluating work performance, and taking necessary action to assure that the work of subordinate employees meets standards of quantity and quality. (See General Schedule Supervisory Guide, the Introduction to the Position Classification Standards, and Part II of this guide.)
2. Employees who have "project" responsibility but do not lead other workers. In some work situations, employees are responsible for projects where some of the work needed to complete the projects is done ("farmed-out") by other employees. Where the other employees do such work under the immediate direction of their regular supervisors, the position of the employee with "project" responsibility is considered to be nonsupervisory in nature.
3. Employees who are responsible for work assignments requiring only one or two other workers. The positions of such employees have as their primary responsibility personal work accomplishment. Responsibility for work assignments involving one or two other persons is not sufficient to warrant being classified as a leader. Such positions are classified under appropriate nonsupervisory classification standards.
4. Employees who lead two-grade interval work or work accomplished by GS-09 or higher one-grade interval positions. Such positions are to be classified through application of grade level criteria in Part II of this Guide.

NOTE TO USERS

It is the nature of responsibility for the work of others, rather than the number of employees involved, that distinguishes between leader and supervisory jobs. However, where the number of workers is more than 12, the position should be carefully reviewed to determine whether it is really that of a leader rather than that of a supervisor, and therefore covered by this guide for leaders of clerical and other one-grade interval occupations.

GRADE LEVEL DETERMINATION

Under Part I of this guide, leader positions are classified one GS grade above the highest level of nonsupervisory work led.

Neither the number of workers led nor the variety of occupations in which they perform work impact the grade of a leader position. Because of the limited nature of leader responsibility, these factors do not significantly affect the difficulty and responsibility involved in performing the duties of a leader. Thus, where the employees in the team perform work in a variety of occupations, an extra grade should not be added because of that variety to the level of nonsupervisory work used in classifying the leader position.

In determining the base level of work led, the grade to be used usually is the grade of the highest level employee in the team (other than the leader or a supervisor). However, care should be taken to assure that this grade reflects the level of the nonsupervisory work actually led.

For example:

- a. The grades of employees assigned to a work team may reflect the level of their other work assignments rather than the work they do when they serve as members of the work team.
- b. The highest level employee assigned to the team may do work in an occupation in which the leader is not fully qualified. The level of such work should be used to grade the leader job only where the leader, although not fully qualified, has enough knowledge of the occupation to lead the work involved (for example, pass on instructions from the supervisor, explain work methods, check work, and report to the supervisor on work status or causes of work delays).
- c. The highest level employee, although assigned to the team, may receive little or no leadership from the leader in performing his work (for example, where the employee is an "expert" in the work, or performs above the normal full performance level of the occupation). In this case, the grade of the highest level employee does not reflect the level of the nonsupervisory work actually led, and should not be used as the base level.

Thus, in classifying one-grade interval leader jobs, consider only work where the leader performs substantially the full range of leader duties described under Coverage of Part I.

Where the nonsupervisory work personally done by a leader is at a higher grade than the work done by the employees led, the nonsupervisory work and the leader duties are graded separately. The final grade of such a position is then determined by selecting the leader grade level or the nonsupervisory grade level, whichever is higher. (Note: Where the final grade of such a position is based on its nonsupervisory work, the position is titled and classified as a nonsupervisory position, not as a leader.)

TITLING INSTRUCTIONS

Positions covered by Part I of this guide are identified by prefixing the word "*Lead*" to the title of the position in which the leader is qualified and which reflects the work being performed by those led: for example -

LEAD SUPPLY CLERK
LEAD VOUCHER EXAMINER
LEAD MECHANICAL ENGINEERING TECHNICIAN

SERIES DETERMINATION

This guide is not intended to affect current practice regarding series classification. Positions classified as to grade by means of this guide will continue to be classified to the most appropriate classification series in accordance with definitions published in the U.S. Office of Personnel Management's (OPM) Handbook of Occupational Groups and Families and amplifying material in individual OPM position classification standards and guides.

PART II - GENERAL SCHEDULE TEAM LEADER POSITIONS

GUIDANCE FOR CLASSIFICATION OF TWO-GRADE INTERVAL GENERAL SCHEDULE TEAM LEADER POSITIONS

COVERAGE OF PART II

Part II of this guide is used to classify positions whose primary purpose is, as a regular and recurring part of their assignment and at least 25% of their duty time, to lead a team of other General Schedule (GS) employees in accomplishing two-grade interval work that meets at least the minimum requirements of Part II. Team leaders usually also participate in the work of the team by performing work that is of the same kind and level as the highest level of work accomplished by the team led.

Team leaders work with team members to achieve specific tasks, produce work products and services and meet program and production goals. Typically, a team leader assists the team through knowledge and application of leadership and team building skills and techniques such as group facilitation, coordination, coaching, problem solving, interpersonal communication, integration of work processes and products, obtaining resources and liaison with the supervisor. Team leaders covered by this guide are also accountable for outcomes and results, e.g., timely delivery of quality work products and services produced by the team led.

EXCLUSIONS

The distinction between team leader positions and types of positions that involve other forms of leadership may not always be clear. Users are urged to consider all available information in making a decision. This guide does not apply to:

1. Positions that fully meet Factor Level 3-2 in the General Schedule Supervisory Guide (GSSG). This includes positions and employees who are accountable as supervisors for planning, scheduling, and directing work operations, administering supervisory personnel functions, evaluating work performance, and taking necessary action to assure that the work of subordinate employees meets standards of quantity and quality.
2. Positions which lead other employees in performing work for which a base level cannot be determined. In some cross-functional project or matrix teams there may be no correlation between the type and/or grade level of work done by team members and the grade levels and/or occupational series of their permanent positions; consequently, it may not be feasible or practical to determine the base level of work performed. An example might be a team composed of employees ranging in grade/rank from WG-2 and GS-05 to GS-14 and SES, representing different field offices, which meets for the express purpose of developing a consolidated, organization-wide strategic plan.

3. Positions that have functional “project” responsibility but do not lead other workers on a continuing basis and/or personally perform work at a higher level than the work led. Such jobs should be evaluated by comparison with criteria in appropriate Factor Evaluation System (FES) or narrative classification standards that contain criteria for project or program management work (e.g., the Administrative Analysis Grade-Evaluation Guide or the Grade Level Guide for Test and Evaluation Work in Engineering and Science Occupations).

NOTE TO USERS

Background

Part II was developed to support the implementation of delayering, streamlining and right-sizing initiatives. It fills a gap in the classification coverage of two-grade interval team leader positions. Information about work covered in the guide was gathered by reviewing current human resources management literature, conducting fact finding involving sampling representative positions in agency headquarters organizations and field installations, identifying issues and concerns expressed by managers and personnelists, and analyzing comments and suggestions from agencies. The resulting classification criteria were developed with the assistance of agency experts to meet the needs of agency managers and personnelists in classifying a broad continuum of new leadership positions across government.

In addition to grade level criteria, Part II includes:

- occupational information about the work of team leaders;
- minimum requirements for coverage;
- examples of exclusions; and
- instructions for titling covered positions

Relationship to Bargaining Unit Status of Team Leader Positions

Due to important and significant differences between the position classification and labor relations definitions of “supervisor,” this guidance should not be used to determine the bargaining unit status of team leader positions. There is a wide range of duties and responsibilities associated with team leadership, some of which may overlap typical supervisory functions. The bargaining unit status (BUS) of each position, i.e., the determination as to whether or not a particular position is included or excluded must be made separately through reference to labor relations criteria, not position classification standards. For additional information on determining the BUS of team leader positions classified using this guide, the user is referred to guidance and definitions in Title 5 United States Code, Part III, Subpart F, Chapter 71.

Position Management

First and foremost, assignment of work and establishment of positions are agency management prerogatives, not classification issues. This team leader classification guidance provides a means of recognizing and crediting the performance of a distinctly different type of leadership work, but this guidance should not be interpreted as encouraging or discouraging the establishment of such positions wherever and whenever management decides they are necessary to further work accomplishment. The need for, size of the team, and number and type of team leader positions established should be based upon sound position management considerations, such as the reporting supervisor's span of control, the type of work led and the costs and benefits of the resulting structure relative to providing customer service and meeting organizational requirements.

More specifically, managers are responsible for designing organizations and structuring positions and functions in a manner that optimizes efficiency, economy, productivity, and organizational effectiveness. Sound position management, in addition to the above considerations, also requires a careful analysis of the level of independence of the positions led. For example, positions at the full performance level in any given organization may operate with fairly significant freedom from supervision. Positions of this type generally need little or no guidance on such matters as selecting appropriate problem-solving methods and techniques, or locating the appropriate regulations. Consequently, the decision to establish team leader positions warrants careful consideration of all applicable position management factors, including potential impact on supervisory positions.

For additional guidance on position management, the user is referred to the Introduction to the Position Classification Standards, Section III. Principles and Policies of Position Classification.

OCCUPATIONAL INFORMATION

Functions of Team Leaders

Team Leaders are responsible to their supervisors or managers for assuring that the work of their assigned team is carried out by performing a range of coordinating and supportive duties and responsibilities. Team Leaders utilize a variety of coordinating, coaching, facilitating, consensus-building and planning techniques. These kinds of work methods and knowledges, skills and abilities (KSAs) are alternatives to traditional supervision which enable the team as a whole to deliver improved quality, quantity and timely services and/or work products to their customers.

To be classified by application of Part II, positions must exercise the minimum authorities and responsibilities required for coverage. At a minimum, Team Leaders perform all of the first seven (7) coaching, facilitating and mentoring duties and a total of fourteen (14) of the twenty (20) duties listed below:

1. Ensure that the organization's strategic plan, mission, vision and values are communicated to the team and integrated into the team's strategies, goals, objectives, work plans and work products and services;
2. Articulate and communicate to the team the assignment, project, problem to be solved, actionable events, milestones, and/or program issues under review, and deadlines and time frames for completion;
3. Coach the team in the selection and application of appropriate problem solving methods and techniques, provide advice on work methods, practices and procedures, and assist the team and/or individual members in identifying the parameters of a viable solution;
4. Lead the team in: identifying, distributing and balancing workload and tasks among employees in accordance with established work flow, skill level and/or occupational specialization; making adjustments to accomplish the workload in accordance with established priorities to ensure timely accomplishment of assigned team tasks; and ensuring that each employee has an integral role in developing the final team product;
5. Train or arrange for the training of team members in methods and techniques of team building and working in teams to accomplish tasks or projects, and provide or arrange for specific administrative or technical training necessary for accomplishment of individual and team tasks;
6. Monitor and report on the status and progress of work, checking on work in progress and reviewing completed work to see that the supervisor's instructions on work priorities, methods, deadlines and quality have been met;
7. Serve as coach, facilitator and/or negotiator in coordinating team initiatives and in consensus building activities among team members;
8. Maintain program and administrative reference materials, project files and relevant background documents and make available policies, procedures and written instructions from the supervisor; maintain current knowledge to answer questions from team members on procedures, policies, directives, etc.;
9. Prepare reports and maintain records of work accomplishments and administrative information, as required, and coordinate the preparation, presentation and communication of work-related information to the supervisor;
10. Represent the team in dealings with the supervisor or manager for the purpose of obtaining resources (e.g., computer hardware and software, use of overtime or compensatory time), and securing needed information or decisions from the supervisor on major work problems and issues that arise;

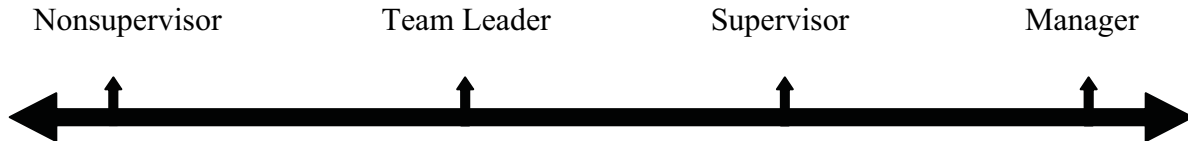
11. Report to the supervisor periodically on team and individual work accomplishments, problems, progress in mastering tasks and work processes, and individual and team training needs;
12. Represent the team consensus and convey the team's findings and recommendations in meetings and dealings with other team leaders, program officials, the public and other customers on issues related to or that have an impact on the team's objectives, work products and/or tasks;
13. Estimate and report to the team on progress in meeting established milestones and deadlines for completion of assignments, projects and tasks, and ensure that all team members are aware of and participate in planning for achievement of team goals and objectives;
14. Research, learn and apply a wide range of qualitative and/or quantitative methods to identify, assess, analyze and improve team effectiveness, efficiency and work products;
15. Lead the team in assessing its strengths and weaknesses and provide leadership to the team in exploring alternatives and determining what improvements can be made (e.g., in work methods, processes and procedures);
16. Approve emergency leave for up to three days; eight hours or less for medical appointments; and/or other types of leave as delegated by management;
17. Resolve simple, informal complaints of employees and refer others, such as formal grievances and appeals, to the supervisor or an appropriate management official;
18. Communicate team consensus and recommendations to the supervisor on actions affecting team and individual awards, rewards and recognition;
19. Inform employees of available employee benefits, services and work related activities;
20. Intercede with the supervisor on behalf of the team to inform the supervisor of performance management issues/problems and to recommend/request related actions, such as: assignments, reassignments, promotions, tour of duty changes, peer reviews and performance appraisals.

Differences Between Team Leaders and Supervisors

For a position to be classified as supervisory and evaluated under the GSSG, the requisite supervisory and related managerial responsibilities involve the accomplishment of work through combined technical and administrative direction of others, and must constitute a major duty occupying at least 25% of the supervisor's time. Supervisory work, at a minimum, includes responsibility for: planning and scheduling work; assigning work to employees; accepting, amending or rejecting completed work; assuring that production and accuracy requirements are met; appraising performance and recommending performance standards and ratings; approving

leave; and effecting minor disciplinary measures. Additionally, the duties of a supervisor typically include prioritizing and scheduling work, and finding ways to improve the quality and/or quantity of the work directed.

Leadership and supervision may be thought of as points along a continuum from nonsupervisory to managerial work. The range of duties a team leader may be assigned is very flexible, i.e., duties may be just sufficient to meet the minimum for coverage to almost sufficient to warrant a supervisory classification.



For quick reference, the chart below lists examples of some of the more significant differences between team leaders and supervisors. These examples are not intended to be all-inclusive:

TEAM LEADERS:	SUPERVISORS:
Explain team goals and objectives to assigned team members and assist team in organizing to accomplish work	Set team goals, select team leaders, assign team members and administratively and technically direct the work of subordinates
Coach, facilitate, solve work problems and participate in the work of the team	Plan, assign, review and accept, amend or reject work done by teams and subordinates
Provide information to the supervisor on performance of the team and individuals	Assign performance ratings, approve awards and take performance-based corrective actions
Communicate assignments, milestones and deadlines to the team and individuals based on supervisor's instructions	Make work assignments, set or negotiate deadlines and completion dates
Observe training needs and relay training needs and requests to supervisor	Schedule and approve funding for team and individual training
Inform supervisor of attendance and behavioral problems	Counsel employees on behavior and initiate disciplinary actions if required
Relay requests for resources and supplies	Allocate resources to teams

GRADE LEVEL DETERMINATION

Under Part II, Team Leader positions are classified one full GS grade level (in a two-grade interval pattern) above the highest grade level of GS-09 or higher (nonsupervisory and nonleader) work led which is carried out for 25% or more of the time by team members. For example, leading a base level of GS-11 work would result in a grade level of GS-12 for the Team Leader's position; or, leading a base level of GS-09 or GS-10 positions would yield a grade level of GS-11 for the Team Leader's position.

Where the work personally done by a Team Leader is materially different from the work done by the employees led, the work and the Team Leader duties are graded separately. The final grade of such a position is then determined by selecting whichever grade is higher.

Base Level of Work Led

In determining the base level of work led, the grade to be used is typically the grade of the highest level of work performed within the team for which the Team Leader is fully responsible. Usually, the base level of work led will also be the level that is most representative of the work of the team led on a continuing basis. Care should be taken to ensure that the grade credited as base reflects the level of 25% or more of the work actually led.

Base level can also be viewed as that portion of the total workload which accounts for 25 percent or more of the duty hours of subordinates and others (based on estimates derived from position descriptions, supervisors, staffing studies, or contract documents) which is expended on work at or above the grade level credited.

Alternatively, where extensive contract work is present, 25 percent or more of the dollars spent on human services would be allocated for work at or above that grade level. For this purpose, include the workload of General Schedule (GS) subordinates, Federal Wage System employees in occupations and/or pay categories often associated with comparable work done by GS counterparts (e.g., Wage Grade Instrument Makers and GS Engineering Technicians, assigned military, volunteers, student trainees or non-Federal workers such as contractor employees, State and local workers, or similar non-federal personnel). In the assessment of the level of any work performed by non-GS employees, pertinent classification standards should be consulted to derive an appropriate GS equivalent, wherever possible.

In determining the highest level of work which constitutes at least 25 percent of the leader's workload or duty time, credit the work of trainee and developmental positions at the full performance level.

Exclude from Consideration as Base Level:

- Any subordinate work the grade level of which is based on criteria in the GSSG (i.e., supervisory duties) or the GS Team Leader Grade Evaluation Guide, Part I or Part II; •
Work the grade level of which is based on an extraordinary degree of independence from supervision or personal accomplishment. For the purpose of applying this guide, it will be necessary to adjust the grade level of such work to whatever level is appropriate for performance under "normal" supervision. For example, if the highest graded employee receives little or no guidance from the leader, the grade level of that employee's position may not be representative of the level of work actually led, and should not be used as the base level.
- Work for which the leader does not perform the minimum duties defined under coverage requirements in this guide for at least 25% of her/his duty time;
- FWS, military, contractor, volunteer or other non-GS work that is not susceptible to conversion to a comparable GS grade level; such work cannot be credited;
- Work performed by employees in occupations in which the leader is not sufficiently knowledgeable to carry out the minimum duties required for coverage under this guide (as may be represented by professional work in an inter-disciplinary or a matrix team). The level of such work should be used to grade the Team Leader's position only where the Team Leader has enough knowledge of the subject matter and the occupations to lead the assigned workers in accomplishing team goals and objectives. For example, this may involve working collaboratively with team members to accomplish the respective mission; working with the team to determine assignments; ensuring that necessary team and subject matter training are provided; observing quality of performance; advising and guiding team members in program matters and resolution of broad or difficult problems; and, providing constructive and timely feedback to stimulate and reinforce the team's best efforts.
- One-grade interval work below grade GS-09. Leadership of such work is assessed through application of criteria in Part I of this guide.

TITLING INSTRUCTIONS

Positions covered by this guide are to be identified by adding the word "*Lead*" as a prefix to the authorized title of the position for which the leader is qualified and which best reflects the nature of the work being performed by the team. For example, a team leader over a team of personnel management specialists would be titled Lead Personnel Management Specialist. (**Note:** *Where the final grade of a position is based on its personal work, the position is titled and classified in accordance with guides and/or standards for the classification of nonleader work, and not as a Team Leader. Where both types of work are evaluated at the same grade level, the official title "Lead" is to be used. If desired by the agency, the parenthetical suffix "Leader" may be added to the basic title of positions graded and titled on the basis of their nonleader responsibilities.*)

SERIES DETERMINATION

This guidance is not intended to affect current practice regarding series classification. Positions classified as to grade by means of this guide will continue to be classified to the most appropriate classification series in accordance with guidance in the Introduction to the Position Classification Standards and The Classifier's Handbook, definitions in the U.S. Office of Personnel Management's (OPM) Handbook of Occupational Groups and Families, and amplifying material in individual OPM position classification standards and guides.

General Schedule Supervisory Guide

Table of Contents

INTRODUCTION.....	2
STATEMENT OF COVERAGE.....	2
EXCLUSIONS.....	3
SERIES DETERMINATION.....	4
DEFINITIONS.....	4
TITLING INSTRUCTIONS.....	7
INSTRUCTIONS FOR APPLICATION.....	8
DEPUTY AND "ASSISTANT CHIEF" SUPERVISORY POSITIONS.....	9
GRADE EVALUATION FACTORS.....	9
FACTOR 1 - PROGRAM SCOPE AND EFFECT.....	9
FACTOR 2 - ORGANIZATIONAL SETTING.....	13
FACTOR 3 - SUPERVISORY AND MANAGERIAL AUTHORITY EXERCISED.....	14
FACTOR 4 - PERSONAL CONTACTS.....	18
FACTOR 5 - DIFFICULTY OF TYPICAL WORK DIRECTED.....	21
FACTOR 6 - OTHER CONDITIONS.....	23
DETERMINING THE GRADE.....	29
POINT-TO-GRADE CONVERSION CHART.....	29

INTRODUCTION

This guide provides evaluation criteria for determining the General Schedule (GS or GM) grade level of supervisory positions in grades GS-5 through GS-15. It also contains criteria for evaluating managerial responsibilities that may accompany supervisory responsibilities in this range of grades. However, the guide is not appropriate for evaluating managerial positions that do not include the accomplishment of work through the supervision of others or that do not require technical competence related to the work directed.

This guide employs a factor-point evaluation method that assesses:

- Program Scope and Effect
- Organizational Setting
- Supervisory and Managerial Authority Exercised
- Personal Contacts
- Difficulty of Typical Work Directed
- Other Conditions

General classification concepts, principles, and policies, such as those in the Introduction to the Position Classification Standards, apply to the classification of supervisory positions.

This guide supersedes the General Schedule Supervisory Guide (GSSG), issued in April 1993, TS-123.

STATEMENT OF COVERAGE

Use this guide to grade GS/GM supervisory work and related managerial responsibilities that:

- require accomplishment of work through combined technical and administrative direction of others; and
- constitute a major duty occupying at least 25 percent of the position's time; and
- meet at least the lowest level of Factor 3 in this guide, based on supervising Federal civilian employees, Federal military or uniformed service employees, volunteers, or other noncontractor personnel. (Work performed by contractors is considered in applying the grading criteria within each factor of this guide, provided the position first meets the coverage requirements above based on supervision of noncontractor personnel.)

EXCLUSIONS

The following kinds of positions are excluded from the coverage of this Guide:

1. Positions with less than the minimum supervisory authority described at Level 3-2 of Factor 3 in this Guide. The work of such positions (e.g., leaders over one-grade interval clerical or technical work or two-grade interval administrative or professional work) is graded through reference to other guides or standards, such as the General Schedule Leader Grade-Evaluation Guide.
2. Supervisory positions that have, as their paramount requirement, experience in and knowledge of trades and crafts to perform their primary duties. Such positions are covered by the Federal Wage System (FWS), and are evaluated by application of the FWS Job Grading Standard for Supervisors.

NOTE: A supervisory position over FWS employees, including some at production, maintenance, and overhaul facilities, may be properly classified to a GS series if its primary supervisory duties do not require experience in, and knowledge of, trades and crafts.

3. Positions with project or program management responsibility (e.g., matrix management, financial management, or team leader duties) that do not directly supervise the work of a recognizable work force on a regular and recurring basis. Evaluate such positions through reference to appropriate standards for the occupation involved or guides such as the Equipment Development Grade Evaluation Guide. (Similar positions with continuing supervisory responsibilities that meet the minimum requirements for coverage by this guide may be graded using this guide provided due care is taken to avoid crediting direction of the same work to supervisors in different chains of command.)
4. Positions with oversight responsibilities over only the work of private sector contractors. Evaluate such positions using the appropriate nonsupervisory standards or guides for the occupations involved.
5. Positions in which supervisory work is carried out only in the absence of another employee or is temporary, short term, and nonrecurring.
6. Positions requiring management skills alone, that is, positions which do not require either technical supervision of employees in specific occupations or competence in a specialized subject matter or functional area.

SERIES DETERMINATION

Positions graded by this guide will continue to be classified in the most appropriate occupational series in accordance with instructions in OPM's Introduction to the Position Classification Standards, occupational definitions in the Handbook of Occupational Groups and Families, and amplifying material in published classification standards.

DEFINITIONS

The following definitions are included solely for the purpose of applying the criteria in this guide. For ease of use they are grouped into two sections: Organizational Definitions and Other Definitions.

ORGANIZATIONAL DEFINITIONS

AGENCY - An Executive or military department as specified by 5 U.S.C. 101, 102, and 5102, which has primary authority and responsibility for the administration of substantive national programs enacted by Congress; a comparable independent agency; or a large agency next below the Department of Defense with worldwide missions and field activities, multibillion dollar programs or resources to manage, and major mission(s) directly affecting the national security. The head of an agency is usually appointed by the President with the advice and consent of the Senate. For example, the Departments of Labor, Health and Human Services, Agriculture, Army, Navy, Air Force, the General Services Administration, the National Aeronautics and Space Administration, the Office of Personnel Management, and the Defense Logistics Agency are Agencies for purposes of this guide.

In addition, where 5 or more of the following conditions apply, an activity next below departmental level may be considered as equivalent to this definition for purposes of applying this guide: (1) the activity comprises or manages more than half of a cabinet level department's resources; (2) the activity has an international mission, and/or numerous Nationwide and worldwide field offices; (3) the activity manages multibillion dollar funds accounts typically separate from normal, departmental budgets (e.g., Social Security trust funds, IRS collections); (4) the activity deals directly with Congress on major budgetary, program, or legislative matters affecting large segments of the population or the Nation's businesses, or both; (5) the activity head is appointed by the President with the advice and consent of the Senate; (6) the activity exercises special statutory powers such as a Nationwide, quasi-judicial function affecting major industries or large segments of the population; (7) the activity manages directly delegated or statutorily assigned programs that have an impact which is Governmentwide or economywide and that receive frequent, intensive, congressional and media scrutiny.

BUREAU - An organizational unit next below the agency level (as defined above) which is normally headed by an official of Executive Level IV or V, or Senior Executive Service (SES) rank, or the equivalent. It is a component of a civilian agency directed by an appointed executive who reports to the Agency Director or the Director's immediate staff. Examples of

bureaus include the Department of Labor's Bureau of Labor Statistics and the Department of Agriculture's Forest Service.

MAJOR MILITARY COMMAND - A military organization next below the Departments of Army, Air Force, or Navy and headed by a flag or general officer who reports directly to the agency headquarters. It is the bureau equivalent in a military department. For example, Air Force's Air Training Command, Army's Army Material Command, and Navy's Naval Sea Systems Command.

MULTIMISSION MILITARY INSTALLATION - A large complex multimission military installation is one which is comparable to one of the two following situations:

(1) A large military installation (including a military base with only one or a few major missions) or group of activities with a total serviced or supported employee-equivalent population exceeding 4000 personnel, and with a variety of serviced technical functions. These personnel are directly affected by, but not supervised by, the position under evaluation. Federal civilian and military employees, estimated contractor personnel, volunteers, and similar personnel may be used to derive the population total; nonemployed personnel such as dependents are significant only if directly impacted by the program segment and work directed.

(2) A complex, multimission installation or a group of several organizations (directly supported by the position under evaluation) that includes four or more of the following: a garrison; a medical center or large hospital and medical laboratory complex; multimillion dollar (annual) construction, civil works, or environmental cleanup projects; a test and evaluation center or research laboratory of moderate size; an equipment or product development center; a service school; a major command higher than that in which the servicing position is located or a comparable tenant activity of moderate size; a supply or maintenance depot; or equivalent activities. These activities are individually smaller than the large installation described in the preceding paragraph.

MAJOR ORGANIZATION - An organizational unit located next below bureau or major military command level and headed by an official of SES rank, GM-15, or GM-14, or the civilian or military equivalent. For example, a line, staff, or program office next below bureau level, the head of which reports directly to the Bureau Director; or a comparable office or directorate which is next below a major military command, the director of which reports directly to the Commander or Director of the major command. At agency headquarters, major organizations include the offices of the heads of major staff functions at the agency level (e.g., Agency Personnel Directorate, Agency Budget Directorate, Agency Logistics Directorate, and Agency Directorate of Administrative Services), and major line organizations, the heads of which report directly to an Assistant Secretary or other office next below the Secretary of the Agency.

ORGANIZATIONAL UNIT - This is a generic term for purposes of this guide and refers to any component, subdivision, or group of employees that is directed by a supervisory position.

OTHER DEFINITIONS

PROGRAM - The mission, functions, projects, activities, laws, rules, and regulations which an agency is authorized and funded by statute to administer and enforce. Exercise of delegated authority to carry out program functions and services constitutes the essential purpose for the establishment and continuing existence of an agency. The focus of a program may be on providing products and services to the public, State and local government, private industry, foreign countries, or Federal agencies. Most programs have an impact or effect which is external to the administering agency. In addition, comparable agencywide line or staff programs essential to the operation of an agency are considered programs in applying this guide; the impact of these programs may be limited to activities within one or a few Federal agencies.

A program may be professional, scientific, technical, administrative, or fiscal in nature. Typically, programs involve broad objectives such as: national defense; law enforcement; public health, safety, and well-being; collection of revenue; regulation of trade; collection and dissemination of information; and the delivery of benefits or services. However, specialized or staff programs may be considerably narrower in scope (e.g., merit systems protection; nuclear safety; and agencywide personnel or budget programs). Programs are usually of such magnitude that they must be carried out through a combination of line and staff functions.

MAJOR MILITARY FUNCTION - The military equivalent of a civilian program, e.g., development of a major weapons system such as the Trident submarine, or an ongoing function such as defense intelligence, when such long range or continuing functions are otherwise comparable to a program, as defined above.

PROGRAM SEGMENT - This is a generic term for purposes of this guide and refers to any subdivision of a program or major military function.

DEPUTY - A position that serves as an alter ego to a manager of high rank or level and either fully shares with the manager the direction of all phases of the organization's program and work, or is assigned continuing responsibility for managing a major part of the manager's program when the total authority and responsibility for the organization is equally divided between the manager and the deputy. A deputy's opinion or direction is treated as if given by the chief.

This definition excludes some positions, informally referred to as "deputy" by agencies, which require expertise in management subjects but do not include responsibility for directing either the full organization or an equal half of the total organization. For example, the definition specifically excludes administrative, personal, or general staff assistants to managers, and positions at lower organizational or program segment levels that primarily involve performing supervisory duties.

FLAG OR GENERAL OFFICER - Any of the various ranks of Admiral or General, e.g., Brigadier General and Rear Admiral.

SUPERVISOR - A position or employee that accomplishes work through the direction of other people and meets at least the minimum requirements for coverage under this Guide. Those

directed may be subordinate Federal civil service employees, whether full-time, part-time, intermittent, or temporary; assigned military employees; non-Federal workers; unpaid volunteers; student trainees, or others. Supervisors exercise delegated authorities such as those described in this guide under Factor 3, Supervisory and Managerial Authority Exercised. A first level supervisor personally directs subordinates without the use of other, subordinate supervisors. A second level supervisor directs work through one layer of subordinate supervisors. A "full assistant" shares fully with a higher level supervisor in all phases of work direction, contractor oversight, and delegated authority over the subordinate staff.

NOTE: In some circumstances, technical planning and oversight of work ultimately accomplished through contractors, by State and local government employees, or by similar personnel will be encompassed in a supervisor's position. Provision is made for considering this work in most factors in this guide. However, many of the supervisor's responsibilities over the work of Federal subordinates do not apply to oversight of contract work.

When work for which the supervisor has technical oversight responsibilities is contracted out, or considered for contracting in lieu of accomplishment by subordinates, the supervisor's responsibilities may include: analyzing, justifying, comparing cost, and recommending whether work should be contracted; providing technical requirements and descriptions of the work to be accomplished; planning the work schedules, deadlines, and standards for acceptable work; arranging for subordinates to inspect quality or progress of work; coordinating and integrating contractor work schedules and processes with work of subordinates and others; deciding on the acceptance, rejection, or correction of work products or services, and similar matters which may affect payment to the contractor.

MANAGERIAL - The authority vested in some positions under the General Schedule which direct the work of an organizational unit, are held accountable for the success of specific line or staff functions, monitor and evaluate the progress of the organization toward meeting goals, and make adjustments in objectives, work plans, schedules, and commitment of resources. As described in 5 U.S.C. 5104, such positions may serve as head or assistant head of a major organization within a bureau; or direct a specialized program of marked difficulty, responsibility, and national significance.

TITLING INSTRUCTIONS

Determine the title for a position covered by this guide through reference to the classification standard, classification guide, and/or series guidance used to determine the occupational series of the position. In most instances these guidelines require use of the word "Supervisory" as a prefix to the appropriate occupational title. However, in some occupations, certain titles (e.g., "Budget Officer") denote supervision and the supervisory prefix is not used.

In the absence of specific titling criteria in a classification standard, apply the instructions on titling contained in the Introduction to the Position Classification Standards in conjunction with the Handbook of Occupational Groups and Series. Positions which meet the minimum

requirements for coverage by this guide should be titled as supervisory even if nonsupervisory work in the position is grade controlling.

Although agencies may independently construct titles for informal or internal purposes, it is not permissible to use the words "Supervisory" or "Supervisor" in the official title of a position unless the position meets the minimum criteria for classification by this guide.

INSTRUCTIONS FOR APPLICATION

This guide uses a point-factor evaluation approach with six evaluation factors designed specifically for supervisory positions. Under each factor there are several factor level definitions which are assigned specific point values. The points for all levels are fixed and no interpolation or extrapolation of them is permitted. Work of positions at different organizational levels often will be properly credited at the same level of a factor.

Evaluate supervisory duties by comparing them with each factor. Credit the points designated for the highest factor level which is met according to the instructions specific to each factor and level. If two or more levels of a factor are met, credit the points for the highest level met. However, if one level of a factor is exceeded, but the next higher level is not met, credit the lower level involved.

Add the total points accumulated under all factors. Use the point-to-grade conversion table at the end of this guide to convert the point total to a grade.

If the supervisory work does not fall at least one grade above the base level of work supervised (as determined by factor 5 in this guide), apply the adjustment provision following the grade conversion table.

(If the position includes major nonsupervisory duties, evaluate them using appropriate other standards and guides. If they evaluate to a different grade than the position's supervisory duties, the grade for the higher level duties will be the final grade of the position.)

Users are cautioned to read carefully all instructions and all levels for each factor before assigning a level; instructions differ for each factor. Individual positions may score low points on some factors and high points on others. As a final check, users should particularly examine the factor level definitions next above and below those initially credited to assure that the highest level that is met is credited.

DEPUTY AND "ASSISTANT CHIEF" SUPERVISORY POSITIONS

The evaluation criteria in this guide are not designed to be applied directly to deputy or "assistant chief" supervisory positions. The grade of a full deputy (as defined in the introduction to this guide) or full "assistant chief" supervisory position which shares fully in the duties, responsibilities, and authorities of the "chief" should normally be set one grade lower than the grade of the supervisory duties of the position to which it reports. Since the criteria in this guide are designed to evaluate only GS/GM grades 5 through 15, the grade of a full deputy to an SES or Executive Level position or other position which exceeds grade 15 is determined through the application of policies and criteria beyond the scope and coverage of this guide. However a full deputy to such a position would normally not be graded below GS/GM-15.

Assignment of SES rank to a position is subject to the requirements of the Executive Personnel Management System, and therefore outside the scope of this guide.

GRADE EVALUATION FACTORS

FACTOR 1 - PROGRAM SCOPE AND EFFECT

This factor assesses the general complexity, breadth, and impact of the program areas and work directed, including its organizational and geographic coverage. It also assesses the impact of the work both within and outside the immediate organization.

In applying this factor, consider all program areas, projects, and work assignments which the supervisor technically and administratively directs, including those accomplished through subordinate General Schedule employees, FWS employees, military personnel, contractors, volunteers, and others. To assign a factor level, the criteria dealing with both scope and effect, as defined below, must be met.

a. SCOPE. This addresses the general complexity and breadth of:

- the program (or program segment) directed;
- the work directed, the products produced, or the services delivered.

The geographic and organizational coverage of the program (or program segment) within the agency structure is included under Scope.

b. EFFECT. This addresses the impact of the work, the products, and/or the programs described under "Scope" on the mission and programs of the customer(s), the activity, other activities in or out of government, the agency, other agencies, the general public, or others.

Factor Level 1-1 -- 175 points

- a. SCOPE. Work directed is procedural, routine, and typically provides services or products to specific persons or small, local organizations.
- b. EFFECT. Work directed facilitates the work of others in the immediate organizational unit, responds to specific requests or needs of individuals, or affects only localized functions.

Illustration:

- Directs messenger, guard, clerical, or laboratory support work below grade GS-5, or equivalent. Provides local services to an organizational unit, small field office, or comparable activity.

Factor Level 1-2 -- 350 points

- a. SCOPE. The program segment or work directed is administrative, technical, complex clerical, or comparable in nature. The functions, activities, or services provided have limited geographic coverage and support most of the activities comprising a typical agency field office, an area office, a small to medium military installation, or comparable activities within agency program segments.
- b. EFFECT. The services or products support and significantly affect installation level, area office level, or field office operations and objectives, or comparable program segments; or provide services to a moderate, local or limited population of clients or users comparable to a major portion of a small city or rural county.

Illustrations:

- Directs budget, management, staffing, supply, maintenance, protective, library, payroll, or similar services which support a small Army, Navy, or Air Force base with no extensive research, development, testing, or comparable missions, a typical national park, a hospital, or a nondefense agency field office of moderate size and limited complexity. The services provided directly or significantly impact other functions and activities throughout the organizations supported and/or a small population of visitors or users.
- In a field office providing services to the general public, furnishes a portion of such services, often on a case basis, to a small population of clients. The size of the population serviced by the field office is the equivalent of all citizens or businesses in a portion of a small city. Depending on the nature of the service provided, however, the serviced population may be concentrated in one city or spread over a wider geographic area.
- Directs operating program segment activities comparable to those above but found at higher organizational levels in the agency, for example, the section or branch level of a bureau.

Factor Level 1-3 -- 550 points

- a. SCOPE. Directs a program segment that performs technical, administrative, protective, investigative, or professional work. The program segment and work directed typically have coverage which encompasses a major metropolitan area, a State, or a small region of several States; or, when most of an area's taxpayers or businesses are covered, coverage comparable to a small city. Providing complex administrative or technical or professional services directly affecting a large or complex multimission military installation also falls at this level.
- b. EFFECT. Activities, functions, or services accomplished directly and significantly impact a wide range of agency activities, the work of other agencies, or the operations of outside interests (e.g., a segment of a regulated industry), or the general public. At the field activity level (involving large, complex, multimission organizations and/or very large serviced populations comparable to the examples below) the work directly involves or substantially impacts the provision of essential support operations to numerous, varied, and complex technical, professional, and administrative functions.

Illustrations:

- Directs design, oversight, and related services for the construction of complex facilities for one or more agencies at multiple sites. The facilities are essential to the field operations of one or more agencies throughout several States.
- In providing services directly to the general public, furnishes a significant portion of the agency's line program to a moderate-sized population of clients. The size of the population serviced by the position is the equivalent of a group of citizens and/or businesses in several rural counties, a small city, or a portion of a larger metropolitan area. Depending on total population serviced by the agency and the complexity and intensity of the service itself, however, the serviced population may be concentrated in one specific geographic area, or involve a significant portion of a multistate population, or be composed of a comparable group.
- Directs administrative services (personnel, supply management, budget, facilities management, or similar) which support and directly affect the operations of a bureau or a major military command headquarters; a large or complex multimission military installation; an organization of similar magnitude, or a group of organizations which, as a whole, are comparable.

Factor Level 1-4 -- 775 points

a. SCOPE. Directs a segment of a professional, highly technical, or complex administrative program which involves the development of major aspects of key agency scientific, medical, legal, administrative, regulatory, policy development or comparable, highly technical programs; or that includes major, highly technical operations at the Government's largest, most complex industrial installations.

b. EFFECT. Impacts an agency's headquarters operations, several bureauwide programs, or most of an agency's entire field establishment; or facilitates the agency's accomplishment of its primary mission or programs of national significance; or impacts large segments of the Nation's population or segments of one or a few large industries; or receives frequent or continuing congressional or media attention.

Illustrations:

- Directs mission-essential, major operating programs or program segments at:
 - a large, complex, aerospace, undersea, or multimission research and development center;
 - the production department of one of the largest Navy shipyards or the aircraft management directorate at an Air Logistics Center;
 - major medical centers which include research programs or other medical programs of national interest and standing.

The program segments directed affect segments of large industries, or receive frequent congressional or media attention, or are essential to major defense, space exploration, or public health programs.

- Directs a program segment which includes major aspects of a regulatory, social service, or major revenue producing program covering a major segment of the Nation or numerous States. The program segments directed directly affect large segments of the Nation's population or businesses.
- Directs administrative activities (such as budget, management analysis, or personnel) conducted throughout, or covering the operations of, the agency's headquarters or most of its field establishment. The program segments directed materially shape or improve the structure, effectiveness, efficiency, or productivity of major portions of the agency's primary missions, multiregion programs, headquarterswide operations, or projects of national interest.

Factor Level 1-5 -- 900 points

SCOPE AND EFFECT combined. Directs a program for which both the scope and impact of the program or organization directed are one or more of the following: Nationwide; agencywide; industrywide; Governmentwide; directly involve the national interest or the agency's national mission; are subject to continual or intense congressional and media scrutiny or controversy; or have pervasive impact on the general public.

- OR -

Directs critical program segments, major scientific projects, or key high level organizations with comparable scope and impact.

Illustrations:

- Directs an agencywide regulatory effort affecting the Nation's general public or one or more large industries. The position heads a major organization one or two levels below the bureau level tasked with developing, issuing, and implementing policies, regulations, and other guidance which have agencywide usage, or affect major activities of large industries, or affect the general public.
- Directs the development of the most critical and complex subsystem(s) in a major aerospace or weapons system development program. The work (whether accomplished at or below headquarters and bureau levels or locations) has significant direct impact one or a few major industries, the agency's national mission, or the national defense.

FACTOR 2 - ORGANIZATIONAL SETTING

This factor considers the organizational situation of the supervisory position in relation to higher levels of management.

For purposes of determining reporting levels under this factor:

- A position reporting to a deputy or full assistant chief position is credited as reporting to the chief. For example, a position reporting to the deputy of an SES position should be credited as if reporting directly to the SES level position. (However, an assistant chief position which does not share fully in the authorities and responsibilities of the chief constitutes a separate, intervening, reporting level under this guide. A supervisory position reporting to such a position would be treated as if reporting to a position one level below the chief.)
- The appropriate full performance level or rank of the position reported to is used when that position is occupied by officials of lower or different rank, e.g., for career development, budgetary, or similar purposes.

- A single factor level definition may cover positions at more than one organizational level in an agency or activity.
- If the position reports to two positions, select the factor level associated with the position which has responsibility for performance appraisal.
- SES equivalents include military officers at, equivalent to, or above the ranks of Rear Admiral and Brigadier General and also include commanding officers of the very largest military installations, regardless of rank.

Factor Level 2-1 -- 100 points

The position is accountable to a position that is two or more levels below the first (i.e., lowest in the chain of command) SES, flag or general officer, equivalent or higher level position in the direct supervisory chain.

Factor Level 2-2 -- 250 points

The position is accountable to a position that is one reporting level below the first SES, flag or general officer, or equivalent or higher level position in the direct supervisory chain.

Factor Level 2-3 -- 350 points

The position is accountable to a position that is SES level, flag or general officer military rank, or equivalent or higher level; or to a position which directs a substantial GS/GM-15 or equivalent level workload; or to a position which directs work through GS/GM-15 or equivalent level subordinate supervisors, officers, contractors, or others.

FACTOR 3 - SUPERVISORY AND MANAGERIAL AUTHORITY EXERCISED

This factor covers the delegated supervisory and managerial authorities which are exercised on a recurring basis. To be credited with a level under this factor, a position must meet the authorities and responsibilities to the extent described for the specific level. Levels under this factor apply equally to the direction of specialized program management organizations, line functions, staff functions, and operating and support activities. Where authority is duplicated or not significantly differentiated among several organizational levels, a factor level may apply to positions at more than one organizational level.

Factor Level 3-2 -- 450 points

Positions at this level meet a or b or c below:

a. Plan and schedule ongoing production-oriented work on a quarterly and annual basis, or direct assignments of similar duration. Adjust staffing levels or work procedures within their organizational unit(s) to accommodate resource allocation decisions made at higher echelons. Justify the purchase of new equipment. Improve work methods and procedures used to produce work products. Oversee the development of technical data, estimates, statistics, suggestions, and other information useful to higher level managers in determining which goals and objectives to emphasize. Decide the methodologies to use in achieving work goals and objectives, and in determining other management strategies.

b. Where work is contracted out, perform a wide range of technical input and oversight tasks comparable to all or nearly all of the following:

1. Analyze benefits and costs of accomplishing work in-house versus contracting; recommend whether to contract;
2. Provide technical requirements and descriptions of the work to be accomplished;
3. Plan and establish the work schedules, deadlines, and standards for acceptable work; coordinate and integrate contractor work schedules and processes with work of subordinates or others;
4. Track progress and quality of performance; arrange for subordinates to conduct any required inspections;
5. Decide on the acceptability, rejection, or correction of work products or services, and similar matters which may affect payment to the contractor.

c. Carry out at least three of the first four, and a total of six or more of the following 10 authorities and responsibilities:

1. Plan work to be accomplished by subordinates, set and adjust short-term priorities, and prepare schedules for completion of work;
2. Assign work to subordinates based on priorities, selective consideration of the difficulty and requirements of assignments, and the capabilities of employees;
3. Evaluate work performance of subordinates;
4. Give advice, counsel, or instruction to employees on both work and administrative matters;
5. Interview candidates for positions in the unit; recommend appointment, promotion, or reassignment to such positions;

6. Hear and resolve complaints from employees, referring group grievances and more serious unresolved complaints to a higher level supervisor or manager;
7. Effect minor disciplinary measures, such as warnings and reprimands, recommending other action in more serious cases;
8. Identify developmental and training needs of employees, providing or arranging for needed development and training;
9. Find ways to improve production or increase the quality of the work directed;
10. Develop performance standards.

Factor Level 3-3 -- 775 points

To meet this level, positions must meet paragraph a or b below:

- a. Exercise delegated managerial authority to set a series of annual, multiyear, or similar types of long-range work plans and schedules for in-service or contracted work. Assure implementation (by lower and subordinate organizational units or others) of the goals and objectives for the program segment(s) or function(s) they oversee. Determine goals and objectives that need additional emphasis; determine the best approach or solution for resolving budget shortages; and plan for long range staffing needs, including such matters as whether to contract out work. These positions are closely involved with high level program officials (or comparable agency level staff personnel) in the development of overall goals and objectives for assigned staff function(s), program(s), or program segment(s). For example, they direct development of data; provision of expertise and insights; securing of legal opinions; preparation of position papers or legislative proposals; and execution of comparable activities which support development of goals and objectives related to high levels of program management and development or formulation.
- b. Exercise all or nearly all of the delegated supervisory authorities and responsibilities described at Level 3-2c of this factor and, in addition, at least 8 of the following:
 1. Using any of the following to direct, coordinate, or oversee work: supervisors, leaders, team chiefs, group coordinators, committee chairs, or comparable personnel; and/or providing similar oversight of contractors;
 2. Exercising significant responsibilities in dealing with officials of other units or organizations, or in advising management officials of higher rank;
 3. Assuring reasonable equity (among units, groups, teams, projects, etc.) of performance standards and rating techniques developed by subordinates or assuring comparable equity in the assessment by subordinates of the adequacy of contractor capabilities or of contractor completed work;

4. Direction of a program or major program segment with significant resources (e.g., one at a multimillion dollar level of annual resources);
5. Making decisions on work problems presented by subordinate supervisors, team leaders, or similar personnel, or by contractors;
6. Evaluating subordinate supervisors or leaders and serving as the reviewing official on evaluations of nonsupervisory employees rated by subordinate supervisors;
7. Making or approving selections for subordinate nonsupervisory positions;
8. Recommending selections for subordinate supervisory positions and for work leader, group leader, or project director positions responsible for coordinating the work of others, and similar positions;
9. Hearing and resolving group grievances or serious employee complaints;
10. Reviewing and approving serious disciplinary actions (e.g., suspensions) involving nonsupervisory subordinates;
11. Making decisions on nonroutine, costly, or controversial training needs and training requests related to employees of the unit;
12. Determining whether contractor performed work meets standards of adequacy necessary for authorization of payment;
13. Approving expenses comparable to within-grade increases, extensive overtime, and employee travel;
14. Recommending awards or bonuses for nonsupervisory personnel and changes in position classification, subject to approval by higher level officials, supervisors, or others;
15. Finding and implementing ways to eliminate or reduce significant bottlenecks and barriers to production, promote team building, or improve business practices.

Factor Level 3-4 -- 900 points

In addition to delegated managerial and supervisory authorities included at lower levels of this factor, positions at this level meet the criteria in paragraph a or b below:

- a. Exercise delegated authority to oversee the overall planning, direction, and timely execution of a program, several program segments (each of which is managed through separate subordinate organizational units), or comparable staff functions, including development, assignment, and higher level clearance of goals and objectives for supervisors or managers of subordinate

organizational units or lower organizational levels. Approve multiyear and longer range work plans developed by the supervisors or managers of subordinate organizational units and subsequently manage the overall work to enhance achievement of the goals and objectives. Oversee the revision of long range plans, goals and objectives for the work directed. Manage the development of policy changes in response to changes in levels of appropriations or other legislated changes. Manage organizational changes throughout the organization directed, or major change to the structure and content of the program or program segments directed. Exercise discretionary authority to approve the allocation and distribution of funds in the organization's budget.

- b. Exercise final authority for the full range of personnel actions and organization design proposals recommended by subordinate supervisors. This level may be credited even if formal clearance is required for a few actions, such as removals and incentive awards above set dollar levels.

FACTOR 4 - PERSONAL CONTACTS

This is a two part factor which assesses the nature and the purpose of personal contacts related to supervisory and managerial responsibilities. The nature of the contacts, credited under Subfactor 4A, and the purpose of those contacts, credited under Subfactor 4B, must be based on the same contacts.

SUBFACTOR 4A - NATURE OF CONTACTS

This subfactor covers the organizational relationships, authority or influence level, setting, and difficulty of preparation associated with making personal contacts involved in supervisory and managerial work. To be credited, the level of contacts must contribute to the successful performance of the work, be a recurring requirement, have a demonstrable impact on the difficulty and responsibility of the position, and require direct contact.

Subfactor Level 4A-1 -- 25 points

Contacts are with subordinates within the organizational unit(s) supervised, with peers who supervise comparable units within the larger organization, with union shop stewards, and/or with the staff of administrative and other support activities when the persons contacted are within the same organization as the supervisor. Contacts are typically informal and occur in person at the work place of those contacted, in routine meetings, or by telephone.

Subfactor Level 4A-2 -- 50 points

Frequent contacts comparable to any of those below meet this level. Contacts are with:

- members of the business community or the general public;
- higher ranking managers, supervisors, and staff of program, administrative, and other work units and activities throughout the field activity, installation, command (below major command level) or major organization level of the agency;
- representatives of local public interest groups;
- case workers in congressional district offices;
- technical or operating level employees of State and local governments;
- reporters for local and other limited media outlets reaching a small, general population.

Contacts may be informal, occur in conferences and meetings, or take place through telephone, televised, radio, or similar contact, and sometimes require nonroutine or special preparation.

Subfactor Level 4A-3 -- 75 points

Frequent contacts comparable to any of those below meet this level. Contacts are with:

- high ranking military or civilian managers, supervisors, and technical staff at bureau and major organization levels of the agency; with agency headquarters administrative support staff; or with comparable personnel in other Federal agencies;
- key staff of public interest groups (usually in formal briefings) with significant political influence or media coverage;
- journalists representing influential city or county newspapers or comparable radio or television coverage;
- congressional committee and subcommittee staff assistants below staff director or chief counsel levels;
- contracting officials and high level technical staff of large industrial firms;
- local officers of regional or national trade associations, public action groups, or professional organizations; and/or State and local government managers doing business with the agency.

Contacts include those which take place in meetings and conferences and unplanned contacts for which the employee is designated as a contact point by higher management. They often require

extensive preparation of briefing materials or up-to-date technical familiarity with complex subject matter.

Subfactor Level 4A-4 -- 100 points

Frequent contacts comparable to any of those below meet this level. Contacts are with:

- influential individuals or organized groups from outside the employing agency, such as executive level contracting and other officials of major defense contractors or national officers of employee organizations;
- regional or national officers or comparable representatives of trade associations, public action groups, or professional organizations of national stature;
- key staff of congressional committees, and principal assistants to senators and representatives. For example: majority and minority staff directors, chief counsels, and directors of field operations;
- elected or appointed representatives of State and local governments;
- journalists of major metropolitan, regional, or national newspapers, magazines, television, or radio media;
- SES, flag or general officer, or Executive Level heads of bureaus and higher level organizations in other Federal agencies;

Contacts may take place in meetings, conferences, briefings, speeches, presentations, or oversight hearings and may require extemporaneous response to unexpected or hostile questioning. Preparation typically includes briefing packages or similar presentation materials, requires extensive analytical input by the employee and subordinates, and/or involves the assistance of a support staff.

SUBFACTOR 4B - PURPOSE OF CONTACTS

This subfactor covers the purpose of the personal contacts credited in Subfactor 4A, including the advisory, representational, negotiating, and commitment making responsibilities related to supervision and management.

Subfactor Level 4B-1 -- 30 points

The purpose of contacts is to discuss work efforts for providing or receiving services; to exchange factual information about work operations and personnel management matters; and to provide training, advice, and guidance to subordinates.

Subfactor Level 4B-2 -- 75 points

The purpose of contacts is to ensure that information provided to outside parties is accurate and consistent; to plan and coordinate the work directed with that of others outside the subordinate organization; and/or to resolve differences of opinion among managers, supervisors, employees, contractors or others.

Subfactor Level 4B-3 -- 100 points

The purpose of contacts is to justify, defend, or negotiate in representing the project, program segment(s), or organizational unit(s) directed, in obtaining or committing resources, and in gaining compliance with established policies, regulations, or contracts. Contacts at this level usually involve active participation in conferences, meetings, hearings, or presentations involving problems or issues of considerable consequence or importance to the program or program segment(s) managed.

Subfactor Level 4B-4 -- 125 points

The purpose is to influence, motivate, or persuade persons or groups to accept opinions or take actions related to advancing the fundamental goals and objectives of the program or segments directed, or involving the commitment or distribution of major resources, when intense opposition or resistance is encountered due to significant organizational or philosophical conflict, competing objectives, major resource limitations or reductions, or comparable issues.

At this level, the persons contacted are sufficiently fearful, skeptical, or uncooperative that highly developed communication, negotiation, conflict resolution, leadership, and similar skills must be used to obtain the desired results.

FACTOR 5 - DIFFICULTY OF TYPICAL WORK DIRECTED

This factor measures the difficulty and complexity of the basic work most typical of the organization(s) directed, as well as other line, staff, or contracted work for which the supervisor has technical or oversight responsibility, either directly or through subordinate supervisors, team leaders, or others.

First Level Supervisors

Determine the highest grade which:

- best characterizes the nature of the basic (mission oriented) nonsupervisory work performed or overseen by the organization directed; and
- constitutes 25 percent or more of the workload (not positions or employees) of the organization.

This means that 25 percent or more of the nonsupervisory duty hours of subordinates and others (based on estimates derived from position descriptions, supervisors, staffing studies, or contract documents) is expended on work at or above the base level credited, or, where extensive contract work is overseen, that 25 percent or more of the dollars spent on human services is for work at or above that level.

Include the workload of General Schedule subordinates, Federal Wage System employees, assigned military, volunteers, student trainees or non-Federal workers, such as contractor employees, State and local workers, or similar personnel.)

In determining the highest level of work which constitutes at least 25 percent of workload or duty time, credit trainee, developmental, or other work engineered to grades below normal full performance levels, at full performance levels. Exclude from consideration:

- the work of lower level positions that primarily support or facilitate the basic work of the unit;
- any subordinate work that is graded based on criteria in this guide (i.e., supervisory duties) or the Work Leader Grade-Evaluation Guide;
- work that is graded based on an extraordinary degree of independence from supervision, or personal research accomplishments, or adjust the grades of such work - for purposes of applying this guide - to those appropriate for performance under "normal" supervision;
- work for which the supervisor or a subordinate does not have the responsibilities defined under Factor 3.

FWS, military, contractor, or volunteer work that is similar to that described in this paragraph should also be credited, adjusted or excluded from consideration as above.

Second (and Higher) Level Supervisors

First, use the method described above for first level supervisors. For many second level supervisors, the base level arrived at by that method will be the correct one.

In some cases, however, a heavy supervisory or managerial workload related to work above that base level may be present. For these positions: Determine the highest grade of nonsupervisory work directed which requires at least 50 percent of the duty time of the supervisory position under evaluation. The resulting grade may be used as the base level for second (and higher) level supervisors over large workloads -- if sound alignment with other supervisory positions in the organization and agency results.

In the assessment of the level of any work performed by non-General Schedule employees, the pertinent classification standards should be consulted to derive an appropriate GS equivalent. In assessing supervisory positions which have mostly FWS employees making up their workforce, see the information in this guide under Exclusions.

After determining the highest qualifying level of the basic nonsupervisory work directed, using a method consistent with the instructions above, assign the proper Factor Level and credit the appropriate points using the following chart:

IF HIGHEST LEVEL OF BASE WORK IS:	THEN FACTOR LEVEL IS:	AND POINTS TO BE CREDITED ARE:
GS-1 or 2, or equivalent	5-1	75
GS-3 or 4, or equivalent	5-2	205
GS-5 or 6, or equivalent	5-3	340
GS-7 or 8, or equivalent	5-4	505
GS-9 or 10, or equivalent	5-5	650
GS-11 or equivalent	5-6	800
GS-12 or equivalent	5-7	930
GS-13 or higher, or equivalent	5-8	1030

FACTOR 6 - OTHER CONDITIONS

This factor measures the extent to which various conditions contribute to the difficulty and complexity of carrying out supervisory duties, authorities, and responsibilities. Conditions affecting work for which the supervisor is responsible (whether performed by Federal employees, assigned military, contractors, volunteers, or others) may be considered if they increase the difficulty of carrying out assigned supervisory or managerial duties and authorities.

To Apply This Factor

Step 1 — Read each Factor Level Definition and select the highest level which the position fully meets.

Step 2 — If the level selected is either 6-1, 6-2, or 6-3, refer to the Special Situations section to be found after the Factor Level Definitions. Read each of the eight situations and determine how many are met by the position. If the position meets 3 or more of the situations (i.e., meets 3 or more of the numbered paragraphs), then add a single level to the level selected in Step 1. For example, if the highest factor level that the position meets is 6-3, and the position also meets three separate numbered paragraphs under Special Situations, credit the position with level 6-4 for Factor 6.

If the level selected under Step 1 is either 6-4, 6-5, or 6-6, do not consult the Special Situations section, and do not add any levels to the level selected in Step 1. The level selected in Step 1 will be the level credited to the position for Factor 6.

Factor Level 6-1 -- 310 points

a. The work supervised or overseen involves clerical, technician, or other work comparable in difficulty to the GS-6 level, or lower. This could vary from basic supervision over a stable workforce performing work operations that are routine, to a level of supervision which requires coordination within the unit to ensure that timeliness, form, procedure, accuracy, quality and quantity standards are met in individual cases.

Factor Level 6-2 -- 575 points

a. The work supervised or overseen involves technician and/or support work comparable in difficulty to GS-7 or GS-8, or work at the GS-4, 5 or 6 level where the supervisor has full and final technical authority over the work, which requires coordination and integration of work efforts, either within the unit or with other units, in order to produce a completed work product or service. (Full and final technical authority means that the supervisor is responsible for all technical determinations arising from the work, without technical advice or assistance on even the more difficult and unusual problems, and without further review except from an administrative or program evaluation standpoint. Credit for this should be limited to situations involving an extraordinary degree of finality in technical decision making.)

The required coordination at this level ensures: consistency of product, service, interpretation, or advice; conformance with the output of other units, with formal standards or agency policy. Supervisors typically coordinate with supervisors of other units to deal with requirements and problems affecting others outside the organization.

OR

b. The position directs subordinate supervisors of work comparable to GS-6 or lower, where coordinating the work of the subordinate units requires a continuing effort to assure quality and service standards, limited to matters of timeliness, form, procedure, accuracy, and quantity.

Factor Level 6-3 -- 975 points

a. Supervision and oversight at this level requires coordination, integration, or consolidation of administrative, technical, or complex technician or other support work comparable to GS-9 or 10, or work at the GS-7 or 8 level where the supervisor has full and final technical authority over the work. (Full and final technical authority means that the supervisor is responsible for all technical determinations arising from the work, without technical advice or assistance on even the more difficult and unusual problems, and without further review except from an administrative or program evaluation standpoint. Credit for this should be limited to situations involving an extraordinary degree of finality in technical decisionmaking.) Directing the work at

this level (cases, reports, studies, regulations, advice to clients, etc.) requires consolidation or coordination similar to that described at Factor Level 6-2a, but over a higher level of work.

This level may also be met when the work directed is analytical, interpretive, judgmental, evaluative, or creative. Such work places significant demands on the supervisor to resolve conflicts and maintain compatibility of interpretation, judgment, logic, and policy application, because the basic facts, information, and circumstances often vary substantially; guidelines are incomplete or do not readily yield identical results; or differences in judgments, recommendations, interpretations, or decisions can have consequences or impact on the work of other subordinates. Such work also may be accomplished by a team, each member of which contributes a portion of the analyses, facts, information, proposed actions, or recommendations, which are then integrated by the supervisor.

OR

b. The position directs subordinate supervisors over positions in grades GS-7 or 8 or the equivalent which requires consolidation or coordination similar to that described at Factor Level 6-2a within or among subordinate units or with outside units.

Factor Level 6-4 -- 1120 Points

a. Supervision at this level requires substantial coordination and integration of a number of major work assignments, projects, or program segments of professional, scientific, technical, or administrative work comparable in difficulty to the GS-11 level. For example, such coordination may involve work comparable to one of the following:

- identifying and integrating internal and external program issues affecting the immediate organization, such as those involving technical, financial, organizational, and administrative factors;
- integrating the work of a team or group where each member contributes a portion of the analyses, facts, information, proposed actions, or recommendations; and/or ensuring compatibility and consistency of interpretation, judgment, logic, and application of policy;
- recommending resources to devote to particular projects or to allocate among program segments;
- leadership in developing, implementing, evaluating, and improving processes and procedures to monitor the effectiveness, efficiency, and productivity of the program segment and/or organization directed;
- reviewing and approving the substance of reports, decisions, case documents, contracts, or other action documents to assure that they accurately reflect the policies and position of the organization and the views of the agency.

OR

b. The position directs subordinate supervisors and/or contractors who each direct substantial workloads comparable to the GS-9 or 10 level. Such base work requires coordination similar to that described at Factor Level 6-3a., above, for first line supervisors.

Factor Level 6-5 -- 1225 points

a. Supervision and oversight at this level requires significant and extensive coordination and integration of a number of important projects or program segments of professional, scientific, technical, managerial, or administrative work comparable in difficulty to the GS-12 level. Supervision at this level involves major recommendations which have a direct and substantial effect on the organization and projects managed. For instance, makes major recommendations in at least three of the areas listed below or in other, comparable areas:

- significant internal and external program and policy issues affecting the overall organization, such as those involving political, social, technological, and economic conditions, as well as those factors cited in the first item of Factor Level 6-4a;
- restructuring, reorienting, recasting immediate and long range goals, objectives, plans, and schedules to meet substantial changes in legislation, program authority, and/or funding;
- determinations of projects or program segments to be initiated, dropped, or curtailed;
- changes in organizational structure, including the particular changes to be effected;
- the optimum mix of reduced operating costs and assurance of program effectiveness, including introduction of labor saving devices, automated processes, methods improvements, and similar;
- the resources to devote to particular programs (especially when staff-years and a significant portion of an organization's budget are involved);
- policy formulation, and long range planning in connection with prospective changes in functions and programs.

OR

b. Supervision of highly technical, professional, administrative, or comparable work at GS-13 or above involving extreme urgency, unusual controversy, or other, comparable demands due to research, development, test and evaluation, design, policy analysis, public safety, public health, medical, regulatory, or comparable implications.

OR

c. Managing work through subordinate supervisors and/or contractors who each direct substantial workloads comparable to the GS-11 level. Such base work requires similar coordination as that described at Factor Level 6-4a. above for first line supervisors.

NOTE: Credit for Factor Level 6-5 cannot be obtained by means of the Special Situations found at the end of the Factor Level Descriptions.

Factor Level 6-6 -- 1325 points

a. Supervision and oversight at this level requires exceptional coordination and integration of a number of very important and complex program segments or programs of professional, scientific, technical, managerial, or administrative work comparable in difficulty to the GS-13 or higher level. Supervision and resource management at this level involves major decisions and actions which have a direct and substantial effect on the organizations and programs managed. For instance, supervisors at this level make recommendations and/or final decisions about many of the management areas listed under Factor Level 6-5a., or about other comparable areas.

OR

b. They manage through subordinate supervisors and/or contractors who each direct substantial workloads comparable to the GS-12 or higher level. Such base work requires similar coordination as that described at Factor Level 6-5a. above for first line supervisors.

NOTE: Credit for Factor Level 6-6 cannot be obtained by means of the Special Situations described below.

SPECIAL SITUATIONS

Supervisory and oversight work may be complicated by special situations and/or conditions. The Methodology section at the beginning of this factor explains how to credit the following situations.

1. Variety of Work:

Credit this situation when more than one kind of work, each kind representing a requirement for a distinctly different additional body of knowledge on the part of the supervisor, is present in the work of the unit. A "kind of work" usually will be the equivalent of a classification series. Each "kind of work" requires substantially full qualification in distinctly separate areas, or full knowledge and understanding of rules, regulations, procedures, and subject matter of a distinctly separate area of work. Additionally, to credit "Variety" (1) both technical and administrative responsibility must be exercised over the work, and (2) the grade level of the work cannot be more than one grade below the base level of work used in Factor 5.

2. Shift Operations:

Credit this situation when the position supervises an operation carried out on at least two fully staffed shifts.

3. Fluctuating Work Force or Constantly Changing Deadlines:

Credit Fluctuating Work Force when the workforce supervised by the position has large fluctuations in size (e.g., when there are significant seasonal variations in staff) and these fluctuations impose on the supervisor a substantially greater responsibility for training, adjusting assignments, or maintaining a smooth flow of work while absorbing and releasing employees.

Credit Constantly Changing Deadlines when frequent, abrupt, and unexpected changes in work assignments, goals, and deadlines require the supervisor constantly to adjust operations under the pressure of continuously changing and unpredictable conditions.

4. Physical Dispersion:

Credit this situation when a substantial portion of the workload for which the supervisor is responsible is regularly carried out at one or more locations which are physically removed from the main unit (as in different buildings, or widely dispersed locations in a large warehouse or factory building), under conditions which make day-to-day supervision difficult to administer.

5. Special Staffing Situations:

Credit this situation when: (1) a substantial portion of the work force is regularly involved in special employment programs; or in similar situations which require involvement with employee representatives to resolve difficult or complex human resources management issues and problems; (2) requirements for counseling and motivational activities are regular and recurring; and (3) job assignments, work tasks, working conditions, and/or training must be tailored to fit the special circumstances.

6. Impact of Specialized Programs:

Credit this situation when supervisors are responsible for a significant technical or administrative workload in grades above the level of work credited in Factor 5, provided the grades of this work are not based upon independence of action, freedom from supervision, or personal impact on the job.

7. Changing Technology:

Credit this when work processes and procedures vary constantly because of the impact of changing technology, creating a requirement for extensive training and guidance of the subordinate staff.

8. Special Hazard and Safety Conditions:

Credit this situation when the supervisory position is regularly made more difficult by the need to make provision for significant unsafe or hazardous conditions occurring during performance of the work of the organization.

DETERMINING THE GRADE

To determine the final grade of supervisory work:

- Assure that you have applied this guide in accordance with the "Instructions for Application" in the introduction to this Guide, and the directions given in each factor.
- Total the points for all six factors and convert them to a grade using the point-to-grade conversion chart below. This normally produces the final grade of supervisory major duties.

POINT-TO-GRADE CONVERSION CHART

<u>Point Range</u>	<u>Grade</u>
4055- up	GS-15
3605-4050	GS-14
3155-3600	GS-13
2755-3150	GS-12
2355-2750	GS-11
2105-2350	GS-10
1855-2100	GS-9
1605-1850	GS-8
1355-1600	GS-7
1105-1350	GS-6
0855-1100	GS-5

If the grade which results from applying the conversion chart is not higher than the base grade of work supervised, as determined under Factor 5 of this guide, the final grade for the supervisory work evaluated will be one grade above the "base" grade of work directed, provided:

- a. the "base" level of work directed is determined under Factor 5 of this guide, and involves 25 percent or more of the workload directed, as estimated under Factor 5; and
- b. the delegated supervisory and managerial authorities and responsibilities credited meet the minimum level of authority and responsibility in Factor Level 3-2;

In addition, where the base grade of work directed is GS-09, and the adjustment conditions "a" and "b" immediately above are fully met, the final grade for the supervisory work shall not be less than GS-11.

These adjustments may not be applied directly to "Deputy" or "Assistant Chief" duties causing a position to be graded at the same grade as the "Chief."

Introduction to the Federal Wage System Job Grading System

Table of Contents

SECTION I -- INTRODUCTION	3
A. BACKGROUND	3
1. Authority.....	3
2. Objectives.....	3
3. Action.....	3
B. OUTLINE OF THE JOB GRADING SYSTEM	4
1. Nature of the system	4
2. Coverage of the system	5
SECTION II -- ASSIGNING GRADES TO JOBS	5
A. KEY RANKING JOBS	5
1. Nature and purpose of key ranking jobs	5
2. Listing of key ranking jobs	5
3. Use of key ranking jobs in job grading.....	7
B. JOB GRADING STANDARDS	7
1. Nature and purpose of standards	7
2. Content of standards.....	8
C. JOB GRADING METHOD	9
1. Basic method for grading nonsupervisory jobs.....	9
2. Main points to consider	10
3. Mixed jobs	11
4. Supervisor and leader jobs.....	11
D. RELATIONSHIP BETWEEN JOB GRADING STANDARDS AND DETERMINING GUIDES	12
SECTION III -- CODES AND TITLES	12
A. THE CODING PLAN	13
1. Pay category	13
2. Job family and occupation	13
3. Grade level	14
4. Method for indicating the code	14
5. Using the coding plan	14
6. Establishing new codes	15
B. TITLES	15
1. Nonsupervisory jobs	16
2. Leader and supervisor jobs.....	16
3. Jobs in the 01 code	16
4. Mixed jobs	17

(continued)

Table of Contents (continued)

APPENDIX 1 -- SUMMARY OF JOB GRADING SYSTEM.....	18
APPENDIX 2 -- DESCRIPTIONS OF KEY RANKING JOBS	19
Laundry Worker; Grade: 1	19
Janitor (Light); Grade: 1.....	19
Janitor (Heavy); Grade: 2.....	19
Food Service Worker; Grade: 2.....	20
Laborer (Light); Grade: 2	20
Laborer (Heavy); Grade: 3.....	21
Sale Store Worker; Grade: 4.....	21
Fork Lift Operator; Grade: 5	22
Warehouseman; Grade: 5	22
Helper (Trades); Grade: 5.....	23
Truck Driver (Light); Grade: 5.....	23
Truck Driver (Medium); Grade: 6.....	23
Packer; Grade: 6	24
Stockroom Attendant; Grade: 6	24
Sewing Machine Operator; Grade: 6.....	25
Bindery Worker; Grade: 7	25
Office Appliance Repairer; Grade: 7.....	26
Truck Driver (Heavy); Grade: 7.....	26
Truck Driver (Trailer); Grade: 8	27
Cook; Grade: 8.....	27
Machine Tool Operator; Grade: 8.....	28
Water Plant Operator; Grade: 9.....	28
Painter; Grade: 9.....	29
Carpenter; Grade: 9.....	29
Plumber; Grade: 9	30
Motor Grader Operator; Grade: 10.....	30
Automotive Mechanic; Grade: 10.....	31
Aircraft Mechanic; Grade: 10.....	31
Welder; Grade: 10.....	32
Pipefitter; Grade: 10	33
Sheetmetal Worker; Grade: 10	33
Electrician; Grade: 10.....	34
Machinist; Grade: 10	34
Electronics Equipment Mechanic; Grade: 11.....	35
Radar Mechanic (Ground); Grade: 12.....	35
Tool, Die, and Gage Maker; Grade: 13.....	36
Die Sinker; Grade: 14	36
Modelmaker; Grade: 14.....	37
Instrument Maker; Grade: 15.....	38
APPENDIX 3 -- FACTOR DEFINITIONS.....	40

SECTION I -- INTRODUCTION

A. BACKGROUND

1. Authority

On November 16, 1965, the President asked the heads of Federal departments and agencies to cooperate with the Chairman of the U.S. Civil Service Commission (now the U.S. Office of Personnel Management) in developing a coordinated wage system for Federal employees in trades and labor occupations.

On August 19, 1972, the Congress enacted Public Law 92-392 to provide an equitable system for fixing and adjusting the rates of pay for prevailing rate employees of the government and for other purposes. Thus, P.L. 92-392 is basically an extension and an update of the old Coordinated Federal Wage System (CFWS). The new system contains nearly all the features of the CFWS but, among the changes, it adds coverage of the system to include non-appropriated fund and Veterans Administration Canteen Service employees in positions having trade, craft, or laboring experience and knowledge as the paramount requirement.

2. Objectives

The policies and practices of the Federal Wage System (FWS) are based on the principles that:

- a. wages shall be fixed and adjusted from time to time as nearly as is consistent with the public interest in accordance with prevailing rates; and
- b. there shall be equal pay for substantially equal work, and pay distinctions shall be maintained in keeping with work distinctions.

3. Action

The law directs that common job standards, wage policies, and practices be developed to insure interagency equity in wage rates and to bring about equitable coordination of wage-fixing practices among the different executive departments and agencies.

Thus jobs under the Federal Wage System are to be graded on the basis of the same set of job standards and grade criteria, regardless of the department or agency involved or the community in which they are located.

B. OUTLINE OF THE JOB GRADING SYSTEM

1. Nature of the system

The job grading system has been established in keeping with these directives. The system includes:

- a. a framework of key ranking jobs to serve as the basic pegpoints of the grade structure;
- b. job grading standards to provide the criteria for determining the relative worth of jobs in terms of grades;
- c. a job grading method to assure consistency in the application of job standards; and
- d. a plan for coding and titling trades and labor jobs.

The key ranking jobs establish the basic scale for grading jobs. In turn, the job grading standards define grade levels in keeping with that basic scale. The standards are the immediate "yardsticks" or tools used for deciding the grade levels of the jobs to which the standards apply.

Under the job grading method used, the grade of a job is decided by comparison of the whole job with grade definitions in an appropriate job grading standard, considering job facts as indicated by the four factors of skill and knowledge, responsibility, physical effort, and working conditions involved in the work. The grade definitions in job grading standards also are described in terms of these four factors.

The method provides a means for analyzing and comparing jobs with applicable job grading standards so that jobs involving the same level of work can consistently be assigned the same grade. When directly applicable job grading standards are not available, jobs can be graded consistently by comparison with grade-level definitions in standards for most nearly related occupations.

Under this common job grading system, jobs with sufficiently similar levels of work are placed in the same grade; jobs with significantly different levels of work are placed in different grades depending on the extent of the differences. The job grading system is summarized graphically in APPENDIX 1.

The identification of the significant similarities and differences in the levels of jobs by means of grades permits the setting of pay in keeping with work distinctions for jobs in many different occupations throughout the Federal Government.

2. Coverage of the system

The common job grading system covers jobs in the executive agencies as indicated in the *Operating Manual for the Federal Wage System*. In effect, it applies to most trades and labor jobs outside the postal field service that are paid from appropriated and nonappropriated funds. The basic guidelines for determining trades or labor jobs, and for distinguishing them from General Schedule (GS) jobs, are in *Section IV of the Introduction to the Position Classification Standards*, published by the Office of Personnel Management. Other guidance is contained in individual FWS job grading standards and General Schedule position classification standards.

(**Note:** The instructions on grading, coding, and titling trades and labor jobs contained herein apply only to jobs under the Federal Wage System. This includes jobs converted from individual agency systems, following procedures in the *Operating Manual for the Federal Wage Systems* and to new jobs established under the Federal Wage System.)

SECTION II -- ASSIGNING GRADES TO JOBS

A. KEY RANKING JOBS

1. Nature and purpose of key ranking jobs

The nonsupervisory structure of the job grading system has 15 grades. To establish a framework for that structure, the Office of Personnel Management determined the ranking relationships among certain key jobs. The descriptions of these key jobs, which are called key ranking jobs, serve as grade-level "pegpoints" for the 15-grade nonsupervisory structure. They reflect the relative worth of different key lines of work and levels within lines of work and control the alinement of the grade levels in all nonsupervisory job grading standards.

The ranking framework is based on the extensive network of relationships among the various kinds of jobs as well as the various grade levels within these kinds of jobs. In keeping with the factor guided job grading technique, these relationships are highlighted in the descriptions of the key ranking jobs by means of the similarities and differences cited among the factors of skill and knowledge, responsibility, physical effort, and working conditions. The grading criteria in all job grading standards are consistent with these relationships.

2. Listing of key ranking jobs

The 39 key ranking jobs listed below and described in APPENDIX 2 are found in the majority of agencies which have trades and labor jobs. They represent a cross section of varying kinds of work as well as various skill levels within these kinds of work.

(**Note:** The following titles are used only to identify the key ranking jobs. They should not be used as the guide for titling jobs. Rather, the official titles of jobs should be determined following the titling instructions in Section III, Codes and Titles.)

Key ranking job title	Grade
1. Laundry Worker	1
2. Janitor (Light)	1
3. Janitor (Heavy)	2
4. Food Service Worker	2
5. Laborer (Light)	2
6. Laborer (Heavy)	3
7. Sales Store Worker	4
8. Fork Lift Operator	5
9. Warehouseman	5
10. Helper (Trades)	5
11. Truck Driver (Light)	5
12. Truck Driver (Medium)	6
13. Packer	6
14. Stockroom Attendant	6
15. Sewing Machine Operator	6
16. Bindery Worker	7
17. Office Appliance Repairer	7
18. Truck Driver (Heavy)	7
19. Truck Driver (Trailer)	8
20. Cook	8
21. Machine Tool Operator	8
22. Water Plant Operator	9
23. Painter	9

Key ranking job title	Grade
24. Carpenter	9
25. Plumber	9
26. Motor Grader Operator	10
27. Automotive Mechanic	10
28. Aircraft Mechanic	10
29. Welder	10
30. Pipefitter	10
31. Sheetmetal Worker	10
32. Electrician	10
33. Machinist	10
34. Electronics Equipment Mechanic	11
35. Radar Mechanic (Ground)	12
36. Tool, Die, and Gage Maker	13
37. Die Sinker	14
38. Modelmaker	14
39. Instrument Maker	15

3. Use of key ranking jobs in job grading

The key ranking jobs are not job grading standards and are not to be used to make final grade decisions for jobs. However, since they establish the grade framework for standards development, the key ranking jobs can be very useful as a general guide.

B. JOB GRADING STANDARDS

1. Nature and purpose of standards

To insure interagency equity in job grading and wage rates, the Office of Personnel Management develops and publishes common job grading standards and instructions which provide the

criteria for grading, titling, and coding jobs. These standards are based on fact finding studies conducted in selected representative work situations. They govern the grading of all jobs under the Federal Wage System.

All jobs under that system must be graded in accordance with or consistent with the common job grading standards and instructions published by the Office of Personnel Management. For jobs not covered directly by published standards, grades are determined by comparison with standards for most nearly related occupation.

2. Content of standards

Because of the many differences in duties, skills, knowledge, and other aspects of trades and labor jobs, standards are developed mainly along occupational lines. Most job grading standards are applicable to specific occupations such as Laborer or Tool Maker. However, the Office of Personnel Management does issue broad standards for certain functional areas which cross occupational boundaries, and which are common to a number of jobs in various occupations. Examples of broad standards are those for Helper, Inspector, Supervisor, and Leader jobs. Such a broad standard is used to grade all jobs consisting mainly of the duties covered by the standard regardless of the occupation involved. The specific form of a standard, and the information it contains, may vary depending on whether the standard applies to an occupation or to a broad function. A nonsupervisory standard generally:

- a. states the coverage by summarizing the kind(s) of work for which the standard provides directly applicable grade-level criteria;
- b. indicates the title(s) of the jobs covered by the standard;
- c. provides explanatory information as needed, such as further details of the work covered, how to apply the standard, or additional information for distinguishing Trades and Labor work from General Schedule work; and
- d. defines grade levels by describing the factors of skill and knowledge, responsibility, physical effort, and working conditions.

The grade definitions establish distinct lines of demarcation among the different levels of work within an occupation. The standards do not try to describe every work assignment of each position in the occupation covered. Rather, based on fact finding and study of selected work situations, the standards identify and describe those key characteristics of occupations which are significant for distinguishing different levels of work. They define these key characteristics in such a way as to provide a basis for assigning the appropriate grade levels to all positions in the occupations to which the standards apply. However, Office of Personnel Management standards do not prescribe agency organization of work or the content of positions.

C. JOB GRADING METHOD

1. Basic method for grading nonsupervisory jobs

Jobs are graded by use of a method which involves:

- a. study of the job being graded, including its purpose and relationship to other jobs;
- b. analysis of the work done and its requirements; and
- c. determination of the correct grade by comparison with grade definitions in an appropriate job grading standard.

Four factors identify the nature of the occupational facts considered in grading jobs under this method. These factors, defined in more detail in APPENDIX 3, are:

a. *Factor I: Skill and Knowledge*

Covers the nature and level of skill, knowledge, and mental application required in performing assigned work. Positions vary in such ways as the kind, amount, and depth of skill and knowledge needed, as well as in the manner, frequency, and extent to which they are used.

b. *Factor II: Responsibility*

Covers the nature and degree of responsibility involved in performing work. Positions vary in responsibility in such ways as the complexity and scope of work assigned, the difficulty and frequency of judgments and decisions made, the kind of supervisory controls, and the nature of work instructions and technical guides used.

c. *Factor III: Physical Effort*

Covers the physical effort exerted in performing assigned work. Positions vary in such ways as the nature, degree, frequency, and duration of muscular effort or physical strain experienced in work performance.

d. *Factor IV: Working Conditions*

Covers the hazards, physical hardships, and working conditions to which workers are exposed in performing assigned work. Positions vary in such ways as the nature of the work environment; the extent to which it includes unpleasant, disagreeable, or hazardous conditions; the degree to which such conditions are experienced; the frequency and duration of exposure; the adequacy of protective clothing and gear, safety devices, and safe trade practices; and the possible effects on the workers. The grade definitions in job grading

standards for particular occupations follow this factor pattern. They define levels of work in terms of detailed factor information that is geared to the occupation covered by each standard.

The general factors shown above, and the more detailed factor information provided by grade definitions, also can be used as guides on what kinds of job facts to look for when studying a job to be graded. The factors also provide a means for arranging job facts in an orderly way for easier analysis and comparison with grade definition in job grading standards.

Some of the other main points to keep in mind when grading jobs are discussed below.

2. Main points to consider

- a. The method of grading involves consideration of the total job. When comparing a job with the factor information and grade level definitions in job grading standards, a determination should be made as to the most appropriate grade value, overall, of the total job rather than a mechanical addition of individual factor judgments. This follows the basic principle that the grade value of a job is determined by its relative worth as a whole in comparison with all other jobs and their grade values.
- b. In grading jobs, no one factor should be considered by itself. Care should be taken to avoid any tendency to overgrade a job on the basis of a predominant characteristic, or to undergrade it because it does not contain a particular element. Rather, all pertinent job facts related to the four factors should be analyzed, including the possible relationships among the different elements of the job. For example, when comparing a job with grade level definitions in an appropriate standard, one of the differences found may be that the job involves responsibility for additional judgments and decisions. Determination of the grade significance of this difference from the standard requires consideration of the possible effect of the additional judgments and decisions on the nature and level of the skill and knowledge required to perform the work.
- c. For exposure to conditions of an unusual nature, employees are compensated by means of environmental pay differentials rather than job grading. (See Operating Manuals for the FWS, Subchapters S8-7 to determine whether or not hazards, physical hardships, or working conditions are of an unusual nature.) However, if exposure to conditions of an unusual nature is regular and recurring, any related skill and knowledge, and responsibility should be taken into account in grading the jobs. This may or may not result in changes in the basic grades of the jobs as shown by the applicable standards.
- d. 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.

- e. Because of the nature of trades and labor occupations, jobs in such an occupation tend to cluster at one or only a few grades. Rather than describe all possible grades for a line of work, each job grading standard therefore describes only those levels which reflect the more commonly found jobs in the occupation covered by the standard. The particular grades defined in the standard then provide a basis for comparing and assigning the proper grades to jobs at any grade called for by their skill and knowledge, responsibility, and other work requirements. This can be at grades either above or below those described in the standards.

3. Mixed jobs

A mixed job involves performance on a regular and recurring basis of duties in two or more occupations at the same or different grade levels. To assure consistency and equity in the grading of such mixed jobs, the following rules apply:

- a. A mixed job should be graded in keeping with the duties that (1) involve the highest skill and qualification requirements of the job, and (2) are a regular and recurring part of the job, even if the duties involved are not performed for a majority of the time. If a job involves regular and recurring duties at the same level in two or more occupations, such a mixed job is graded to that same level. For example, see the Job Grading Standards for Cemetery Caretaking, 4754, and Maintenance Mechanic, 4749.
- b. Duties performed only in the absence of another employee, to meet emergency workloads, or for training purposes to gain qualifying experience for a higher grade position should not be considered as "regular and recurring" duties when grading mixed jobs.

4. Supervisor and leader jobs

Separate grading standards are used to place supervisor and leader jobs in their proper grades. Under these standards, the grades of such jobs reflect the relative difficulty, responsibility and qualification requirements of the supervisory or leader work performed.

The FWS Job Grading Standard for Supervisors supervisory grading standard provides for grading supervisor jobs through consideration of the volume, kinds and levels of work involved, and the nature of supervision exercised. Similarly, leader jobs are graded taking into consideration the kinds and levels of work led.

D. RELATIONSHIP BETWEEN JOB GRADING STANDARDS AND DETERMINING GUIDES

Job grading standards provide criteria for distinguishing different levels of work by describing the requirements of different grade levels in terms of the skill and knowledge, responsibility, physical effort, and working conditions involved.

Examining guides, on the other hand, provide guidance for the requirements for filling jobs and apply to the movement of employees into and within the Federal Service. They describe the knowledge, skill, ability, and personal characteristics required to predict potential for successful performance of the duties of a job, and are a means for determining that job applicants have this potential.

To insure consistent occupational relationships in terms of kinds and levels of work, and qualifications required, job grading standards and examining guides are developed on the basis of coordinated fact-finding studies. Statements in a job grading standard covering the specific knowledge, skill, and ability necessary for performance of work at a particular grade level are consistent with the corresponding guide for establishing the qualification requirements for positions involving that work.

Nevertheless, it would be noted that, since they serve different purposes, the criteria in job grading standards are not completely identical with those in examining guides. For example, certain personal characteristics, such as interest in the work, may be very useful in a qualification guide to predict potential for successful performance of the duties of a job. These personal characteristics at times, however, are of little use in distinguishing among different grade levels of work, and therefore may not be mentioned in the job grading standard.

Care must be taken to assure that examining guides remain basically consistent with the corresponding grade-level criteria in job grading standards. Any significant change of qualification requirements for a job may change the grade of the job. For this reason, employees who are responsible for staffing functions, and employees who are responsible for grading the jobs involved, should work closely with each other to achieve the necessary coordination.

SECTION III -- CODES AND TITLES

This section describes the common plan for the coding and titling of trades and labor jobs. The purpose of these instructions is to achieve consistency in coding and titling practices among agencies.

A. THE CODING PLAN

The coding plan provides an orderly method for identifying jobs. The system uses a combination of letters and numbers to indicate pay category, job family and occupation, and grade level.

1. Pay category

The pay category indicates the type of job and specific wage schedule from which the job is paid. The designations for regular schedule FWS jobs are as follows:

- Grade--- – for nonsupervisory jobs
- WL--- – for leader jobs
- WS--- – for supervisory jobs

Other prefixes are used for special wage schedules and pay plans.

2. Job family and occupation

The various kinds of work performed by employees have been organized into occupations and job families. Each is defined in terms of the nature of work. These definitions establish the boundaries between the various occupations and families. The job family is a broad grouping of occupations which are related in one or more ways such as: similarity of functions performed, transferability of knowledge and skills from one occupation to another, or similarity of materials or equipment worked on. For example, the Transportation/Mobile Equipment Operations Family groups together all occupations involving the operation of self-propelled mechanical equipment in providing transportation or performing industrial work.

An occupation is a subgroup of a family which includes all jobs at the various skill levels in a particular kind of work. Jobs within an occupation are similar to each other with regard to subject matter, and basic knowledge and skill requirements.

The code for family and occupation has four numbers. The first two numbers show the family and the second two identify the specific occupation within the family. The main code for a family has four numbers with zeroes as the third and fourth numbers. For example, 5700 identifies the Transportation/Mobile Equipment Operation Family. The third and fourth numbers, ranging from 01 to 99, stand for specific occupations within the family. For example, 5704 identifies the Forklift Operating occupation within the job family.

3. Grade level

The grade level of a job represents a range of skills, knowledge, and responsibilities sufficiently similar to warrant a common range of rates of basic pay on a local area wage schedule. The grade is represented by two numbers. For grade levels 1 to 9, a zero precedes the number which indicates the grade -- for example; grade seven is indicated by 07. With the exception of Apprentice jobs, all jobs have a grade-level designation. Instead of the grade-level code, Apprentice jobs are designated by two zeroes.

4. Method for indicating the code

The complete code is indicated in the following order: pay category, job family and occupation, and grade level. For example, a Fork Lift Operator at grade five is designated as: 5704-05.

5. Using the coding plan

- a. Approved codes: Each job grading standard indicates the types of jobs that are to be graded by application of that particular standard. A job covered by a job grading standard is assigned the code indicated in the standard.

Part II of the Handbook of Occupational Groups and Families, titled Outline of Position Classification Plan for Federal Wage System (FWS) Job Families and Occupations, issued by the Office of Personnel Management is to be used for determining the codes for jobs for which no job grading standard has been published. A job is coded to the occupation which represents the best match between the content of the job and the definitions of the various occupations.

Supervisor, Leader, Inspector, Helper, and Apprentice jobs are assigned the code of the specific occupation involved. For example, a supervisor of carpenters would be coded to the carpentry occupation.

- b. General code ("01"): Because of the scope and variety of Federal Government operations, and the continuing changes taking place in occupations, a separate occupation is not always established for each identifiable line of work. The "01" code in each job family therefore is designated as a general code, and is used for jobs which cannot be identified with an established occupation within the family but which can be identified with the family itself. One type of job which should be assigned the "01" code is the general job which is characteristic of the family but not of any specific occupation within the family. A second type of job which should be assigned the "01" code is that which has a narrower range of duties readily identifiable with the job family but for which no specific occupation has been established.

- c. Mixed jobs: Jobs requiring the performance of work in two or more occupations (mixed jobs) 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. Mixed jobs usually are not assigned to the "01" code.

6. Establishing new codes

The Classification Programs Division in the Office of Personnel Management (OPM) establishes and defines occupations and job families. When a job is not specifically covered by an established occupation, the job is coded to the existing occupation which is most closely related in terms of the skills and knowledge involved or to the "01" code as discussed above).

Agencies may request that the Office of Personnel Management establish new occupations or revise the definitions of established occupations. Such recommendations include the suggested occupational title, a proposed definition, and a justification for the addition or change. If study indicates it is warranted, the Office of Personnel Management approves such additions or changes for use by all agencies, and incorporates them in Part 3 of the FWS Job Grading System.

B. TITLES

The Office of Personnel Management prescribes official titles for those occupations covered by OPM job grading standards. For all other occupations, agencies develop titles in accordance with the principles and instructions contained in this section.

A title designated for use in one occupation is not used as a title in any other occupation. Titles specified in job grading standards are used only for the occupation for which they were developed.

Job titles are as brief and as broad in coverage as possible, consistent with the need to distinguish one occupation from all other occupations. Specializations are added to the basic titles only when needed for a specific personnel purpose in distinguishing between jobs on the basis of qualifications and other special requirements. Such specializations are also as broad as possible to assure that the overall title does not make overrefined distinctions between jobs, which may tend to hamper rather than aid personnel processes.

Modifying words usually are placed before key nouns to avoid the need for commas and other punctuation marks. For example, the title of Electronics Mechanic is to be used rather than Mechanic, Electronics.

Agencies may use organizational or other local titles for the purpose of internal operation, but only official titles are used for official purposes.

1. Nonsupervisory jobs

Titles for nonsupervisory jobs resemble, as closely as possible, occupation titles as indicated in Part 3 of the FWS Job Grading System. Usually, this is done by changing the last word of the occupation title from that of "doing" to that of "doer." For example, the employee doing "Welding" work is called "Welder."

When the title of the occupation covers several functions, such as installing and repairing, the job title includes only one function if the duties of the job involve only that one function.

Broad terms such as Mechanic are used when the employee performs a broad range of functions. For example, if the job involves building, installing, and repairing small engines, the specified job title is Small Engine Mechanic.

In some cases, traditional titles which have generally accepted meanings are used—for example, Electrician and Machinist.

The title of an Apprentice, Helper, or Inspector job consists of the occupation title followed by a designator for the type of job involved. For example, the job title of an Apprentice who is being trained as a Carpenter is Carpenter Apprentice.

2. Leader and supervisor jobs

The title of a leader or supervisory job consists of the job title of the occupation followed by a designator which identifies the nature and scope of the leader or supervisory responsibilities -- for example, Carpenter Leader and Carpenter Supervisor.

3. Jobs in the 01 code

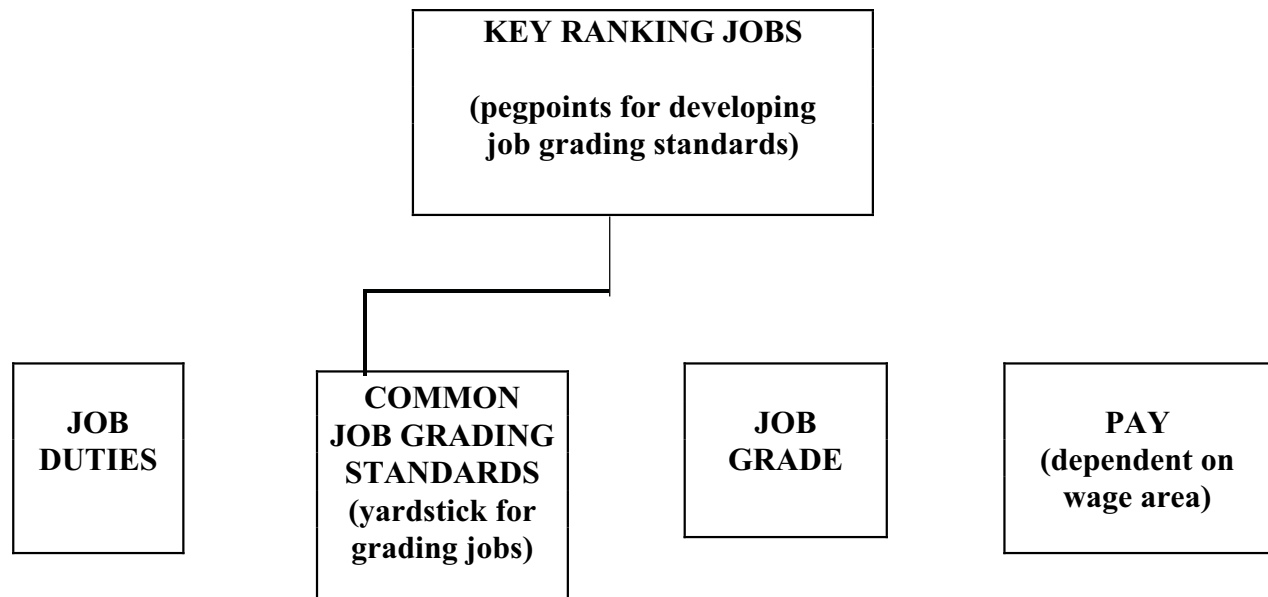
The title of a broad and general job assigned to the "01" code usually is the job family title. For example, a job with a combination of skills such as repairing air conditioning equipment and boiler plant equipment should be titled, Industrial Equipment Mechanic and assigned to the 01 code of the 5300 job family.

On the other hand, in accordance with the principles and instructions contained in this section, a job has a more precise title when it is specific in nature but when a separate occupation has not been established for it in the job family. For example, a Reindeer Herder should be assigned to the 01 code in the 5000 job family.

4. Mixed jobs

The basic title of a job requiring the performance of work in two or more occupations (mixed job) is the job title of 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.

APPENDIX 1 -- SUMMARY OF JOB GRADING SYSTEM



- Determined through job analysis

- Recorded in job description

- Job ranking with factor guidance

- Grade definitions in standards described in some of 4 factors. Grade determined by comparison of whole job with grade definitions in standards considering job facts indicated by 4 factors.

- Same series, title, code, and grade for same job.

APPENDIX 2 -- DESCRIPTIONS OF KEY RANKING JOBS

Laundry Worker; Grade: 1

Does various manual duties in a laundry. Shakes out and separates different laundry items. Hand feeds items into automatic flatwork ironer or spreader by holding items, straightening edges and smoothing wrinkles. Catches, folds and stacks flatwork. Wraps and seals laundry bundles, and ties by hand or with automatic tying machines. Wipes off laundry equipment.

Follows a few specific and easily understood oral instructions to perform assignments. Continually handles objects weighing up to 5 kilograms (10 pounds) and occasionally objects weighing up to 9 kilograms (20 pounds). Works inside in areas that are usually hot, humid and noisy. Is exposed to the possibility of cuts and bruises.

Janitor (Light); Grade: 1

Does a variety of janitorial duties, including the operation of lightweight hand or powered cleaning equipment. Sweeps, dry-mops, waxes and polishes floors. Dusts and polishes furniture and fixtures. Empties ash trays and waste baskets. Wipes room partitions and fixtures that can be reached without use of ladders.

Follows a few specific and easily understood oral instructions concerning what to clean and how to clean it.

Continually handles objects weighing up to 5 kilograms (10 pounds) and occasionally objects up to 9 kilograms (20 pounds).

Works inside in areas that usually have adequate light, heat and fresh air. Is exposed to some unpleasant odors and to the possibility of cuts, chapped hands and bruises.

Janitor (Heavy); Grade: 2

Does a variety of janitorial duties including the operation of heavy industrial type power operated equipment. Scrubs, wet mops, waxes, and polishes floors. Cleans walls, ceilings, room partitions and polishes fixtures that can be reached only by ladder. Washes and replaces venetian blinds. Removes stains from a variety of surfaces such as rugs, drapes, walls, floors and fixtures by use of chemicals and cleaning solutions. Moves furniture, cabinets, boxes, crates and equipment to clean areas.

Follows a few specific and easily understood instructions concerning what to clean and what cleaning methods and equipment to use.

Continually bales objects weighing up to 9 kilograms (20 pounds) and occasionally objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that usually have adequate light, heat and fresh air. Is exposed to some unpleasant odors and to the possibility of cuts, chapped hands, and bruises.

Food Service Worker; Grade: 2

Does various duties in connection with the preparation and serving of foods and beverages. Makes coffee, tea and other beverages. Washes, peels, scrapes, and cuts vegetables and fruits. Prepares simple salads and toast. Dishes out portions of foods on trays or plates and pours beverages. Prepares dining and serving areas by setting up counters, stands and tables. Places food containers in serving order, fills salt and pepper shakers, and places linen and silverware on tables. Clean kitchen equipment, pots and pans, counters, and tables. Sweeps and mops floors.

Follows a few specific and easily understood oral instructions concerning what foods to prepare and how to prepare them, what dining and serving areas to set up and with what materials.

Frequently handles objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are usually hot and humid. Is exposed to the possibility of cuts, bruises, and burns.

Laborer (Light); Grade: 2

Does various laboring duties requiring moderately heavy physical effort. Loads and unloads materials. Moves supplies by hand, handtruck, or dolly. Sorts and stacks various items by obvious breakdowns. Opens and closes packages and boxes by using hammers, shears and crow-bars. Loads material in bailing presses. Runs hand or powered lawnmowers. Washes cars and trucks. Follows a few specific and easily understood oral instructions concerning what materials to handle, what to do with them and when the work should be completed.

Frequently handles objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are usually dusty and dirty and outside, sometimes in bad weather. Is exposed to the possibility of cuts and bruises.

Laborer (Heavy); Grade: 3

Does various laboring duties requiring very heavy physical effort.

Digs ditches and trenches using pick and shovel, involving some simple sloping and grading. Breaks up pavement, concrete, or other hard surfaces using jackhammers. Fills, tamps, and levels holes. Mixes, pours and pushes wheelbarrow loads of concrete, asphalt, hot mix, gravel and other materials to worksite. Removes forms after concrete has set. Lays and repairs railroad tracks. Carries ties and rails and places on railbed. Drives spikes, shovels ballast under ties and tightens bolts between rails.

Follows a few specific and easily understood oral instructions concerning what to do and when and where to do it.

Frequently handles objects weighing over 23 kilograms (50 pounds).

Works inside in areas that are usually dusty and dirty and outside in all kinds of weather. Is exposed to the possibility of cuts, and bruises.

Sale Store Worker; Grade: 4

Does various manual stock handling duties in commissary stores, self-service supply centers and clothing sales stores. Moves stock items from storage areas. Stacks and replenishes empty spaces in display shelves and cases. Arranges stock in a neat and orderly manner and rotates items based on stamped code dates, age or freshness of stock. Sets aside damaged goods for salvage or disposal. Measures, weighs and marks prices on items based on master price lists or oral instructions. Answers questions concerning item location and prices. Assists in checking out customer purchases by placing items in paper bags or boxes and lifting into push carts. Assists in inventories of stock by counting containers on shelves and giving totals to responsible person. Assists in unloading incoming trucks by checking container markings and quantities against figures shown on receiving reports. Reports damaged items. Places items in stockroom or freezer locations, stacking containers in groups by commodity, brand and size.

Follows various oral instructions, written price lists and receiving reports which indicate what stock to move and what to do with it, current prices of items and types and quantities of stock received.

Frequently handles objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are sometimes damp and drafty and occasionally outside, sometimes in bad weather. Is exposed to the possibility of cuts, and bruises.

Fork Lift Operator; Grade: 5

Operates electric, gasoline or diesel-powered fork lift trucks capable of lifting loads up to, but not including 4500 kilograms (10,000 pounds) to a height of 420 centimeters (168"). Operates the lifting and tilting controls and steers the vehicle into position to load, transport, and stack goods and materials contained on pallets, skids, crates or boxes about warehouses, piers, shipsides or railroad car sidings. Must be able to pass operator's test, read traffic signs and fill out trip tickets. Follows written or oral orders concerning location and priority of assignments and instructions concerning the movement and placement of materials.

Follows safety and traffic rules and drives carefully to prevent damage to vehicle and materials, and injury to others.

Uses light physical effort in operating hand and foot controls.

Works inside in areas that are sometimes damp and drafty and occasionally outside in all kinds of weather. Is exposed to the possibility of cuts and bruises.

Warehouseman; Grade: 5

Receives, stores, and ships bin and bulk supplies, materials and equipment. Verifies quantity, nomenclature and unit of issue against receiving documents, notes discrepancies, and reports findings. Selects specific storage locations within the framework of general warehousing plan. Stores, stacks, and palletizes items considering use, size, shape, weight, quantity, spoilage, pilferage, contamination and safety to others. Examines stock for deterioration and damage and reports findings. Conducts inventory of stock on hand and reports reasons for overages, shortages and misplacements. Selects designated items from storage and assembles for shipment. Assures that items are properly marked, tagged and labeled and in properly marked containers.

Accomplishes final loading in trucks and freighters. Completes and signs receiving and shipping documents. Records and updates stock location cards showing location, nomenclature, stock number, quantity on hand and unit of issue. Uses handtools. Moves stock by hand, handtruck and dollies.

Follows accepted warehousing methods, procedures and techniques and various written or oral instructions on day-to-day operations.

Frequently handles objects weighing up to 18 kilograms (40 pounds). Works inside in areas that are sometimes damp and drafty and outside, sometimes in bad weather. Is exposed to the possibility of cuts and bruises.

Helper (Trades); Grade: 5

Assists journey level worker in a skilled trade by performing the least skilled duties of the trade. Engages in joint operations with the journey level workers as instructed. Uses hand and powered tools of the trade to perform such tasks as cutting holes in walls and floors and cutting threads on piping. Supplies, lifts and holds materials and tools for journey level workers. Applies knowledge gained from previous work assignments.

Receives detailed instructions with each new assignment. Work is reviewed while in progress and when it is finished.

Frequently handles objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are usually dusty, dirty or greasy and outside, sometimes in bad weather. Is exposed to the possibility of cuts, bruises, and scrapes.

Truck Driver (Light); Grade: 5

Drives one or more types of trucks with rated weight capacities up to and including one ton in hauling cargo or passengers within Government installations and over public roads. Usually loads and unloads cargo. Must be able to pass driver's test, read traffic signs and fill out trip tickets.

Follows written or oral orders and schedules concerning where to go and what to do. Follows safety and traffic rules and drives carefully to prevent damage to truck and materials, and injury to others.

Uses light physical effort in operating hand and foot controls. Frequently handles objects weighing up to 9 kilograms (20 pounds) and occasionally, objects weighing over 23 kilograms (50 pounds) while loading and unloading trucks.

Works outside and occasionally is exposed to bad weather conditions while loading and unloading trucks. Drives in all types of traffic and weather and is exposed to the possibility of serious accidents.

Truck Driver (Medium); Grade: 6

Drives one or more types of trucks with rated weight capacities of over one ton and up to but not including four tons in hauling cargo or passengers within Government installations and over public roads. Double clutches. Occasionally directs or assists in loading or unloading cargo and checks to see that loads are properly distributed, secured and within maximum rated weight capacity. Must be able to pass driver's test, read traffic signs and fill out trip tickets.

Follows written or oral orders and schedules concerning where to go and what to do. Follows safety and traffic rules and drives carefully to prevent damage to trucks and materials and injury to others.

Uses light physical effort in operating hand and foot controls. Frequently handles objects weighing up to 9 kilograms (20 pounds) and occasionally objects weighing over 23 kilograms (50 pounds) while loading and unloading trucks.

Works outside and occasionally is exposed to bad weather conditions while loading and unloading trucks. Drives in all types of traffic and weather and is exposed to the possibility of serious accidents.

Packer; Grade: 6

Performs a variety of duties involved in packing for shipment or storage different kinds of material or equipment, including items of a large, heavy, or fragile nature. Checks items against shipping document to insure correct identification and quantity. Follows written packing instructions and manuals. Selects proper size and type of container, cushioning and other packaging materials, taking into consideration the destination, method of shipment, weight, configuration, fragility and nature of items to be packed. Packs items in wood, plywood, and fiberboard boxes, metal containers and cartons. Blocks, braces, cushions, applies desiccants and secures container by sealing, banding or wiring. Over-packs previously packed materials for greater protection when necessary. Uses special techniques such slot hanging, bracketing and suspending within boxes and crates. Completes and signs various documents. Stencils necessary identification and affixes standard and special labels and markings on containers.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted methods, techniques and procedures.

Frequently handles objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that usually have adequate light, heat and fresh air. Is exposed to the possibility of cuts and bruises.

Stockroom Attendant; Grade: 6

Receives, stores and issues a variety of hand and powered tools and equipment, shop supplies, and common and special parts. Identifies item being requested from descriptions of item shop nomenclature, parts number, or intended usage. Checks catalogs and listings for more specific identification and to determine substitute or interchangeable items.

Makes visual and operational checks of returned items, some of which require the use of specialized measuring instruments such as micrometers. Determines items needing repair or maintenance and accomplishes those of a minor nature such as preserving with oil and grease, replacing broken handles, and sharpening rough edges with hand files. Requests reasons for damaged items and reports those requiring major repair. Segregates, assembles and rearranges items in stock based on size, convenience in handling, similarity in nomenclature and kind, and available space. Inventories items for quantities and conditions and reports reasons for overages, shortages, and damages.

Requisitions new or additional items based on predetermined stock levels, and based on shop workload requirements, recommends changes in stock levels. Assures that stock items are properly marked, tagged, labeled and placed in proper locations. Uses handtools.

Follows established receiving, storing and issuing methods and procedures. Assures that adequate levels of stock are maintained and in workable condition to support shop workload requirements. Frequently handles objects weighing up to 10 pounds and occasionally objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are sometimes damp and drafty. Is exposed to the possibility of cuts and bruises.

Sewing Machine Operator; Grade: 6

Sets up and runs a variety of domestic and industrial type power operated sewing machines and related special purpose machines such as buttonhole, basting and feed-off the arm machines. Does all work involved in the sewing of textiles and fabrics for such items as clothing, blankets, linens, tents and other heavy fabrics. Makes, alters, repairs and modifies items that require difficult sewing because of their large size, weight, or appearance, such as setting coat sleeves, taping and stitching the edges of coats with seaming tape requiring very close stitching.

Makes independent judgments and decisions within the framework of oral or written instructions and accepted methods, techniques and procedures.

Continually handles objects weighing up to 5 kilograms (10 pounds) and occasionally objects weighing up to 9 kilograms (20 pounds).

Works inside in areas that usually have adequate light, heat and fresh air. Is exposed to the possibility of cuts and bruises.

Bindery Worker; Grade: 7

Sets up and operates powered paper staplers, drills, punches and plastic binding machines to trim, assemble and package printed material. Selects proper drills, dies, punches and combs.

Makes sure that machines are working correctly and makes necessary operating adjustments. Lays out and collates material from round-tables and rack assemblies. Assists higher grade workers in running power paper cutters, folders and collators. Must be familiar with different sizes, kinds, weights and colors of papers.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted methods, techniques and procedures. Follows detailed oral instructions while assisting higher grade workers.

Continually handles objects weighing up to 5 kilograms (10 pounds) and occasionally objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are occasionally noisy. Is exposed to the possibility of cuts, bruises and broken bones.

Office Appliance Repairer; Grade: 7

Repairs and maintains various kinds of standard office appliances and machines such as standard (manual) typewriters, small manual or electric accounting machines having limited automatic parts, envelope opening and sealing machines, and address plate and embossing machines. Reads basic sketches, blueprints and wiring diagrams. Determines work sequence, materials and tools to be used. Uses standard repair techniques. Makes operational tests, diagnoses malfunctions, disassembles, replaces parts, reassembles, adjusts and makes final operational tests. Uses a variety of handtools.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted methods, techniques and procedures.

Frequently handles objects weighing up to 18 kilograms (40 pounds).

Works inside areas that usually have adequate light, heat and fresh air. Is exposed to the possibility of cuts and bruises.

Truck Driver (Heavy); Grade: 7

Drives one or more types of trucks without trailers, with rated weight capacities of four tons and over in hauling cargo or passengers within Government installations and over public roads. Occasionally directs or assists in loading or unloading cargo and checks to see that loads are properly distributed, secured and within the maximum rated weight capacity. Must be able to pass driver's test, read traffic signs and fill out trip tickets.

Follows written or oral orders and schedules concerning where to go and what to do. Follows safety and traffic rules and drives carefully to prevent damage to truck and materials and injury to others.

Uses moderate physical effort in operating hand and foot controls. Occasionally handles objects weighing over 23 kilograms (50 pounds) while loading and unloading trucks.

Works outside and occasionally is exposed to bad weather conditions while loading and unloading trucks. Drives in all types of traffic and weather and is exposed to the possibility of serious accidents.

Truck Driver (Trailer); Grade: 8

Drives truck or truck tractor with trailer or semi-trailer to haul cargo within Government installations and over public roads. Backs and drives vehicles in traffic, over uneven roads and grounds, and in narrow or crowded areas. Carefully applies hydraulic or airbrakes to prevent slipping, tipping or jackknifing. Directs or occasionally assists in loading or unloading cargo and checks to see that loads are properly distributed, secured and within maximum rate weight capacity. Must be able to pass driver's test, read traffic signs and fill out trip tickets.

Follows written or oral orders and schedules concerning where to go and what to do. Follows safety and traffic rules and drives carefully to prevent damage to vehicle and materials and injury to others.

Uses moderate physical effort in operating hand and foot controls.

Occasionally handles objects weighing over 23 kilograms (50 pounds) while loading and unloading vehicle.

Works outside and occasionally is exposed to bad weather conditions while loading and unloading vehicle. Drives in all types of traffic and weather and is exposed to the possibility of serious burns.

Cook; Grade: 8

Prepares and cooks all kinds of food in bulk or individual servings using a wide variety of cooking methods and techniques. Cooks foods for standard and special diets. Prepares and cooks meats, fish, poultry, vegetables, soups, sauces, gravies, dressings and desserts by frying, roasting, baking, broiling, braising, steaming and boiling. Uses various standard tests to determine that food is properly cooked and assures that high nutritive value and good tastes are achieved. Prevents waste and spoilage. Uses a variety of cooking utensils, tools and powered kitchen equipment.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted methods, techniques and procedures.

Continually handles objects weighing up to 5 kilograms (10 pounds) and occasionally objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are usually hot and humid. Is exposed to the possibility of cuts, bruises, and serious burns.

Machine Tool Operator; Grade: 8

Operates one or more types of machine tools such as lathes, boring mills, milling machines, shapes, grinding machines, planers, and drill presses to machine castings, forgings, or bar stock of various metals and metal alloys. Normally operates machines of only one type, or closely related types. Carries out production runs involving standard operations. Aligns metal parts in machines according to set methods and given reference points. Controls machine speed and feed, and uses different tools in successive operations. Checks dimensions as necessary, using various standard or preset gages. Changes tools as necessary. Makes minor changes in machine setup, such as realining for different sizes of workpiece or changes in shape.

Follows detailed oral and written instructions concerning machine speeds, tools to be used, alignment processes and predetermined machined dimensions.

Frequently handles objects weighing up to 5 kilograms (10 pounds) and occasionally objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are usually noisy and dirty. Is exposed to fumes and to the possibility of cuts, bruises and scrapes.

Water Plant Operator; Grade: 9

Operates, cleans and maintains water pumping and treating equipment to purify and supply water for domestic and industrial use. Accomplishes such treatment processes as filtration, softening, fluoridation, chlorination, demineralization and ammoniation. Operates a variety of automatic or manually controlled pumps and related equipment by adjusting valves to control rates of feed of various chemicals as well as waterflow; and reading various meters, gages, thermometers and charts to determine when pumps should be started, stopped, or adjusted. In accordance with standard methods and procedures, performs a variety of tests to determine the bacterial, physical and chemical content of the water. Selects and mixes chemical compounds in correct amounts and feeds into equipment in correct quantities and sequence. Adjusts equipment to regulate chemical input as well as waterflow. Checks operation of plant equipment and accomplishes minor repairs and maintenance such as cleaning and replacing gaskets, valves and piping; and fixing leaks by replacing packing. Reports damages requiring major repairs. Prepares reports showing test results, waterflow, pressures and temperatures.

Makes independent judgments and decisions within the frame-work of written and oral instructions and accepted practices, processes and procedures while completing assignments.

Frequently handles objects weighing up to 5 kilograms (10 pounds) and occasionally objects weighing up to 18 kilograms (40 pounds). Occasionally works in awkward and cramped positions.

Works inside in areas that are usually noisy but have adequate light and heat, and outside, sometimes in bad weather. Is exposed to some unpleasant odors and to the possibility of burns, cuts, bruises and broken bones.

Painter; Grade: 9

Paints wood, metal parts, equipment, interiors and exteriors of buildings, vessels and other structures, using brushes, rollers and spray guns. Examines surfaces to determine proper coating materials. Prepares wood, metal, and other surfaces by sanding and scraping. Blends colors and mixes paints and other surfacing materials. Applies prime, intermediate and finished coats including decorative finishes by stippling, graining, marbling and mottling.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted trade practices, processes and procedures while completing assignments.

Continually handles objects weighing up to 5 kilograms (10 pounds) and occasionally handles objects weighing up to 18 kilograms (40 pounds).

Works inside and outside, sometimes in bad weather, and is usually exposed to paint spray and fumes. Experiences discomfort while wearing respirator. Is exposed to the possibility of cuts, bruises and broken bones.

Carpenter; Grade: 9

Builds, repairs, alters and installs wooden articles and structures. Constructs and installs window frames, door frames, inside walls, floors, ceilings, closets, counters, shelves, casing, wood foundations, and similar structures. Lays beams, shingles and clapboards. Plans and lays out work from blueprints, drawings and verbal instructions. Determines work sequence, materials and tools to be used. Measures and cuts materials to required lengths. Uses hand and portable power tools of the carpentry trade, shop woodworking equipment and standard measuring instruments such as rulers, carpenter's square and levels.

Makes independent judgments and decisions within the frame-work of oral and written instructions and accepted trade practices, processes and procedures while completing assignments.

Continually handles objects weighing up to 5 kilograms (10 pounds) and occasionally handles objects weighing up to 23 kilograms (50 pounds). Occasionally works in awkward and cramped positions.

Works inside in areas that are usually dusty and noisy and outside, sometimes in bad weather. Is exposed to the possibility of cuts, bruises and broken bones.

Plumber; Grade: 9

Assembles, installs and repairs pipes, fittings and fixtures of heating, water and drainage systems. Installs and repairs various fixtures and facilities such as water mains, sewage lines, hydrants, unit gas heaters, water heaters, hot water tanks, garbage disposal units, dishwashers and water softeners. Plans and lays out work from blueprints, drawings and verbal instructions. Determines work sequence, materials and tools to be used. Measures, cuts, reams, threads, bends, fits and assembles pipe and pipe fittings. Installs piping through floors, walls and ceilings of various structures. Joins pipes by use of screws, bolts, fittings or solder and caulks joints. Locates source and determines cause of malfunctions; checks piping, fittings and fixtures for defective parts or connections. Disassembles and repairs damaged sections. Uses hand and power tools of the plumbing trade.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted trade practices, processes, and procedures while completing assignments.

Frequently handles objects weighing up to 18 kilograms (40 pounds). Frequently works in awkward and cramped positions.

Works inside in areas that are usually dusty, dirty, or greasy and outside, sometimes in bad weather. Is exposed to fumes and the possibility of burns, infection, scrapes, and broken bones.

Motor Grader Operator; Grade: 10

Operates pneumatic-tired gasoline or diesel powered motor graders to perform excavating, backfilling and leveling of earth to rough grading requirements. Starts and checks the operation of the power unit. Assures that control levers, tires, blade, scarifier and leaning wheel control are in proper position and working order, making adjustments as necessary. Steers grader and operates clutches, brakes, levers and valves in accomplishing required grading. Operates graders close to buildings, around obstructions and in open areas. Performs rough grading such as digging and cleaning ditches and roadbeds; spreading crushed rock, gravel and sand; cleaning highways and airfields of rocks, boulders and snow;

performing rough bank sloping and building; removing light stumps, small rocks and roots; and operating scarifier while building and grading road shoulders.

Follows oral instructions concerning job location and what has to be done. Follows safety rules and operates motor graders carefully to prevent damage to the grader and injury to others.

Uses strenuous physical effort in operating hand and foot controls. Occasionally handles objects weighing up to 23 kilograms (50 pounds).

Operates motor grader in all types of weather and is exposed to the possibility of serious accidents.

Automotive Mechanic; Grade: 10

Overhauls, repairs and maintains vehicles such as automobiles, buses, trucks, forklifts, warehouse tractors and light ground maintenance equipment. Within the framework of inspection reports or instructions, determines nature and extent of repairs required on engines, transmissions, suspension, steering and braking systems and related electrical, fuel, hydraulic, wheel and engine assemblies. Following instructions contained in technical manuals, tears down, adjusts repairs, reassembles and runs operational checks on components of these systems. Tunes and adjusts vehicle components to prescribed operating tolerances. Uses specialized testing equipment such as compression testers, motor analyzers, test benches, and specialized measuring instruments such as micrometers, vernier calipers and dial indicators.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted trade practices, processes, and procedures while completing assignments.

Continually handles objects weighing up to 9 kilograms (20 pounds) and occasionally handles objects weighing up to 23 kilograms (50 pounds). Frequently works in awkward and cramped positions. Works inside in areas that are usually noisy, dirty and greasy. Is exposed to the possibility of cuts, bruises, shocks, scrapes and burns.

Aircraft Mechanic; Grade: 10

Makes repairs, adjustments and modifications to a variety of reconnaissance, fighter, bomber or cargo aircraft. Within the framework of discrepancies noted by the pilot, inspection reports, periodic maintenance checklists or engineering modification work orders, determines nature and extent of repairs or adjustments required on engines, fuel systems, landing gear, flight control surfaces and systems, heating, cooling and de-icing systems and hydraulic systems. Following instructions contained in technical manuals or engineering work orders, removes items to be inspected, repaired or replaced, installs, makes adjustments and makes

repairs to items. Installs and adjusts engine accessories, control surfaces, fuel tanks and lining, oil, fuel and hydraulic fluid tubing, propellers and propeller governors, wings, seats, tail assemblies, armament mounts, canopies, wheels and landing gear mechanisms. Makes visual and functional check of items installed, repaired or adjusted. Uses handtools, power tools, jigs, fixtures, tests stands, external power sources and specialized measuring instruments such as gages, micrometers, vernier calipers and templates. Uses a knowledge of overall aircraft systems.

Makes independent judgments and decisions within the frame-work of oral and written instructions and accepted trade practices, processes and procedures while completing assignments.

Continually handles objects weighing up to 9 kilograms (20 pounds) and occasionally weighing up to 23 kilograms (50 pounds). Frequently works in awkward and cramped positions. Works inside in areas that are usually noisy, dirty and greasy, and outside, sometimes in bad weather. Is exposed to the possibility of cuts, bruises, shocks, scrapes, broken bones and burns.

Welder; Grade: 10

Repairs, modifies and fabricates all types of metal and alloy parts and equipment by use of electric, gas or insert gas-shielded welding processes. Plans and lays out work from blueprints, sketches, drawings and work orders. Determines work sequence. Selects proper materials and processes to be applied. Sets up and adjusts equipment. Welds, in vertical, horizontal, flat and overhead positions, items of various sizes and shapes, frames, flame-cuts, beads, heat-treats, pressure and tack welds. Welds are subject to X-ray analysis, magnaflux inspection, dye check, water or gas tight pressure and other tests. Uses hand and power tools of the welding trade. Uses templates in measuring, marking, scribing and cutting.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted trade practices, processes and procedures while completing assignments.

Continually handles objects weighing up to 9 kilograms (20 pounds) and occasionally objects weighing up to 23 kilograms (50 pounds). Frequently works in awkward and cramped positions.

Works inside in areas that are usually noisy and dirty and outside, sometimes in bad weather. Experiences considerable discomfort while wearing a welding helmet. Is exposed to fumes and heat and to the possibility of cuts and bruises, scrapes, shock, broken bones and serious burns.

Pipefitter; Grade: 10

Installs, repairs and maintains high pressure piping systems such as steam heating, steam power, hydraulic and high pressure air or oil line system. Determines nature and extent of necessary repairs. Plans and lays out work from blueprints, drawings, technical manuals or specifications. Determines work sequence and tools to be used. Works with a variety of pipe and pipe fittings including those made of copper, brass, lead, glass and plastic. Measures, cuts, bends, threads, packs and joins piping to pipe fittings. Installs valves, traps, thermostats and gages to maintain flow and pressure. Makes pressure test of piping systems to assure pressure tight joints and proper circulation and flow. Uses hand and power tools of the pipefitting trade.

Makes independent judgments and decisions within the frame-work of oral and written instructions and accepted trade practices, processes and procedures while completing assignments.

Frequently handles objects weighing up to 23 kilograms (50 pounds) and occasionally handles objects weighing over 23 kilograms (50 pounds). Frequently works in awkward and cramped positions.

Works inside in areas that are usually dusty and dirty and outside, sometimes in bad weather. Is exposed to fumes and the possibility of burns, infection, scrapes and broken bones.

Sheetmetal Worker; Grade: 10

Fabricates, repairs and installs a variety of standard sheetmetal articles and equipment such as heating, air-conditioning and ventilating systems, down spouts, gutters, partitions and refrigeration compartments. Plans and lays out work from blueprints, drawings, sketches and work orders. Determines work sequence. Selects materials, equipment and tools to be used. Sets up and operates a variety of sheetmetal machines to bend and form light gage metals into desired shapes, allowing for seams, joints, laps, and shrinkages. Joins parts by riveting, soldering and spot welding. Installs sheetmetal sections with bolts, rivets, screws, and other fastening devices. Uses hand and power tools of the sheetmetal trade. Uses shop mathematics in developing templates and patterns used to lay out work.

Makes independent judgments and decisions within the frame-work of oral and written instructions, and accepted trade practices, processes and procedures while completing assignments.

Continually handles objects weighing up to 9 kilograms (20 pounds) and occasionally handles objects weighing up to 23 kilograms (50 pounds). Frequently works in awkward and cramped positions.

Works inside in areas that are usually dirty and noisy and outside, sometimes in bad weather. Is exposed to the possibility of cuts, bruises, burns and broken bones.

Electrician; Grade: 10

Installs, maintains, repairs and tests electrical systems, electric setup equipment and internal electrical power distribution facilities including connection of power and control circuits to motors, industrial equipment and alarm systems. Determines nature and extent of repairs required. Plans and lays out work from blueprints, sketches, wiring diagrams, technical manuals and other specifications. Determines work sequence. Makes standard computations relating to load requirements of wiring or electrical equipment. Uses specialized measuring instruments such as voltmeters, ammeters, wattmeters, ohmmeters and meggers. Makes independent judgments and decisions within the frame-work of oral and written instructions and accepted trade practices, processes and procedures while completing assignments.

Frequently handles objects weighing up to 9 kilograms (20 pounds). Occasionally works in awkward and cramped positions.

Works inside in areas that are usually dirty and greasy, and outside, sometimes in bad weather. Is exposed to the possibility of cuts, bruises, shocks, burns and broken bones.

Machinist; Grade: 10

Sets up and operates various machine tools such as engine lathes, milling machines, "boring mills, planers, shapers and precision grinders for machining castings, forgings and bar stock of various metal and metal alloys from raw stock to finished product. Plans and lays out work from blueprints, work orders, sketches and other specifications. Determines work procedures, machines, tools, equipment and attachments to be used. Decides on type and size of raw stock to be used. Determines speeds, feed tolerances and sequence of machine operations. Makes complex setups and adjustments. Cuts, turns, drills, bores, taps, reams, shapes, grinds, and finishes item. Uses specialized measuring instruments such as vernier calipers, inside and outside micrometers, surface gages, center-head protractors and dial indicators. Uses shop mathematics and standard handbook formulas in computing dimensions for planning and laying out work. Uses a high degree of manual skill and works within close tolerances.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted trade practices, processes, and procedures while completing assignment.

Frequently handles objects weighing up to 5 kilograms (10 pounds) and occasionally handles objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are usually noisy and dirty. Is exposed to the possibility of cuts, bruises, scrapes and burns.

Electronics Equipment Mechanic; Grade: 11

Tests, overhauls, repairs, modifies, aligns and installs various electronic equipment and related devices involving audio and video electronic circuits including all components in a complete standard operational system. Works on radar, radio, sonar, loran units, radio teletype and related equipment which requires an extensive knowledge of a wide range of the principles of the electronics mechanic trade.

Determines nature and extent of repairs required. Plans and lays out work from blueprints, schematic diagrams, wiring diagrams, technical manuals and other specifications. Determines work sequence. Selects specialized testing and measuring instruments such as spectrum analyzer, oscilloscope, wave meter, voltmeters and frequency meters. Performs complete operational tests to assure that all components of systems are working within prescribed close tolerances.

Makes independent judgments and decisions within the framework of oral and written instructions and accepted maintenance shop practices, processes and procedures while completing assignments.

Continually handles objects weighing up to 5 kilograms (10 pounds) and occasionally objects weighing up to 18 kilograms (40 pounds). Occasionally works in cramped and awkward positions.

Works inside in areas that have adequate light, heat and fresh air, and outside, sometimes in bad weather. Is exposed to the possibility of cuts, bruises, scrapes, shock, broken bones and serious burns.

Radar Mechanic (Ground); Grade: 12

Performs trouble analysis, complete overhaul and final alignment on complete complex ground radar systems, such as search height finders, ground approaches, bomb scoring devices and gap fillers. Following technical orders, factory test specifications and preoverhaul survey reports, analyzes intricate relationships among, and signal flow through, all subsystems, circuits and components. Determines significant defects, such as burning power supplies, overloaded amplifiers, arcing magnet rolls, improper indicator sweep rotations and excessive power consumption.

Applies advanced radar theory and special data flow tests which are complex because of frequent technological changes in systems. Determines modifications, parts replacements, relocation of consoles and repair of components to be made by lower grade workers. Performs final operational tests in terms of continuity, power, amplitude, signal frequency,

voltage, amperage and resistance. Aligns all system components, circuits and subsystems to assure their optimum operating effectiveness.

Makes independent judgments and decisions within the framework of oral or written instructions and accepted maintenance shop practices, processes, and procedures while completing assignments.

Frequently handles objects weighing up to 5 kilograms (10 pounds) and occasionally objects weighing up to 18 kilograms (40 pounds). Frequently works in cramped and awkward positions.

Works inside in areas that usually have adequate light, heat and fresh air and outside, in all kinds of weather. Is exposed to the possibility of cuts, bruises, broken bones and burns.

Tool, Die, and Gage Maker; Grade: 13

Fabricates and repairs tools, jigs, fixtures, dies, punches and gages used in the manufacture, overhaul and repair of equipment. Fabricates molds and dies for use in the forming of metals, plastics and other types of materials. Determines the structural characteristics of the item based on how it will be used bearing in mind the intricate working relationship of holes or surfaces in the functioning of the end item. Determines the dimensions and layout of broken lines, compound radii, or holes. Determines need for, sets up and operates a variety of types of machine tool equipment. Works with a variety of kinds of metals and metal alloys. Uses specially constructed devices to hold work at a position or angle. Calibrates work while in process and upon completion. Accomplishes precision fitting and assembly of end items. Uses specialized and precision measuring instruments such as computing devices, toolmaker's microscopes, air gage devices, optical flats and master gage blocks. Uses shop mathematics to calculate the dimensional sizes and relationships of parts and working tolerances and clearances. Uses a very high degree of manual dexterity and works within extremely close tolerances.

Makes independent judgments and decisions within the framework of oral and written instructions. Uses originality and ingenuity by frequently adapting or modifying existing tools and dies and work processes and procedures in fabricating and repairing items.

Frequently handles objects weighing up to 5 kilograms (10 pounds), and occasionally handles objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are usually noisy and dirty. Is exposed to the possibility of cuts, bruises, scrapes and burns.

Die Sinker; Grade: 14

Machines and grinds matched impressions in two blocks of steel simultaneously to make impression dies or molds used in forging hammers and presses. Studies blueprints, templates

of drawings of the product as well as the die or mold. Plans sequences of operations, visualizing shape of die or mold in reverse of item to be produced. Measures, marks and scribes steel stock to lay out for machining. Determines need for, sets up and operates a variety of types of machine tool equipment to machine outer dimensions and contoured cavities of die or mold to extremely close tolerances. Grinds, files and sands parts using handtools such as files, emery cloth and power grinders to smooth and finish cavity for precision fitting and assembling. Fastens die halves and pours in molten lead to make castings from which final checks of dies can be made. Verifies dimensions, using such specialized measuring instruments as micrometers, calipers, planer gages and dial indicators. Uses shop mathematics to calculate the dimensional sizes and relationships of parts and working tolerances and clearances. Uses a very high degree of manual dexterity.

Makes independent judgments and decisions within the frame-work of oral and written instructions. Uses originality and ingenuity by frequently adapting or modifying existing dies and molds and work processes and procedures in fabricating items.

Frequently handles objects weighing over 23 kilograms (50 pounds).

Works inside in areas that are usually noisy and dirty. Is exposed to the possibility of cuts, bruises, scrapes and burns.

Modelmaker; Grade: 14

Fabricates, installs, tests, modifies and repairs a variety of different types of models or various major component parts made of ferrous and nonferrous metals and metal alloys. Makes complete models and model parts, usually used in experimental or developmental work, to a full, reduced, or enlarged scale within extremely close tolerances. Follows blueprints, sketches or oral information that indicates the design data that is required to achieve specific test applications. Discusses with scientists and engineers design characteristics that cannot be met by fabrication processes and indicates what designs could be achieved by different component alignment and placement; and changes in size, weight or dimensional relationships of parts. Determines from nature of test, experiment or other use what material to use and work methods and operational sequence to follow. Considers such factors as shrinkage, warpage, desired life, location of component members and surface finish of models.

Lays out work, which involves a wide variety of interrelated dimensions such as unusual contours and shapes and a variety of irregularly shaped parts at varying angles and planes. Performs precision machining or handwork by use of a variety of machine and handtools. Fabricates and assembles interrelated parts and provides for access holes, cover plates, or other comparable assembly and operational considerations. Devises and makes special tools, templates, molds, jigs, gages, fixtures and securing devices needed in fabrication or assembly of models. Accomplishes precision fitting and assembling of complete model.

Observes tests of models to determine if any defects result from or can be corrected by methods of fabrication or assembly. Uses a variety of specialized and precision measuring instruments such as micrometers; vernier calipers; height, limit, and surface gages; and master gage blocks. Uses shop mathematics to calculate the sizes and dimensional relationships of parts, working tolerances and clearances and machine tool settings. Uses a very high degree of manual dexterity and works within extremely close tolerances.

Makes independent judgments and decisions in determining how to fabricate a model to meet the precise specifications established by the scientist or engineers responsible for testing the model. Uses originality and ingenuity in modifying or adapting standard tools and machines, and work processes to accomplish required fabrication.

Frequently handles objects weighing up to 5 kilograms (10 pounds) and occasionally handles objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that are usually noisy and dirty. Is exposed to the possibility of cuts, bruises, scrapes, burns, and shock.

Instrument Maker; Grade: 15

Fabricates, modifies and tests a variety of mechanical and electrical instruments for special purpose use, such as one-time research and development model, special laboratory equipment or highly precise instruments used to record accurate and uniform physical measurements. Makes complete operating instruments or modifies existing instruments which have fine mechanical or electromechanical movements to measure and regulate factors such as heat, distance, time, pressure, illumination and sound. Works with a wide variety of materials such as ferrous and nonferrous metals and metal alloys, plastics, wood, rubber, stone and porcelain. Discusses with scientists and engineers how the instrument will be used, the operating and environmental conditions under which it will operate and the desired size and shape. Determines what materials to use, considering the special purpose of the instrument.

Determines the most economical and effective fabrication and modification methods and procedures, considering such factors as use of new or rare materials, the physical properties and reactions of different materials, component alignment and placement, safeloading requirements, and unusual experimental conditions. Plans and lays out work, which involves unique and varied fabrication sequences and methods. Performs highly precise machining by using a variety of special machine tools which often includes the fabrication of special tools, jigs, gages, fixtures and securing devices.

Constructs complex electrical circuitry and determines values for electrical parts and accessories, considering wire size and gage, insulation, fuse and the physical placement of instrument components. Assembles instruments by fitting and mounting various electrical parts and circuitry and installing precision components, such as timing devices, springs, gear trains in housing, and balance mechanisms, which often require the use of a jeweler's lathe,

tweezers, eyepiece, and specialized hand tools. Tests, aligns and calibrates instruments to determine if any defects can be corrected by methods of fabrication. Uses a variety of highly specialized and precise measuring instruments such as electronic indicators, super micrometers and shadowgraphs. Uses advanced shop mathematics to calculate the sizes and dimensional relationships of parts, working tolerances and clearances, and special tool settings. Uses a very high degree of manual dexterity and works within extremely fine tolerances and precise finishes.

Makes unreviewed trade judgments and decisions as to how the instrument will be fabricated, including determinations of precise specifications required to achieve the final operating characteristics required by scientists and engineers. Uses considerable originality and ingenuity in making an instrument without detailed design specifications.

Frequently handles objects weighing up to 5 kilograms (10 pounds) and occasionally handles objects weighing up to 18 kilograms (40 pounds).

Works inside in areas that usually have adequate light, heat and fresh air. Is exposed to the possibility of cuts, bruises, shocks and burns.

APPENDIX 3 -- FACTOR DEFINITIONS

The following four factors are used in grading nonsupervisory jobs:

a. *Factor I: Skill and Knowledge*

Covers the nature and level of skill, knowledge, and mental application required in performing assigned work. Positions vary in such ways as the kind, amount, and depth of skills and knowledge needed, as well as in the manner, frequency, and extent to which they are used.

Elements covered under this factor include, but are not limited to:

- (1) Knowledge of work practices, methods, and processes, and their levels of difficulty.
- (2) Knowledge of shop mathematics (such as arithmetic, geometry, trigonometry, algebra).
- (3) Practical knowledge of the principle underlying the work, or other special or technical knowledge (e.g., electricity, electronics, processing characteristics of materials).
- (4) Knowledge of other trades.
- (5) Skill in specific trade operations, and the degree of manual dexterity or precision required.
- (6) Ability to read and write, to interpret blueprints, work instructions, and other technical guides of varying degrees of complexity.
- (7) Ability to use or operate tools, equipment, or machines of varying difficulty.
- (8) Mental abilities needed, such as memory, judgment, and ingenuity.
- (9) Mental application required (e.g., in planning and laying out work, in maintaining alertness and concentrated attention, or because of the nature of muscular and visual coordination needed).

b. *Factor II: Responsibility*

Covers the nature and degree of responsibility involved in performing work. Positions vary in responsibility in such ways as the complexity and scope of work assigned, the difficulty and frequency of judgments and decisions made, the kind of supervisory controls, and the nature of work instructions and technical guides used.

- (1) *Complexity of work* (e.g., whether the work involves simple repetitive actions, or responsibility for a variety of different operations and machines to complete assignments; whether work sequences are simple or complex; whether the work requires a low or a high degree of accuracy and precision; whether assignments involve a low or a high degree of care and skill to prevent damage to tools and materials, and injury to others).
- (2) *Scope of work* (e.g., whether assignments involve responsibility for part of an operation or for a complete process; whether assignments include responsibility for planning and laying out work; whether the worker is responsible for advising management and

engineering personnel on practical trade aspects of the work, such as techniques, fabrication details, and work sequences).

- (3) *Nature a degree of responsibility for making judgments and decisions* (e.g., whether the work is performed under close supervision, or with considerable independence from supervisory controls; whether the work instructions are complete and specific, or general in nature; whether guides such as technical manuals and work precedents can be applied directly, or must be modified; whether the worker has authority to deviate from instructions and work precedents without prior approval; whether assignments involve the need to make decisions and judgments which affect the quality and adequacy of work performed).

c. *Factor III: Physical Effort*

Covers the physical effort exerted in performing assigned work. Positions vary in such ways as the nature, degree, frequency, and duration of muscular effort or physical strain experienced in work performance.

Elements considered under this factor include, but are not limited to:

- (1) Physical exertion related to actions such as lifting, pushing, pulling, or carrying objects of varying weights, sizes, and shapes.
- (2) Physical effort related to movements such as walking, running, climbing, crawling, and bending.
- (3) Strain related to lack of movement such as standing in place, crouching, or stooping for extended periods of time.

d. *Factor IV: Working Conditions*

Covers the hazards, physical hardships, and working conditions to which workers are exposed in performing assigned work. Positions vary in such ways as the nature of the work environment; the extent to which it includes unpleasant, disagreeable, or hazardous conditions; the degree to which such conditions are experienced; the frequency and duration of exposure; the adequacy of protective clothing and gear, safety devices, and safe trade practices; and the possible effects on the worker. Elements considered under this factor include, but are not limited to:

- (1) Lighting, heating, and ventilation in work area.
- (2) Weather conditions to which exposed when working outdoors.
- (3) Temperature to which exposed in the work area.
- (4) Dust, grease, and soiling of clothing and skin surfaces.
- (5) Noise and vibration.
- (6) Gases and fumes.
- (7) Hazards in working above ground level, on slippery surfaces, or in crowded areas near moving vehicles or cutting tools.

Federal Wage System Job Grading Standard for Motor Vehicle Operating, 5703

Table of Contents

WORK COVERED	2
WORK NOT COVERED.....	2
TITLES	2
GRADE LEVELS	2
NOTES TO USERS.....	3
MOTOR VEHICLE OPERATOR, GRADE 4.....	4
MOTOR VEHICLE OPERATOR, GRADE 5.....	5
MOTOR VEHICLE OPERATOR, GRADE 6.....	6
MOTOR VEHICLE OPERATOR, GRADE 7.....	8
MOTOR VEHICLE OPERATOR, GRADE 8.....	11

WORK COVERED

This standard covers nonsupervisory work involved in the operation of gasoline, diesel, or electric powered wheeled vehicles to haul cargo and fuel, transport passengers, or to tow or recover equipment. The vehicles are driven in restricted traffic environments on Government installations, over public roads and highways, or under cross-country conditions. Also included are motor vehicles which have special-purpose or auxiliary devices where a knowledge of such devices does not exceed the level of knowledge and skill required to operate the vehicle safely.

WORK NOT COVERED

This standard does not cover work which primarily involves:

- Operating electric, diesel, or gasoline powered fork lift trucks to move, stack, and load materials in and about warehouses, storage areas, loading docks, and vehicles. (See Job Grading Standard for Fork Lift Operating Series, 5704.)
- Operating wheeled tractors and attached or towed equipment such as trailers, towbars, plows, harrows, planters, mowers, post hole diggers, combines, bailers, spreaders, backhoes, and front-end loaders in order to transport materials and equipment, dig, load, plant, harvest, clear, mow, and dispense liquid and solid materials. (See Job Grading Standard for Tractor Operating Series, 5705.)
- Operating gasoline or diesel powered engineering and construction equipment with wheeled or crawler-type traction such as graders, tractors with bulldozer or angledozer blades, front-end loaders, trench diggers, and large industrial tractors with pan or scraper attachments in order to cut, move, dig, grade and roll earth, sand, stone, and other materials, and to maintain ditches, road shoulders and beds, and firelines. (See Job Grading Standard for Engineering Equipment Operating Series, 5716.)

TITLES

Jobs covered by this standard are to be titled *Motor Vehicle Operator*.

GRADE LEVELS

This standard does not describe all possible grades at which jobs might be established. If jobs differ substantially from the skill, knowledge, or other work requirements described for the grade levels in the standard, they may be graded above or below the levels described based on sound job grading methods.

NOTES TO USERS

An underlying premise in the grade level descriptions in this standard, except at the grade 4 level, is that the vehicles are driven on Government installations and on public roads in a full range of traffic conditions or in installation environments that exhibit the same driving characteristics as public roads on a regular and recurring basis. Such public road characteristics would include widely dispersed urban and rural roadway systems; two-lane and four-lane highways; various weight limits and vehicle prohibitions on certain roads or bridges; a range of driving speeds as well as highway speed limits on some roads; various traffic signals and multiple types of intersections; frequently heavy traffic congestion; and sharp curves and blind or steep hills. Situations within the confines of an installation, such as driving in congested industrial areas, impose skill and knowledge requirements on motor vehicle operators similar to the demands of driving on public roads in all kinds of traffic. The requirement that vehicles are operated on public roads or the equivalent in terms of driving characteristics is consistent with the key ranking job descriptions for Truck Driver (Light), Truck Driver (Medium), Truck Driver (Heavy) and Truck Driver (Trailer) set forth in Part I, Appendix 2 of the Job Grading System for Trades and Labor Occupations. In instances where drivers do not use their vehicles on public roads (or the equivalent), a lower grade level than the one depicted in this standard for the type of vehicle driven is appropriate. This is primarily because the knowledge and skill required for the driver to operate the vehicle competently and safely is not as high.

Formerly, indicators such as gross vehicle weight (weight of the vehicle plus weight of the load), load capacity, number of forward speeds, number of driving (powered) wheels, and passenger capacity have been routinely used as the primary criteria for determining grade levels of motor vehicle operator jobs. These indicators are insufficient for determining the grade of the total job since they do not give consideration to all features of the job which affect the four grade determining factors of skill and knowledge, responsibility, physical effort, and working conditions involved in performing the work. However, gross vehicle weight provides a frame of reference from which to conduct a complete analysis and evaluation of a position. Therefore, gross vehicle weight is being retained as a means of establishing a framework in grade analysis for straight-in-line vehicles, i.e., vehicles that are unitized with the axles, power source or cab portion of the vehicle and load carrying body all on the same chassis. This indicator does not directly apply to passenger buses, passenger ambulance buses, or motor coaches. The final grade level for all vehicle operating positions will be based on a thorough consideration of the four grading factors of the total job.

MOTOR VEHICLE OPERATOR, GRADE 4

General: Drivers at this grade level operate one or more motor vehicles including pickup trucks, panel trucks, flatbed trucks, carryalls, sedans, crew cab pickup trucks, jeeps, and station wagons which typically have an approximate gross vehicle weight of up to 4500 kilograms (10,000 pounds). Vehicles are driven on the basis of either specific trip assignments or regularly established schedules and standard routes to transport personnel, supplies, materials, or equipment and tools throughout an installation or establishment under limited traffic conditions at low speeds. Drivers perform operator maintenance, such as checking fluid levels and air pressure in tires, and cleaning and washing the vehicles. They may use two-way radios to receive and transmit messages. They complete trip tickets and preventive maintenance records.

Skill and Knowledge: At this grade level, drivers have basic skills for manipulating the controls for starting, stopping, backing, and driving the vehicle. They have a knowledge of the height, width, length, and weight of the vehicle in order to operate the vehicle safely on short runs, following limited or prescribed routes throughout a Government installation. Also, they have a knowledge of installation traffic rules and regulations, and the skill to read and understand installation maps and other locator documents for finding various buildings and facilities. The drivers load and arrange the cargo so that it does not shift or fall and damage the material. They have a knowledge of the operator's manual for their assigned vehicle and the skill to apply such knowledge to particular driving situations. They have the knowledge to recognize developing maintenance problems when conducting an inspection of their vehicles, and report technical problems to the supervisor.

Responsibility: Drivers receive instructions from the dispatcher or supervisor on the type of vehicle to be operated, destination, cargo or passengers to be transported, purpose of the trip, deadlines to be met, and any special information. Grade 4 drivers are responsible for the comfort and safe transport of passengers and cargo throughout the installation or establishment. For example, they adhere to installation traffic rules and safe operating practices for moving vehicles; drive carefully to avoid jolting or injuring passengers; and load or assist in loading, unloading, and arranging cargo correctly. They enforce use of seat belts when the vehicle is in motion. They may use a two-way radio to keep the dispatcher or supervisor informed on the status of job assignments and problems encountered. The driver's work is regularly checked and evaluated for timeliness, the safe delivery of cargo or passengers, and for following instructions. Trip tickets are examined for compliance with regulations and for completeness.

Physical Effort: Drivers at this grade level exert light physical effort in reaching, bending, turning, or moving hands, arms, feet, and legs to operate hand and foot controls. They exert moderate physical effort in the frequent handling of objects weighing up to 18 kilograms (40 pounds), and the occasional handling of heavier objects while loading cargo, with the assistance of other workers or weight handling equipment.

Working Conditions: Drivers work mostly outside and operate vehicles in all kinds of weather in a controlled traffic environment throughout a Government installation or establishment. Drivers are exposed to dirt and fumes, and to the possibility of cuts, bruises, and broken bones as a result of accidents while driving or from falling objects when loading and unloading the vehicle.

MOTOR VEHICLE OPERATOR, GRADE 5

General: Drivers at this grade level operate one or more motor vehicles including pickup trucks, panel trucks, flatbed trucks, carryalls, sedans, crew cab pickup trucks, jeeps, and station wagons which typically have an approximate gross vehicle weight up to 4,500 kilograms (10,000 pounds). Vehicles are driven on the basis of specific trip assignments or regularly established schedules over public roads (or the equivalent) at highway speeds to transport personnel, supplies, materials, or equipment and tools or to tow equipment throughout rural or urban areas. In comparison with the restricted traffic conditions at the grade 4 level, drivers at this grade operate vehicles over Federal, state, and county roads and city streets in all traffic conditions. They load and unload the vehicles by hand, sometimes receiving help from other workers. They ensure the cargo is protected from the weather and that it is properly distributed and secured to prevent damage or loss while in transit. The drivers make certain that any equipment being towed does not exceed the maximum weight allowable for the vehicle being driven, and that it is connected to the vehicle according to local and Federal regulations. They perform operator maintenance and wash their vehicles in compliance with established policies. They complete trip tickets, preventive maintenance records, and accident reports.

Skill and Knowledge: At this grade level drivers have skill in manipulating controls for starting, stopping, backing, and driving the vehicle in all types of traffic and road conditions. They have knowledge of the height, width, length, and weight of the vehicle in order to judge overhead and side clearances, the turning radius, braking distance, and the safest distance to be maintained from other vehicles. They have skill to read and understand a road map, and to determine the shortest and safest route for both short and long runs. They have knowledge of defensive driving techniques, including skill to recognize developing hazardous road and traffic conditions and the judgment to select alternate routes to avoid potential problems. Drivers at this grade level have knowledge and skill to adjust their driving methods to the practices of the surrounding traffic in order to avoid accidents and to transport cargo and passengers safely. Also, they have knowledge of State and local safety rules and regulations, and the rules of other jurisdictions (e.g., surrounding States) for operating vehicles. The drivers have knowledge and skill to load cargo properly onto the vehicle, using appropriate tie-downs such as chains, binders, or straps for transit on public roads at highway speeds or under similar driving circumstances. They have knowledge of the operator's manual for their assigned vehicle and skill to apply such knowledge to particular driving situations. They have the knowledge to recognize developing maintenance problems when conducting an operator's inspection of their assigned vehicles, and to report technical problems to the supervisor.

Responsibility: The drivers receive instructions from the dispatcher or supervisor as to the type of vehicle to be operated, destination, cargo or passengers to be transported, purpose of the trip,

deadlines to be met and any special information important to the mission. Grade 5 drivers are responsible for safely transporting passengers or cargo to their destinations throughout rural or urban areas on public roads in a full range of traffic conditions (or the equivalent). The driver's work is regularly checked and evaluated for timeliness, the safe delivery of cargo or passengers, and for following instructions. Trip tickets are examined for compliance with regulations and for completeness.

Physical Effort: In addition to the physical demand described at the grade 4 level, moderate physical effort may be required in making couplings between the vehicle and towed equipment because safety chains, towbars, and hooks must be lifted and properly secured. Considerable physical effort may be required to change tires and make limited emergency repairs, such as installing an emergency fan belt or replacing an electrical fuse on open highways.

Working Conditions: In addition to the working conditions described at the grade 4 level, at this level drivers operate vehicles in all types of traffic and weather on public roads (or the equivalent), and are exposed to the danger of serious accidents. They drive in heavy traffic and at highway speeds over complicated road and interchange systems.

MOTOR VEHICLE OPERATOR, GRADE 6

General: Drivers at this grade level operate and perform operator maintenance on one or more motor vehicles including platform trucks, van trucks, stake trucks, dump trucks, ambulances or patient transport vehicles, passenger shuttle vans, and cargo vans which typically have an approximate gross vehicle weight of more than 4,500 kilograms (10,000 pounds) and up to 11,700 kilograms (26,000 pounds). Some of these vehicles are equipped with air brakes. Vehicles are driven on the basis of either specific trip assignments or regularly established schedules over public roads (or the equivalent) at highway speeds under the same types of traffic and driving conditions as described at the grade 5 level.

Drivers may operate platform, van or stake trucks and cargo vans to pick up and deliver materials and equipment or tow equipment to various locations and work sites. They maneuver vehicles over uneven terrain, over improved or unimproved roads, and through congested areas exercising caution when backing to load or unload at docks, ramps, and similar locations. They determine the manner and sequence of loading cargo to achieve load balance and adequate protection for fragile items. The drivers secure the cargo with tie-down ropes or a tarpaulin to prevent shifting and to protect the load, and mark dangerous or protruding cargo with flags, placards, or reflection lights. They check material loaded or delivered against various documents to prevent errors and to certify the condition of the items and obtain signatures from receiving personnel.

Other drivers at this grade level operate dump trucks to haul earth, gravel, sand, and similar construction materials or debris such as logs, stumps, and stone over roads, streets, and through open field areas and over difficult terrain around construction sites or similar operating environments. They also operate a hydraulic dumping mechanism to unload or spread the materials in the dump bed.

Some drivers at this grade level drive ambulances or patient transport vehicles to pick up and transport patients under nonemergency conditions from one location to another such as from an airport to a hospital or from one hospital to another. They drive on public roads at controlled speeds to insure the patient's comfort. The drivers assist the accompanying medical personnel in loading, unloading and securing litter patients.

Some drivers at this grade level drive passenger shuttle vans over predetermined routes and arrive at and depart from pick up and discharge points at scheduled times. They also may drive shuttle vans on special runs for meetings and other activities. The drivers check authorized passes on all passengers. They adhere to all State, local, and installation traffic laws and ordinances. They are required to maneuver the vehicle in and out of constricted areas including narrow city streets and congested parking lots.

Also included at this level are the drivers of vehicles equipped with a power takeoff device for transferring engine power to special-purpose accessory equipment, such as winches, power lifts, and plows and spreaders.

Skill and Knowledge: At this grade level, the vehicles operated are typically higher, wider, longer, and heavier than those described at the grade 5 level. Therefore, the driver has knowledge to make more difficult judgments concerning loading and arranging cargo, overhead and side clearances, the turning radius, braking distance, and the distance to be maintained from other vehicles. Also, the drivers are selective in determining which routes to take because of the size and weight of the vehicle and the laws restricting the use of some roads by such vehicles.

Drivers of dump trucks have skill in manipulating the hydraulic controls to raise and lower the bed of the truck. They know how to adjust the tailgate for spreading construction material from the dump truck bed. They are responsible for backing the vehicle over ground which is uneven and soft into areas difficult to access safely and without causing damage to property. These drivers use side mirrors and respond to the hand signals from a spotter to maneuver the vehicle, and follow the proper procedures for dumping the load to prevent the truck from tipping over.

Drivers of ambulance or patient transport vehicles may be required to know basic first aid and cardiopulmonary resuscitation (CPR) techniques to assist medical technicians in treating patients when requested. They are familiar with the medical equipment in the vehicle and can quickly locate such equipment for the medical technicians. They have skill in driving the vehicle in various road conditions to transport patients to their destinations, and know how to properly load and secure litter patients in the vehicle.

Drivers of passenger shuttle vans know the route and the time schedule to follow, and have skill in applying the braking and maneuvering the vehicle to avoid jostling the passengers. In connection with special runs or tour trips, the drivers have the ability to deal effectively with people in a hospitable manner. Also, these drivers have skill in selecting alternate routes to avoid heavy traffic or other delaying conditions, and skills in map reading in order to reach unfamiliar locations.

Drivers of vehicles equipped with special-purpose accessory equipment know how to use the power takeoff device to transfer engine power to the equipment, and have skill in manipulating a variety of controls and understanding equipment gauges. For example, the driver may operate a winch on a flatbed truck or a snow auger or plow with a salt or sand spreader on a dump truck.

Responsibility: Drivers receive instructions from the dispatcher or supervisor as to the type of vehicle to be operated, destination, cargo, passengers or patients to be transported, deadlines to be met, and any special information important to the mission.

The driving proficiency at the grade 6 level is assessed in terms of safe and expeditious completion of the assigned job. The driver is responsible for selecting routes and obeying all traffic laws and safety regulations, as well as the safe loading and unloading of the vehicle.

Performance of preventive maintenance tasks and preparation of trip tickets are reviewed for adequacy and compliance with instructions.

Physical Effort: In addition to the requirements described at the grade 5 level, greater physical effort is needed at this level to maneuver the longer and heavier vehicles, especially when backing these vehicles. Ambulance or patient transport vehicle drivers may be required to assist patients into and out of the vehicle, which involves physical exertion and frequent stooping and bending.

Working Conditions: The working conditions are the same as those described at the grade 5 level.

MOTOR VEHICLE OPERATOR, GRADE 7

General: Drivers at this grade level operate one or more motor vehicles including platform trucks, van trucks, fuel trucks, stake trucks, dump trucks, and trash removal trucks which typically have an approximate gross vehicle weight of more than 11,700 kilograms (26,000 pounds) and up to 14,400 kilograms (32,000 pounds). Also, at this grade level drivers may operate passenger buses or passenger ambulance buses regardless of gross vehicle weight. All of these vehicles are usually equipped with air brakes. Vehicles are driven on the basis of either specific trip assignments or regularly established schedules over public roads (or the equivalent) at highway speeds to transport passengers, patients, supplies, materials, or equipment and tools or to tow equipment throughout rural or urban areas. Drivers perform operator maintenance on all vehicles operated (e.g., monitoring fluid levels, replacing air filters and interior lights, checking tire pressure and hose connections, and washing the vehicle).

Drivers at this grade may operate platform, van, stake, and dump trucks in the same manner as described at the grade 6 level except that these vehicles are higher, wider, longer, and heavier than those driven at the lower grade level, and carry bulkier and heavier loads which are more likely to fall or shift if not properly loaded and secured or are more difficult to safely dump or spread. Vehicles operated at this level are driven over rough terrain, in close quarters, and in heavy traffic on both long and short hauls.

Some drivers at this grade level operate refueling vehicles (unitized tanker types) to refuel fixed and rotary wing aircraft. They drive these vehicles to and from aircraft refueling locations and fuel facilities using public roads and highways. They may pump fuel or assist other workers in the actual refueling of aircraft on the flight line or at other sites. They may install static lines for proper grounding of the aircraft and connect the hose to the aircraft fuel tank or assist attending personnel in such operations. These drivers comply with a checklist of safety procedures, and insure that the proper fire protection equipment is present. They complete such paper work as trip tickets and records indicating the amount and type of fuel dispensed and received.

Some drivers at this grade level operate trash removal trucks with a rear end compactor plate to pick up and dispose of trash and refuse on a scheduled route both in a restricted installation environment and on public roads or under equivalent driving conditions. They may be required to back the vehicle into narrow spaces between buildings to collect trash. They may be assisted by laborers who collect the trash cans and empty their contents into the back of the truck. They drive the trash removal truck to the local dump site or incinerator facility, and operate the power takeoff device to empty the compressed trash from the body of the truck.

Some drivers at this grade level operate a variety of passenger buses on scheduled or special runs from one location to another. Scheduled runs include work runs and shuttle runs, and special runs include touring trips to such locations as historic sites and recreation facilities. They are required to maneuver the bus around sharp corners and through narrow streets and roadways.

Drivers at this grade level may also operate passenger ambulance buses which are equipped with litter facilities and other medical support equipment. These vehicles are driven with the same medical mission and driving conditions and requirements as described for ambulance or patient transport vehicle drivers at the grade 6 level, except that these drivers operate larger and longer vehicles and transport patients and their family members, and medical personnel.

Skill and Knowledge: At this grade level, drivers know how to operate vehicles that are larger and longer than those driven at the lower grade levels; have heavier loads to secure and control; have air brakes and are more susceptible to sliding and tipping; and are difficult to maneuver, especially when turning and backing. Drivers have skill and knowledge to operate these vehicles over a variety of roads including interstate highways, narrow country roads, and on steep winding grades. Also, because of the size and weight of these vehicles, drivers are knowledgeable about which routes may be legally driven and the overpass clearances and other restrictions on such routes.

The drivers of refueling vehicles know the operating procedures and regulations pertaining to driving vehicles in close proximity to aircraft. They have skill to maneuver the vehicles around parked aircraft and to back vehicles close to aircraft using hand signals from a spotter. They know the Federal, State, and installation safety regulations regarding the transportation of flammable liquids. They also know safety regulations regarding aircraft fueling operations, including hot operations where refueling is accomplished with the aircraft engines running and emergency shutdown procedures.

The drivers of passenger buses have knowledge of safe braking distances because of the weight and size of the bus and the added weight of the passengers. They also know when mechanical or operational problems indicate that the bus is unsafe to drive and should be recovered by a tow vehicle.

The drivers of vehicles equipped with special-purpose accessory equipment know how to operate power takeoff controls of equipment with more complex functions than the equipment at the grade 6 level. Also, this equipment has more intricate operating characteristics than equipment at the lower levels which makes its manipulation and control more difficult. For example, the driver may operate a large snow blower or very large snow plows such as rollover or v-blades for removing deep snow. Consequently, considerable judgment and experience are used to perform supplemental operations.

Responsibility: Drivers receive instructions from the dispatcher or supervisor as to the type of vehicle to be operated, destination, cargo, passengers or patients to be transported, purpose of the trip, deadlines to be met, and any special information important to the mission. Additionally, some drivers determine the route to be followed, taking into consideration such factors as the clearance of underpasses, overhead power lines, weight limitations, highway restrictions, and alternate bypass routes. Other drivers who are assigned prescribed routes for such trips as work runs, shuttle runs, or medical transportation runs are responsible for knowing acceptable alternative routes for use in emergency situations which will legally accommodate the size and length of the vehicle being driven.

Some grade 7 drivers are responsible for performing or overseeing the loading and unloading of bulky, cumbersome cargo and assuring that it is properly located, distributed, and secured in the vehicle for balance and stability. These drivers exercise more responsibility than the drivers at lower levels because the weight of the cargo and the size and type of vehicle driven increase the tendency of the entire cargo to shift and the vehicle to tip.

Passenger buses or passenger ambulance buses are larger and longer and are able to carry more people than vehicles at the grade 6 level. Consequently, the driver must use expert judgement in making wide turns, braking, and backing and turning the bus around competently and safely. These drivers maneuver the buses in difficult traffic and in a variety of constricted locations while maintaining time schedules. Also, they insure that the buses do not contain more passengers than legally allowed.

Drivers who operate special purpose accessory equipment are responsible for following a greater number of safety procedures and precautions than at the grade 6 level because the functions of the equipment are more complex.

Drivers at the grade 7 level accomplish their assignments with considerable independence and are responsible for the safe operation of vehicles and equipment. Work is evaluated in terms of timeliness and driving competence.

Physical Effort: In addition to the physical effort described at the grade 6 level, drivers at this level exert moderate physical effort in operating, turning, backing, and controlling vehicles which carry heavier loads or larger numbers of people than vehicles at the grade 6 level.

Working Conditions: The working conditions are the same as those described at the grade 5 level.

MOTOR VEHICLE OPERATOR, GRADE 8

General: Drivers at this grade level operate and perform operator maintenance on straight-in-line trucks which typically have an approximate gross vehicle weight of more than 14,400 kilograms (32,000 pounds). Also, at this grade level are drivers who operate truck tractors with semi-trailers or full trailers, and motor coaches.

The drivers of tractor-trailer or truck and full trailer combinations (including tractor-trailer refueling vehicles) couple and uncouple the truck tractor and semi-trailer or truck and trailer, and connect and disconnect the air brakes and electrical lines. They maneuver these vehicles within close tolerances when driving and backing over uneven ground and in narrow or congested areas, between buildings and other vehicles, between parked aircraft and when positioning vehicles at loading docks. Tractor-trailer refueling operators drive heavy load vehicles on the flight line as well as over public roads (or the equivalent). They operate the vehicle's auxiliary pumping system including regulating the pumping pressure and the rate of fuel flow which varies with each type of aircraft being serviced. They verify that the fuel is the correct grade or mixture for the aircraft, that the aircraft is properly grounded, that there is no fuel leaking from the aircraft, and that the aircraft fuel tanks are not overfilled. They record the amount and type of fuel dispensed. Other tractor-trailer operators direct the arranging of cargo or sometimes assist in this operation to spread the load for best support and to insure the proper unloading sequence. They check to make sure that the cargo is secured to prevent shifting or falling while in transit, and to minimize the possibility of vehicle sway. These drivers select the safest, most direct, and legally allowed route to be followed, and identify alternative routes which may be used if emergency situations arise. They operate these vehicles on interstate highways, winding roads, and steep grades and manipulate the dual braking system to prevent the semi-trailer or trailer from jackknifing.

Other drivers at this grade operate motor coaches on long-distance trips which usually involve interstate driving and night driving. For example, the driver may transport sports teams to their events. The drivers load the passengers' baggage and equipment into the coach's baggage compartment, insuring that it is properly distributed and balanced to prevent shifting and breakage while in transit. They study the planned itinerary and select the best routes and identify alternative routes for emergencies. The drivers frequently maneuver the coach through congested, narrow streets with sharp turns.

Skill and Knowledge: Drivers at this level have greater knowledge and skill in the operation of their vehicles than required of drivers at grade 7 since the vehicles driven have limited maneuverability; have more than one body and two braking systems; or are oversized and carry large groups of people on trips where long periods of day and night driving are involved. These drivers use greater skill and knowledge in turning the vehicles, in evaluating the condition and load limits of bridges, in scheduling weigh points, and in assessing traffic conditions and hazards locally and over long-distance routes in unfamiliar geographic areas.

The driver of tractor-trailer or truck and full trailer combinations must have knowledge and skill to: determine the correct turning radius for these flexion-type vehicles; back the trailer into loading docks, between other trailers, and in narrow, congested locations around warehouses and parking areas; and apply the dual braking system for the combination vehicles especially on steep winding grades, without causing the trailers to jackknife. They have knowledge to load, arrange, and secure the cargo in the trailer in order to insure that it is not overloaded or unevenly loaded because of the trailer's tendency to sway.

Drivers of tractor-trailer refueling vehicles at this level have skill to maneuver such combination vehicles around parked aircraft and in constricted refueling areas. They have knowledge of the vehicle's fuel pumping system to transfer fuel safely to and from the vehicle and aircraft. These drivers have skill to drive such heavy load vehicles over rough terrain or soft ground and avoid tipping or similar accidents when refueling rotary wing aircraft in the field.

Drivers at this level have skill to maneuver oversize vehicles safely in narrow and confined locations which are often congested with other vehicles. Grade 8 level drivers apply more skill and knowledge in driving their vehicles without mishap in complicated traffic situations. Also, they have skill to remain attentive and maintain a defensive attitude while making interstate drives at highway speeds for extended periods, often at night.

Responsibility: Drivers receive instructions from the dispatcher or supervisor on the type of vehicle to be operated, destination, cargo or passengers to be transported, purpose of the trip, and deadlines to be met. Drivers at this level either determine the route to be followed or follow prescribed routes and identify acceptable alternative routes for use in emergency situations. Drivers who operate tractor-trailer or truck and full trailer combinations are responsible for overseeing or assisting others with the loading and unloading of cargo and making difficult judgments concerning the arrangement and securing of that cargo. This responsibility is greater than described at the grade 7 level because the size and type of the vehicle increase the tendency of the trailer to sway and the driver to lose control of the vehicle.

Motor coach drivers are responsible for operating oversize vehicles on extended trips where a variety of driving situations may be encountered, including congested locations, difficult metropolitan traffic, high speed highways, narrow country or mountain roads, and steep winding grades. These vehicles carry a larger number of passengers than are transported by conventional buses at the grade 7 level. The drivers have custody of the motor coach throughout the trip and are responsible for performing preventive maintenance, arranging for towing and unexpected repairs, and making parking or storage arrangements.

Drivers at the grade 8 level manage their assignments with virtually no supervision, and are responsible for the safe transport of cargo or the comfort of passengers on extended trips. Work is evaluated for efficiency and compliance with established policies, procedures and instructions pertinent to the driving mission.

Physical Effort: Drivers at this grade may exert moderate to heavy physical effort in climbing on tractors to hook up service lines, lower landing gears, and in climbing on the trailer to load or tie down cargo. Otherwise, the physical effort is the same as described at the grade 7 level.

Working Conditions: The working conditions are the same as those described at the grade 5 level.

Federal Wage System Job Grading Standard For Carpentry, 4607

Table of Contents

WORK COVERED	2
WORK NOT COVERED.....	2
TITLES	2
GRADE LEVELS	3
HELPER AND INTERMEDIATE JOBS	3
CARPENTRY WORKER, GRADE 7	3
CARPENTER, GRADE 9	4

WORK COVERED

This standard is used to grade nonsupervisory work involved in constructing, altering, maintaining, and repairing buildings, structures, partitions, panels, tool cabinets, bookcases, work benches, and other items using wood, wood substitutes, and composite building materials. The work requires knowledge of construction and repair techniques; the type, grade, and working characteristics of wood and wood substitute materials such as strengths and applications, and skill and accuracy in the operation of hand and power tools and equipment.

WORK NOT COVERED

This standard does not cover the following work.

- ! Making, repairing, and assembling boxes, crates, and shipping and storage containers and structures made with wood or wood substitute materials. (See Job Grading Standard for Wood Working, 4604.)
- ! Making and repairing high grade wood items such as fine cabinetry and furniture requiring precise and intricate joining, and the shaping and contouring of surfaces. (See Job Grading Standard for Wood Crafting, 4605.)
- ! Structural and finish work where the preponderance of the work involves such activities as roofing, tile or floor covering installation, plastering, insulating, or masonry should be classified in the appropriate occupational series within the Structural and Finishing Work Family, 3600.
- ! Fabricating, modifying, repairing, and installing plastic items, parts, assemblies, and structures exclusively. (See Job Grading Standard for Plastic Fabricating, 4352.)
- ! Constructing, placing, and installing wooden blocks, wedges, bracing structures and other staying devices to secure cargo shipment by land, sea, or air. (See Job Grading Standard for Blocking and Bracing, 4602.)

TITLES

Jobs covered by this standard below the grade 9 level are titled *Carpentry Worker*. Jobs covered by this standard at the grade 9 level and above are titled *Carpenter*.

GRADE LEVELS

This standard describes two levels of nonsupervisory carpentry work at grades 7 and 9. The standard does not describe all possible grades at which jobs may be established in this occupation, or in any way limit the authority of agencies to assign work or particular duties to positions.

If jobs differ substantially from the levels of skill, knowledge, and other work requirements of the grades described in this standard, they may warrant grading either above or below these grades, based on the application of sound job grading principles.

HELPER AND INTERMEDIATE JOBS

Helper jobs are graded by the Office of Personnel Management Job Grading Standard for Trades Helper Jobs.

The grade 7 level in this standard does not apply to jobs that are part of a planned program of training and development of skills for advancement to a higher grade. Such trainee jobs are covered by the Office of Personnel Management Job Grading Standard for Intermediate Jobs. Grade 9 in this standard is used as the journey level in applying the Intermediate Job Grading Table.

CARPENTRY WORKER, GRADE 7

General: Carpentry workers at this grade level measure, cut, construct, install, repair, and modify wood, composite, and wood substitute items where specific fit and accuracy are within allowable limits to produce a serviceable product. Finished appearance of work products is not the primary consideration at this grade level. Grade 7 carpentry workers apply standard measurements, specifications, and instructions when constructing, installing, or repairing items such as frame structures, decking, partitions, shelving, doors, forms, siding, and scaffolds. They apply a general knowledge of wood, composite materials, wood substitutes, and woodworking techniques, as well as basic shop mathematics to plan, measure, and lay out materials according to dimensional requirements and specifications. Workers at this level typically follow specific instructions and are aided through the use of templates, or preplanned, or precut materials.

Skill and Knowledge: Grade 7 carpentry workers have a working knowledge of woodworking techniques and basic shop mathematics and are skilled in using measuring tapes, squares, levels, and other carpentry tools to plan, lay out, measure, cut, construct and install materials according to dimensional requirements and specifications. Workers at this level have a basic knowledge of material strengths and applications. They are skilled in use and operation of a variety of hand and power tools such as hammers, hand saws, drills, planes, routers, screwdrivers, power nailers and fasteners, glue guns, metal shears, screw guns, power saws, and power sanders and planes. They are able to work from sketches, work orders, basic blueprints, and instructions which are complete in terms of type of job required and materials and methods to be used. They are able to perform mill work, construct framing, and make items such as

benches, partitions, frames, and tables. They are able to perform limited repairs to office-type furniture such as regluing loose joints and replacing shelving and slide mechanisms. They are knowledgeable of woodworking techniques to prevent splitting, chipping, and splintering and of the types and uses of various nails, screws, specialized fasteners, and bonding materials.

Responsibility: Grade 7 carpentry workers work under general supervision or with a higher graded worker and receive assignments orally or through work orders, sketches, or basic blueprints. They select the proper tools to be used and determine methods and techniques based on established practices or specific instructions from the supervisor or a higher grade worker. Deviations from standard practices and material substitutions generally require approval. Work is spot-checked in progress and checked upon completion to insure requirements have been met in terms of fit, dimensions, structural integrity, and other required objectives.

Physical Effort: Carpentry workers at this level work in wood shops and at job sites. When working in a shop, grade 7 carpentry workers stand for extended periods while operating machines such as bench planers, saws, and drill presses. The work requires considerable bending, kneeling, and stooping. When at a job site, strenuous physical exertion is sometimes required when handling heavy and bulky materials such as sheets of plywood, framing members, and other building and construction materials.

Grade 7 carpentry workers use manual or portable power tools for extended periods in uncomfortable positions. On-site work typically requires bending, stooping, crawling, and climbing on ladders, scaffolding, and rooftops. Workers may lift and move materials up to 18 kilograms (40 pounds), unassisted, and occasionally lift or move heavier items with the assistance of lifting devices or other workers.

Working Conditions: Some work is performed in shop areas where the worker is exposed to moderate or high noise levels from operating machinery, sawdust in the air, glue fumes, and hazards associated with woodworking and related power equipment. When working at job sites, workers may be exposed to weather conditions and the hazards of working on and around scaffolds and ladders. They are subject to cuts, bruises, and contusions. Carpentry workers may work in confined areas such as crawl spaces and attics which may be dusty and dirty. They use protective devices such as ear plugs, safety glasses, respirators, and gloves.

CARPENTER, GRADE 9

General: Grade 9 carpenters use skilled techniques to construct, install, repair, and modify wood and wood substitute structures and items requiring close tolerance fit and structural soundness. They construct and repair a wide variety of structural items such as building frames, rafters, concrete forms, walls, staircases, door and window frames, interior and exterior trim, and miscellaneous items such as workbenches, counter tops, bookcases, equipment cabinets, computer consoles, and items requiring limited decorative trim and molding. They also construct air and weathertight assemblies such as equipment shelters for ships undergoing refitting of military hardware.

Grade 9 carpenters set up and operate a wide variety of wood working machines and tools. They assemble items with a variety of joining techniques such as miters, rabbets, dados, biscuit, and mortise and tenon, and use glues and adhesives to secure wood pieces, veneers, and counter tops. They use wood, metal, and various composite materials when installing or replacing interior partitions, flooring, panels, suspended ceilings, counter tops, and moldings. Unlike grade 7 carpentry workers, grade 9 carpenters interpret drawings, blueprints, and specifications independently, and determine the layout and work sequences and types of lumber or special related materials. Carpenters at this level plan and carry out projects from initial layout to completion. Accuracy, spacing, fit, and structural soundness and finished appearance are essential.

Skill and Knowledge: Carpenters at this level have a thorough knowledge of wood and wood substitute materials, and construction techniques. They are skilled in the operation of general and precision carpentry and woodworking equipment and are able to produce finished products with precise fits, accurate dimensions, and acceptable appearance. By comparison with grade 7 carpentry workers, who work with basic blueprints and sketches, grade 9 carpenters are able to interpret complex instructions, sketches, blueprints, and building codes. They are able to measure for layouts such as those required to construct footings for structural foundations and construct concrete forms and related structures with little or no supervisory guidance. They use advanced shop mathematics to plan, compute, and lay out more complex and exact projects with features such as arcs, tangents, and circles. They are skilled in setting up and operating the full range of industrial woodworking and related machinery such as routers, band and scroll saws, and drill presses. They are able to determine the proper grade, size, and type of lumber or wood substitute material required for the job. They have skill in operating and using power and hand tools and other woodworking equipment such as portable drills, clippers, joiners, shavers, tenoners, sanders, routers, power activated nailers, combustion type saws, screw fasteners, drill presses, and table saws. They also have skill in setting up and adjusting stationary power equipment by checking and adjusting, for example, the "squareness" of the blade on a radial arm saw in relation to the surface of the cutting table. They have skill in performing routine maintenance on equipment by lubricating machines, changing and sharpening saw blades, and by adjusting drive belt tensions. Grade 9 carpenters are able to mill heavy lumber, cut bevels, rabbets, chamfers, grooves, and compound miter joints, and apply plastic laminates to wood and other surfaces on counter tops, cabinets, desk tops, and tables.

Responsibility: Unlike the grade 7 carpentry worker, who works under the overall guidance of a higher grade worker or supervisor and receives detailed and easily understood instructions for assignments, grade 9 carpenters lay out work, determine material and equipment needs, and plan and accomplish a wide range of work sequences ranging from basic repairs to complex project segments with minimal supervision or review of work in progress. Grade 9 carpenters use initiative and judgment in accomplishing work assignments. For example, they evaluate problems and determine how or what repairs to make and the type and grade of wood or appropriate wood substitute materials and type of tools to use. They accomplish all phases of work independently including work requiring close tolerances, precise fit, and a finished appearance. Unlike the grade 7 carpentry workers, who work under the guidance of a supervisor or higher grade worker, and whose work is regularly spot checked, grade 9 carpenters typically initiate and complete assignments under minimal supervision. Review of work is primarily for compliance with building codes, objectives, timeliness, and quality of workmanship. Grade 9 carpenters are responsible for safely operating powered equipment and hand tools and adhering to all safety procedures.

Physical Effort: Physical effort at this level is the same as that described at grade 7.

Working Conditions: Working conditions at this level are the same as those described at grade 7.

Federal Wage System Job Grading Standard For Automotive Mechanic, 5823

Table of Contents

WORK COVERED	2
WORK NOT COVERED.....	2
TITLES	3
GRADE LEVELS	3
HELPER AND INTERMEDIATE JOBS	3
AUTOMOTIVE WORKER, GRADE 8.....	3
AUTOMOTIVE MECHANIC, GRADE 10.....	5

WORK COVERED

This standard is used to grade all nonsupervisory jobs involved in the maintenance, repair, and overhaul of combustion-powered automotive vehicles, over-the-road trucks, and comparable vehicles, such as passenger cars, pickup trucks, buses, semitrailer truck tractors, warehouse tractors, farm tractors, forklifts, motorcycles, light combat vehicles such as jeeps and trucks, and other vehicles with similar characteristics, including their gasoline and diesel engines and other mechanical, hydraulic, electrical, and electronically controlled systems.

WORK NOT COVERED

This standard does not cover work which primarily involves:

- Maintaining and repairing heavy duty vehicles and heavy mobile equipment such as bulldozers, road graders, crawler tractors, power shovels, locomotives, combat tanks, cranes, large missile transporters, and fire trucks, which have utility systems or special hydraulic, pneumatic, or mechanical systems and controls which are designed for construction, combat, earth moving, ship loading, firefighting, and other comparable heavy duty or industrial applications. (See Job Grading Standard for Heavy Mobile Equipment Mechanic, 5803.)
- Servicing automotive and mobile equipment, such as automobiles, trucks, buses, ambulances, forklifts, and bulldozers, including dispensing gasoline, checking fluid levels and tire pressures, inflating tires, washing cars, lubricating vehicles, installing simple accessory items, and changing and repairing tires and tubes. (See Job Grading Standard for Mobile Equipment Servicing, 5806.)
- Overhauling and repairing electric-powered material handling and other self-propelled mobile equipment such as electric-powered forklifts, cranes, platform lifts, and electric tugs. (See Electromotive Equipment Mechanic Series, 5876.)
- Repairing and replacing upholstery, including fabrics, springs, webbing, filling, and padding on items such as seats and structural frameworks in automobiles, trucks, buses, and other vehicles or equipment. (See Job Grading Standard for Upholstering, 3106.)
- Maintaining and repairing mobile equipment bodies and mainframe groups. (See Job Grading Standard for Mobile Equipment Metal Mechanic, 3809.)
- Troubleshooting, repairing, modifying, and testing automotive radiators, air coolers, and oil temperature regulators including locating and repairing leaks, removing defective parts, and installing new parts. (See Metal Tank and Radiator Repairing, 3858.)
- Operating gasoline, diesel, or electric powered vehicles, some of which may be equipped with special-purpose powered equipment. (See Job Grading Standard for Motor Vehicle Operating, 5703.)

TITLES

Jobs covered by this standard below grade 10 are to be titled *Automotive Worker*.

Jobs covered by this standard at the grade 10 level and above are to be titled *Automotive Mechanic*.

GRADE LEVELS

The standard does not describe all possible grade levels for this occupation. If jobs differ substantially from the skill, knowledge, and other work requirements described in the grade levels of the standard, they may be graded either above or below these grades based on the application of sound job grading principles.

HELPER AND INTERMEDIATE JOBS

Helper jobs are graded by the U.S. Office of Personnel Management Job Grading Standard for Trades Helper Jobs.

The grade 8 level described in this standard does not apply to jobs that are part of a planned program of training and development of skills for advancement to a higher grade. Such trainee jobs are covered by the U.S. Office of Personnel Management Job Grading Standard for Intermediate Jobs.

Grade 10 in this standard is to be used as the Journey level⁴ in applying the Intermediate Job Grading Table.

AUTOMOTIVE WORKER, GRADE 8

General: The work at this grade involves making repairs that can be accomplished by removing, replacing, adjusting, or cleaning defective parts or components. For example, grade 8 automotive workers replace sensors, water pumps, spark plugs, brakeshoes, mufflers, radiator caps, condensers, engine gaskets, a variety of belts and hoses, and complete assemblies such as removing old engines and replacing them with new engines. They adjust brakes, transmission linkages, engine idle, voltage and current control valves, sensing valves, expansion valves, and pressure regulator valves. They clean or replace filters, screens, battery cables and clamps, engine components, and heating and cooling devices. In addition, they service and check air conditioning systems including purging and recharging systems, flush radiators and replace anti-freeze solutions, and align front ends of cars and trucks by adjusting caster, camber, and setting toe-in.

Automotive workers at grade 8 receive work orders or oral instructions that indicate the nature of the repair or installation to be made. They locate worn or poorly adjusted parts through visual

and auditory checks, and through the use of a small variety of test equipment such as test lamps, timing lights, multimeters, tachometers, and dwell meters. They also use vehicle on-board computers to help diagnose problems, and electronic analyzers to test automotive computer control systems and emission systems.

Skill and Knowledge: At this grade, automotive workers must have a knowledge of various techniques for removing, replacing, cleaning, and installing a variety of parts, components, and accessories such as filters, radiators, engine thermostats, wheel cylinders, universal joints, wheel bearings, springs, shock absorbers, mufflers, components of heating and air conditioning systems, brake components, catalytic converters, clutch assemblies, carburetors, and suspension components such as lower control arms, struts, constant velocity joints (CV Joints), and stabilizer arms. They must have the ability to determine when parts should be cleaned and reinstalled or replaced with standard parts. They must have a basic understanding of electricity and hydraulics, and the skill needed to make adjustments and settings, such as performing engine tune-ups, setting engine timing according to specifications, and adjusting brakes and power steering mechanisms. They must have a basic understanding of on-board computer diagnostic systems and other test equipment, and the ability to test automotive computer control systems and emission systems. They must be skilled in using basic tools common to the occupation (e.g., wrenches, sockets, ratchets, impact wrenches, torque wrenches, pliers, brake tools, and screwdrivers); in operating equipment common to the trade (e.g., front-end alignment and wheel balancing equipment, turning and grinding equipment for servicing brake drums and discs or rotor assemblies, and drilling and pressure bleeding devices); and in operating a small variety of test equipment (e.g., engine analyzers, capacity testers to determine if batteries are discharging or need replacement, hand-held computer diagnostic equipment, circuit testers, micrometers and dial indicators, tachometers, dwell meters, and battery hydrometers). They must have a basic understanding of the makeup and operation of the various individual systems and their interrelationships to analyze test results in order to locate improperly functioning parts for repair or replacement. They must have the ability to read and interpret parts manuals and manufacturers' repair manuals.

Responsibility: A higher grade worker or supervisor assigns work orally or through work orders, indicating the nature of the problem. Automotive workers at this level select tools, decide on the techniques to use, and carry out assignments with minimal check during progress. They obtain standard parts, such as water pumps, wheel bearings, fan clutches, brake linings, tailpipes, thermostats, master cylinders, windshield wiper motors, starters, alternators, batteries, drive line components, and other components of similar complexity by looking up replacement information in parts manuals or by making comparison with samples. They make adjustments and settings in accordance with specifications in manufacturers' manuals and test the completed product. Routine repair and maintenance duties are accomplished independently. A supervisor or higher graded worker provides assistance when standard procedures fail to correct the problem or when the automotive worker is assigned more complex repairs involving major assemblies or systems, such as engines, transmissions, differentials, or electronically controlled components. Completed work is checked for compliance with instructions, specifications, and standard shop practices.

Physical Effort: Automotive workers at this level make repairs which often require them to work in tiring, awkward, and uncomfortable positions. They frequently stand for long periods of time, bend, stoop, crawl under vehicles, and make repairs in other tight spaces. They frequently lift, handle, and carry parts and equipment weighing up to 18 kilograms (40 pounds). Occasionally, they move moderately heavy items with assistance or with mechanical devices, including objects weighing up to or over 23 kilograms (50 pounds).

Working Conditions: The work is usually performed inside on concrete surfaces where there is exposure to drafts, noise, and fumes from vehicles. Automotive workers occasionally perform work outside under adverse weather conditions. They are continually exposed to dirt, dust, and grease, and to the potential for burns, chemical irritations, shocks, bruises, cuts, and strains. To reduce dangers and irritations from these conditions, they follow prescribed safety practices and use safety equipment such as safety shoes and glasses, and respirators.

AUTOMOTIVE MECHANIC, GRADE 10

General: The work at this grade involves troubleshooting, repairing, and/or overhauling major components and systems such as engines, transmissions, differentials and transaxles, electronic fuel injection systems, emission control systems, and related electrical, electronic, hydraulic, fuel, and other assemblies. In comparison with grade 8 automotive workers who adjust or replace parts or complete assemblies in accordance with oral instructions or work orders, grade 10 mechanics must be able to tear down, adjust, repair, reassemble, and run operational checks on components of these systems following instructions contained in technical manuals. Some grade 10 level mechanics troubleshoot and repair the wide variety of major systems described above, while others specialize in tearing down, overhauling, and rebuilding one or a limited variety of major systems (e.g., engines and transmissions) for a variety of vehicles, such as automobiles, trucks, buses, and tractors. They must be able to use a wider variety of test procedures and equipment than grade 8 workers in tracing hard-to-locate defects or problems, and they complete repairs and installations with little or no technical advice.

Within the framework of inspection reports, diagnostic computer printouts, or instructions, grade 10 automotive mechanics isolate and repair malfunctions by a combination of visual and auditory examinations, and the use of a wide variety of test equipment such as computerized engine analyzers, compression testers, test benches, oscilloscopes, multimeters, and special feeler and dial gauges. They disassemble, repair, replace, recondition, and rebuild components of the various systems, and make independent judgments based on specifications in technical manuals and on accepted trade practices.

Skill and Knowledge: At this grade, the automotive mechanic must have a thorough knowledge of the makeup, operation, and installation of complex major systems and assemblies to troubleshoot and repair a variety of systems or to rebuild one or more systems such as the following: gasoline and diesel engines; automatic and manual transmissions and gear reduction systems; transaxles; drive line and rear axle assemblies including electrical, air, vacuum, or mechanically controlled differentials; electrical and electronic systems and accessories (e.g.,

conventional and transistorized ignition systems, charging and starting systems, and wiring and lighting systems); carbureted and electronic fuel injection systems; exhaust and emission control systems (e.g., continuous flow air injector or fuel vapor control); conventional and power steering mechanisms and hydraulic power-assist systems; and other systems of similar complexity. Additionally, grade 10 mechanics must be knowledgeable in the repair of hydraulic lifting, loading, turning, and positioning systems including their mechanical, hydraulic, electrical and electronic controls automotive worker, (e.g., hydraulic lift gates and electric wenchers). They must be able to troubleshoot and replace standard electronic components of systems, such as computer circuit boards and sensing and controlling units in engines, printed circuits in instrument and indicator panels, diodes in alternator regulators, armatures and control module transistors in electronic ignition systems, and sensors and relay units in emission control systems. Mechanics use this knowledge to test and troubleshoot components and systems to locate equipment defects.

They must have the ability to determine how far major components should be torn down, what parts and mechanisms can be reworked and refitted or should be replaced with new parts, and the type and extent of adjustment and alignment required. They must have the ability to interpret and apply manufacturers' repair manuals and technical specifications, schematics and engineering drawings, diagnostic codes, computer printouts, and safety manuals. Grade 10 mechanics must have skill in the use of hand and power tools common to the occupation (e.g., wrenches, screwdrivers, insulated pliers, electric drills, pneumatic wrenches, and soldering irons) and a wide variety of specialized tools and test equipment (e.g., bench lathes, grinding and seating equipment, clutch pilot and gear puller tools; precision measuring tools such as dial gauges, micrometers, dial indicators, and calipers; vacuum gauges, tachometers, compression testers, capacity testers, coil testers, and pressure bleeding devices). They must also be able to operate electronic test equipment such as computerized engine analyzers and scanners, exhaust analyzers, dynamometers, and oscilloscopes.

Responsibility: Unlike grade 8 automotive workers who receive assistance on more complicated repairs, grade 10 automotive mechanics make independent judgments and decisions within the framework of oral and written instructions and accepted trade practices. They work from oral assignments or work orders and determine the type and extent of repairs needed. They complete repairs with little or no check during their progress or upon completion. They complete repairs and adjustments in accordance with manufacturers' specification and service bulletins and ensure that vehicle systems (e.g., lighting systems, steering mechanisms, mechanical and hydraulic braking systems, and exhaust and related emission control systems) function in accordance with safety regulations set by various regulatory agencies. The supervisor assures that overall work meets accepted trade standards.

Physical Effort: Physical effort required at this grade is the same as that described at grade 8.

Working Conditions: Working conditions at this grade are the same as those described at grade 8.

Federal Wage System Job Grading Standard for Trades Helper Jobs

Table of Contents

WORK COVERED	2
TITLES	2
GRADING	2
GENERAL.....	2
ILLUSTRATIONS.....	3

WORK COVERED

This standard will be used to grade jobs of employees assisting journey workers, at grade 9 and above, in one or more of the skilled trade occupations by performing the simpler and more routine duties of the trade and working with the journeyman as instructed. Some employees perform these tasks on a continuing basis while others perform them as a means of developing trade skills and gaining knowledge of the trade to move to intermediate and journey worker levels.

Jobs graded by this standard have similar types of duties and tasks even though the work is in different trade occupations. Therefore, this standard does away with the need for separate grade-level definitions of these types of jobs within each trade job grading standard.

Jobs of employees in a formal apprentice program are not graded by this standard. Jobs where employees assist higher grade employees, at grade 8 and lower will be graded by the specific job grading standard for the occupation in which the employees work.

All jobs that require mainly physical abilities and effort involving no knowledge of specific trade practices will be graded by the job grading standard for Laboring, 3502.

TITLES

The adjective title *Helper* is to be added to the journey worker job title of the occupation in which the duties are performed. For example, employees performing duties graded by this standard would have titles such as:

Pipefitter Helper

Sheetmetal Worker Helper

GRADING

All helper jobs in skilled trade occupations will be graded at grade 5.

GENERAL

The helper is required to learn the common and most typical tasks of the trade so that he can assist the journey worker. Occasionally, the helper performs more difficult work under close supervision.

Usually, the helper is assigned to assist a journey worker who works with and instructs the helper in performing duties common to the trade. Detailed instructions are provided on new

assignments along with close supervision and detailed review. The simple, routine tasks are performed without much supervision after they are learned.

Those employees who are learning the trade to move to intermediate and journey worker levels of the trade receive more difficult tasks to perform; as training goes on, the work is done with less supervision. Advancement to intermediate or journey worker levels, however, depends upon the assignment and performance of higher level work on a regular basis.

ILLUSTRATIONS

The following are illustrations of duties typically performed in jobs covered by this standard:

Sheetmetal Worker Helper: Assists journey worker in the operation of power machines by holding and feeding metal parts. Assists in assembling and installing parts and units by getting tools and supplies, carrying materials, and lifting and holding materials in place during operations. Operates hand shears, hand roller, handbrakes, saws, and drills to cut roll, fold, saw, and drill sheetmetal as marked or measured by journeyman workers. Files rough metal surfaces or edges to a smooth finish. Cleans work areas and keeps work benches clean and orderly and tools and machines lubricated.

Pipefitter Helper: Assists in the assembly, laying, or hanging of pipe by lifting, carrying, and handing tools, fittings, and equipment to the journey level pipefitter; holding pipe during assembly; and screwing or bolting pipe hangers to walls, ceilings, etc. Cuts and threads pipe using hacksaw, pipecutter, and threading machine, the dies of which have been set by a higher grade pipefitter; bends or shapes pipe by applying pressure after placing pipe in bending block; tightens pipe connections and valves; and cuts or drills previously marked holes in walls. Cleans tools, machines, and equipment and keeps work area clean and orderly.

Federal Wage System Job Grading Standard for Intermediate Jobs

Table of Contents

WORK COVERED	2
TITLES	2
GENERAL	2
GRADING	3

WORK COVERED

This standard will be used to grade jobs which involve training or development of skills and knowledge of the trade. The employees perform duties and tasks requiring more skills than the helper level up to and including, under close direction, duties and tasks performed by the journey workers of a trade. These duties are performed to increase knowledge of the trade and develop skills for advancing to the journey grade.

Jobs graded by this standard have similar types of duties even though the work is in different trade occupations. Therefore, this standard does away with the need for separate definitions for these types of jobs within each trade job grading standard.

Jobs which do not involve training or development of skills and knowledge differ from those covered by this standard. They will be graded by the specific job grading standard for the occupation in which the employees work.

Jobs where the employees are in a formal apprentice program are not covered by this standard. Lower level jobs in occupations which are basically semi-skilled (e.g., machine operator) are also not graded by this standard.

TITLES

Jobs covered by this standard are to be titled the same as the journey worker of the trade.

GENERAL

The intermediate grade is the **average value** of the work performed between the helper and journey worker levels. The employee in this type of job works in situations which provide training to develop skills and knowledge of the occupation. The duties performed at any one time might include those above the simpler and more routine duties of the helper level jobs, less difficult than the journey worker level, but up to and including, under close direction, journey worker level duties.

Jobs involve learning such trade practices and skills as:

- the proper usage of tools and equipment of the trade;
- the order of assembling parts and what tools and equipment are needed;
- how to read blueprints, sketches, and technical manuals to understand the functions of the parts or systems, to plan and lay out work, and to aid in finding faulty parts or systems;
- repair techniques to be used including methods used in getting the right fits or tolerances;
- how to make adjustments and calibrations; and
- how to rebuild and make parts.

Usually, the journey worker directs the worker and provides instructions on new assignments. As the employee's skill and knowledge increases, he receives less direction until he is able to do the journey worker job. Advancement to the journey worker grade, however, depends on the assignment and performance of higher level duties on a regular basis.

GRADING

The following table is used to grade intermediate jobs:

Intermediate Job Grading Table	
When the journey grade is:	The intermediate grade is:
12	9
11	8
10	8
9	7

Where the journey grade of an occupation is grade 8 or lower, the intermediate or less than journey worker job will be graded by the specific job grading standard for that occupation. Progression to grade 13 or higher is normally from lower level journey worker jobs rather than directly from an intermediate level. Therefore, no provision is made in the table for intermediate grades for these types of jobs.

Federal Wage System Job Grading Standard for Leader WL/NL

Table of Contents

WORK COVERED	2
PART I - WORKING LEADERS	2
WORKING LEADER DUTIES	3
WORK NOT COVERED	4
TITLES AND CODES	5
JOB GRADING CRITERIA.....	5
WORKING LEADER GRADING TABLE	7
PART II - TRAINING LEADERS.....	8
TRAINING LEADER DUTIES.....	8
WORK NOT COVERED	9
TITLES AND CODES	10
JOB GRADING CRITERIA.....	11
TRAINING LEADER TYPE A.....	12
TRAINING LEADER TYPE B.....	13
TRAINING LEADER GRADING TABLE.....	14

WORK COVERED

This standard is used to grade the jobs of leaders who as a regular and recurring part of their jobs, and on a substantially full time and continuing basis, lead three or more workers to (a) accomplish trades and labor work or (b) train them in the nonsupervisory work of a trades and laboring occupation.

Both types of leaders are responsible to their supervisors for assuring that the work or training assignments of the group led are carried out.

It should be noted that sometimes working and training leader duties are assigned in a manner that does not meet the requirements for coverage under this standard. Examples of such duties which are not covered by the standard are those performed only in the absence of the regular working or training leader, to "assist" working or training leaders to meet emergency workloads, on a rotating basis with other employees, or for training purposes to gain qualifying experience for a higher grade position. Duties such as these do not meet the requirement that they be performed as a regular and recurring part of the job, and on a substantially full time and continuing basis. (When such a situation occurs, the position involved is graded under the regular nonsupervisory grading structure and not under the leader structure.)

In other situations, employees have leader type responsibility on a regular but periodic or intermittent basis (e.g., for one day in every five day work week or for one week in every month). Although such employees have leader responsibility as a regular and recurring part of their jobs, in such situations the leader responsibility is not exercised on a substantially full time and continuing basis as required for coverage under this standard. (When such a situation occurs, the position is graded under the regular nonsupervisory grading structure and not under the leader structure.)

Part I of this standard contains additional information, instructions, and the criteria to be used in grading the jobs of working leaders.

Part II of this standard contains additional information, instructions, and the criteria to be used in grading the jobs of training leaders

PART I - WORKING LEADERS

Working leaders must have the ability to lead three or more other workers to accomplish trades and labor work, including as a paramount requirement, sufficient skill in and knowledge of the trades and labor work performed by the group led to effectively carry out the duties of working leaders outlined below. Working leaders also perform regular nonsupervisory (i.e., non-leader) work that is usually of the same kind and level as that done by the group led.

Thus, working leaders in positions covered by this standard are nonsupervisory workers who, in addition to the exercise of leader responsibility, perform regular nonsupervisory (i.e., non-leader)

trades and labor work as members of the work crews or groups they lead. Typically, working leader tasks, such as these listed in this standard are performed by leaders at various times throughout the work day (or work shift) as needed or as otherwise appropriate. Thus, the working "leader" tasks are mingled with the accomplishment of other regular nonsupervisory (non-leader) work. The amount of time spent by working leaders in accomplishing leader tasks, as distinct from regular non-supervisory work, varies with work situations and operating needs.

However, the leader responsibility assigned to a position remains in effect and continues to be exercised even when, as discussed above, the leader is personally engaged at various times during the workday (or shift) in non-leader work. Therefore, the percentage of time during a work day (or shift) spent in the performance of "leader" tasks should not in itself be considered in determining whether positions meet the criteria for coverage as leader under this standard. Rather, in addition to all other criteria, users of the standard must consider whether leader responsibility has been assigned officially by competent management authority as a regular and recurring part of the job and is (or, in the case of a vacant position, will be) exercised on a substantially full time and continuing basis.

WORKING LEADER DUTIES

Typical duties of a working leader are:

- Passing on to other workers the instructions received from supervisors and getting work started, e.g., by assigning the immediate tasks to be performed by individual members of the group led;
- Working along with other workers and setting the pace;
- Demonstrating proper work methods;
- Seeing to it that needed plans, blueprints, materials, and tools are available, and that needed stock is obtained from supply locations;
- Obtaining needed information or decisions from supervisors on problems that come up during the work;
- Maintaining a current knowledge, and answering questions of other workers on procedures, policies, written instructions, and other directives (for example, technical orders);
- Seeing to it that there is enough work to keep everyone in the work crew busy;
- Checking work while in progress and when finished to see whether the supervisor's instructions on work sequence, procedures, methods, and deadlines have been met;
- Urging or advising other workers to follow instructions received from supervisors, and to meet deadlines;

- Assuring that safety and housekeeping rules are followed (for example, assuring that limits of safe machine operation are not exceeded and that all tools are used properly);
- Reporting to supervisors on status and progress of work, and causes of work delays; and
- Answering questions of supervisors on overall work operations and problems (for example, concerning, additional on-the-job training requirements for individual employees).

WORK NOT COVERED

The jobs of the following kinds of employees should not be graded as working leaders under this standard:

- Employees who are accountable as supervisors for planning, scheduling, and directing work operations, evaluating work performance, and taking necessary action to assure that the work of subordinate employees meets standards of quantity and quality. (A separate grading standard is provided for supervisors.)
- Employees who have "shift" responsibility in utility operations, but do not lead three or more other workers. (On night shifts and during weekends, one employee may be in charge of work operations when a supervisor is not available for technical advice and guidance. This may require the performance of additional and more responsible duties in locating problems, determining and taking actions necessary to maintain operations, and relaying instructions to the person in charge of the next shift, including problems encountered and actions taken.) The position of such an employee is graded under the nonsupervisory grading structure.
- Employees who in performing their own work are assisted by helpers, laborers, or other lower-level workers.
- Employees who have "project" responsibility but do not lead other workers. In some work situations, employees are responsible for projects where some of the work needed to complete the projects is done ("farmed-out") by other employees. Where the other employees do such work under the immediate direction of their regular supervisor, the job of the employees with "project" responsibility is considered to be nonsupervisory (i.e., non-leader) in nature.
- Employees who are responsible for work assignments, requiring only one or two other workers. The jobs of such employees have as their primary responsibility personal work accomplishment. Responsibility for work assignments involving one or two other persons is not sufficient to warrant being graded as a leader. Such jobs are graded under the appropriate nonsupervisory grading standards.

In some situations, work may be done by persons other than civilian Federal employees, such as patients or inmates of institutions, military personnel, and others. In determining whether an employee is a working leader, such persons should be counted if the employee is responsible for

their work assignments on a substantially full-time and continuing basis, as a regular and recurring part of the job.

TITLES AND CODES

Jobs covered by this standard which involve leading other workers to accomplish trades and labor work are identified by adding the word "*Leader*" to the job title of the occupation in which the working leader is qualified *and* which reflects the nonsupervisory work performed by the leader. For example:

CARPENTER LEADER
PAINTER LEADER
ELECTRICIAN LEADER

The occupational code of a working leader job is the same as the code for the occupation reflected in the title.

JOB GRADING CRITERIA

Under this standard, working leader jobs are graded on the basis of the highest level of nonsupervisory work **led**. The resulting leader grade reflects the relative worth of the working leader job being graded in comparison with other working leaders, and its direct pay relationship to the employees led.

A minimum of **three** workers led is required for coverage under this standard. However, except for this minimum requirement, *the number of workers led and the variety of occupations in which they perform work does not affect the grade of a working leader job.*

Because of the limited nature of leader responsibility, these factors do not significantly affect the difficulty and responsibility involved in performing the duties of a leader. Thus, where the employees of the group led perform work at the same grade in a variety of occupations, an extra grade could not be added because of that variety to the level on nonsupervisory work used in grading the working leader job. However, where the number of workers led is more than 12, the job should be carefully reviewed to determine whether it is really that of a working leader covered by this standard rather than that of a supervisor.

In applying the grading table to working leader jobs, the grade to be used usually is the grade of the highest level nonsupervisory employee in the group led (other than the leader). However, care should be taken to assure that this grade reflects the level of the nonsupervisory work actually led. For example:

- The grades of employees assigned to a work crew from a "pool" may reflect the level of their other work assignments rather than the work they do when they serve as members of the work crew.

- The highest level employee assigned to the group led may do work in an occupation in which the working leader is not fully qualified. The level of such work should be used to grade the working leader job only where the leader, although not fully qualified, has enough knowledge of the occupation to lead the work involved (for example, pass on instructions from the supervisor, assign immediate tasks to be performed, demonstrate work methods, check work, and report to the supervisor on work status or cause of work delays).
- The highest level employee, although assigned to the group, may receive little or no leadership from the working leader in performing his work (for example, where the employees are "experts" in their work, or perform above the normal journey worker level of their occupation). In this case, the grade of the highest level employee does not reflect the level of the nonsupervisory work actually led, and should not be used to grade the working leader job.

Thus, in grading working leader jobs, consider only work where the leader performs all or most of the working leader duties described in this standard under WORK COVERED.

Where the nonsupervisory (non-leader work personally done by a working leader is at a higher grade than the work done by the employees led, the nonsupervisory (non-leader) work and the working leader duties first, are graded separately. The final grade of such a job is then determined by selecting the working leader grade or regular nonsupervisory grade which results in the highest pay rate for the employee. (Note: Where the final grade of such a job is based on its non supervisory- non-leader) work, the job is titled, coded and graded as a regular non-supervisory job, and not as a working leader job. However, the fact that such an employee performs working leader duties can be shown by adding in parenthesis the word "Leader" to the basic nonsupervisory title, for example, Carpenter (Leader) NA or 4607-9.

WORKING LEADER GRADING TABLE

After determining the highest level of nonsupervisory work led, use the grade determination chart below to arrive at the grade level for the working leader job.

GRADE DETERMINATION CHART	
Level of Highest Grade Work	Led by the Working Leader
Grade	WL/NL Grade
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15

PART II - TRAINING LEADERS

Training leaders must have the ability to lead 3 or more workers in performing trades and labor training assignments, including as a paramount requirement sufficient skill in and knowledge of the trades and labor occupation or work in which training is given to effectively carry out the duties of training leaders outlined below. Training leaders also must have, as a second requirement, practical knowledge of the methods and techniques of instruction.

TRAINING LEADER DUTIES

Typical duties of a training leader are:

- Conducting training sessions designed to update, improve, or upgrade the knowledge and skills of others;
- Selecting, modifying, and using various instructional methods and techniques;
- Obtaining textbooks, magazines, bulletins, charts, educational and instructional media, directives, and other training materials for use during training sessions, and developing training materials as needed;
- Showing others proper trade techniques and practices, and explaining safety precautions to be followed in setting up machinery and equipment, and giving instruction in the use of layout techniques, power tools, materials, measuring devices, precision instruments, and safety devices;
- Making class and outside work assignments consistent with daily lesson plans, scheduling practical exercises to accommodate time limitations, and monitoring class work to ascertain progress;
- Encouraging good class attendance and conduct, and motivating other workers to achieve training objectives;
- Offering counsel and guidance to those striving to improve performance in the training course;
- Evaluating the progress of workers in terms of such factors as interest, cooperation, assimilation of basic fundamentals and theory, and practical application of work methods;
- Developing and administering informal examinations of workers to test their progress in the training;
- Maintaining individual progress charts showing type of work and equipment worked on, and performance rating for each type of work; and

- Discussing with shop supervision and training personnel, problems and other issues concerning the training of workers.

WORK NOT COVERED

The jobs of the following kinds of employees should not be graded as training leaders under this standard:

- Employees in positions that primarily involve advising on and promoting apprenticeship training for workers in industry. (See the Apprenticeship and Training Series, GS-0243.)
- Employees in positions that involve staff assistance to agency management in the job orientation, training, and planned development of employees within the Federal Government, when the key requirement is a knowledge of the objectives, methods, and organization of personnel management, in addition to training knowledge. (See the Human Resources Management Series, GS-0201.)
- Employees in positions that require the application of full professional knowledge of the theories, principles, and techniques of instruction. (See Education and Vocational Training Series, GS-1710.)
- Employees in positions that require practical but less than full professional knowledge of the methods and techniques of instruction when such positions do not have as their paramount requirement (a full knowledge and experience at the target level in the trade or craft for which personnel are being trained or (b) trade experience and knowledge of sufficient depth and range at the level of the trade at which they are giving training to permit them to extend and improve the skills of others. For example, in some situations, trade or trade related courses such as electricity, surveying, air conditioning and refrigeration controls, industrial and commercial heating, electronics, teletype maintenance, aircraft fundamentals, and flight engineering are taught from textbooks, manuals, and other reference material in a classroom and laboratory setting. Various instructional techniques are used such as lecturing, discussion, and demonstrations. Also utilized are training aids such as movies, slides, flip charts, video tape, transparencies, and laboratory models for demonstrating the practical application of theory. No on-the-job training is provided. This instruction is conducted in the traditional classroom or laboratory/workshop situation and is designed to provide the student with the fundamentals and rudimentary skills of a trade or craft. The courses are typically highly structured, short, and repetitive.

Although in such situations instructors may be required to have some trade background, knowledge and experience in a trade, craft, or laboring occupation is not a paramount requirement. (See the Training Instruction Series, GS-1712.)

- Employees in positions which have as their paramount requirement knowledge of the principles and techniques of recreation. Such positions may include instructional work such

as personally providing instruction in specialized arts and handicrafts or in trades such as automobile repair and carpentry. Although the personal instruction in "blue collar" trades provided by these positions occasionally may exceed the elementary skill level, the positions do not have as their paramount requirement experience and knowledge of the involved trade. (See the Recreation Specialist Series, GS-0188.)

- Employees in positions in which some knowledge of various trades and manual laboring procedures is desirable or even required, but do not have as their paramount requirement knowledge and experience in performing the work of a specific trade and laboring occupation. For example, courses such as industrial safety, mechanical drawing, oral communications, and industrial organization are excluded when their contents apply alike to various occupations, and do not necessitate knowledge and skill in a particular trade on the part of the person giving the training.

In any trade, higher level workers may, as a normal part of their duties, be required to direct or guide lower grade workers who have been assigned to assist in accomplishing the same work project. Experienced workers in a trade may also be required to demonstrate or explain particular work methods and procedures to personnel receiving on-the-job training in the trade. Such responsibilities do not warrant extra grade consideration. In other situations, employees may be selected to receive special training such as in new techniques and methods, or in the operation and maintenance of new equipment, and then be required to demonstrate what was learned to other workers. These demonstrations are informal and require few special instructional techniques or communicative skills of the demonstrator. Nor is the demonstrator responsible for the degree to which others learn from the demonstrations. In situations such as these, the demonstrator's position is not graded under this standard.

TITLES AND CODES

Jobs covered by this standard which involve leading other workers for the purpose of training them in trades and labor work are identified by adding the words "*Training Leader*" to the job title of the occupation in which the training leader is qualified to conduct training courses. For example:

PIPEFITTER TRAINING LEADER
FORK LIFT OPERATOR TRAINING LEADER
WELDER TRAINING LEADER

The occupational code of a training leader job is the same as the code for the occupation reflected in the title.

JOB GRADING CRITERIA

Under this standard, training leader jobs are graded on the basis of (a) the grade level of trades and labor work involved and (b) the type of training leader job discussed below.

GRADE LEVEL INVOLVED

For the purpose of grading training leader jobs, the "grade level involved" is either (a) the grade level of the nonsupervisory work (target grade) for which the trainees qualify upon completion of the training course, or, if no target grade can be identified, (b) the highest nonsupervisory level of trade skill and knowledge required of the trainer. For example, if training in the operation of fork lifts qualifies the trainees for grade 5 fork lift operator work, the training leader job is graded on the basis of the grade 5 target grade. Similarly, if successful completion of a training course qualifies the trainees for grade 6 fork lift operator work, the training leader job is graded on the basis of the grade 6 target grade.

However, some training leaders conduct training courses which in themselves do not qualify students for jobs at specific target levels. Examples of such courses are special safety procedures and radiological controls. The class may consist of students at the same grade level or at various grade levels of an occupation. In situations such as these, in which no target grade is identifiable, the training leader job is graded on the basis of the highest nonsupervisory level of trade skill and knowledge required of the trainer. For example, if the class consists of workers some of whom are at grade 10 and others at grade 11, but the trade skill and knowledge required of the trainer is at grade 10, then the training leader job is graded on the basis of the grade 10 level and not the grade 11 level.

A minimum of **three** workers led in the performance of training assignments is required for coverage as a training leader under this standard. However, except for this minimum requirement, the number of students in the training class, their occupation, and grade level do not affect the grade of the training leader.

In making the above determinations, consider the full range of courses and subject matter areas in which training is given by the training leader in question during the period of a full work cycle. For example, in formal apprenticeship programs such work cycles may involve several years.

TYPE OF TRAINING LEADER JOB INVOLVED

Before applying the grading table for training leaders, the type of training leader position being graded also must be determined as indicated below.

Note that as used in this standard, a "formal organized training program" is defined as a program of instruction which has been officially established by competent management authority to attain a specified objective or goal within a pre-planned time frame. It sets forth the planned and

scheduled training to be accomplished commencing with the initial session until the completion of the course.

TRAINING LEADER TYPE A

Training leaders, Type A, conduct training sessions under formal organized training programs designed to update, extend, or improve the skills of workers, or to cross train full performance workers of one trade to an intermediate skill level of another trade. Type A training sessions either (a) stress practical training involving little or no classroom type instruction, or (b) involve training in limited, narrow, or specialized aspects of a particular trade, such as blueprint reading or trade mathematics for machinists.

Training leaders, Type A, have as their paramount requirement experience in and knowledge of sufficient depth and range at the level of the particular trade at which they are giving training to permit them to conduct training sessions of this type. (As noted under the WORK NOT COVERED section of this standard, when the contents of the training sessions conducted are applicable alike to various occupations, and do not necessitate as a paramount requirement knowledge and experience in a particular trade, the positions of the persons conducting the training are excluded from coverage and are not graded as those of training leaders under this standard). In addition to the paramount requirement for trade experience and knowledge, training leaders must also be able to communicate effectively with students, both by oral means and by demonstrating work methods and techniques, particularly when utilizing on-the-job training methods. They are skilled in observing and testing students to determine their progress and performance.

Typical of this type of training are the following:

1. Updating or extending the skills of full performance workers in the methods, techniques, practices, tools, and manual skills of their trade when these are modified by the special requirements of reactor plant work, radiological controls, and special safety procedures.
2. Training full performance workers in the application of a special skill, such as silver brazing, to their particular trade.

Training leaders, Type A, conduct training sessions in which the practical aspects of the trade are emphasized, usually utilizing the on-the-job method of instruction. The proper technique or method of operation is demonstrated and explained to the worker who, subsequently, tries to duplicate it. Testing is done by observation as the worker performs the complete operation. Instruction in subjects involving trade theory is seldom included. These training programs are usually of short duration, extending over a period of a few days to a few weeks.

There are occasions when the classroom method of instruction is employed as in a program designed to train individuals how to perform their duties on nuclear powered vessels or to teach some narrow or specialized aspect of the trade such as blueprint reading, characteristics of materials, or trade mathematics. Training leaders, Type A, typically conduct such training

classes involving a single course which may or may not qualify the worker for a higher skill level of the trade upon completion of the course. They develop and revise daily lesson plans indicating the subject matter to be covered, the training materials to be used, and the method of presentation; develop and administer quizzes or informal examinations to test progress of class and, for certification and recertification purposes, administer and grade written, practical, and oral exams; maintain a record of each student's performance rating; offer counsel and guidance to students striving to improve performance; and report disciplinary problems to shop supervision.

TRAINING LEADER TYPE B

Training leaders, Type B, conduct training sessions under formal organized training programs which cover all phases of a recognized trade or line of work and are designed to progressively improve the student's skills. These training programs combine the on-the-job and classroom methods of instruction in the theory and practices of the trade or line of work. Examples of such programs are apprenticeship training plans or similar formalized plans such as those for advancing helpers to an intermediate target level or through all intermediate skill levels culminating at the full performance level.

Training leaders, Type B, typically conduct courses covering two or more different areas of the particular trade or line of work in which training is given, including the trades and labor occupational knowledge, skills, techniques, methods, procedures, and practices involved (for example, concurrently conducted courses in blueprint reading and characteristics of materials; or trade drawing, machine setup, and fabrication of parts).

Because of the breadth of knowledge and skills in which training is given, Type B training leaders have as their paramount requirement full knowledge and experience at the target level of the trade for which personnel are being trained. They must be knowledgeable of all phases of the trade appropriate to the target level so as to provide such personnel as apprentices, trainees, and helpers with the background knowledge and information required to perform at the target level and to provide a foundation for adjustment to future technological changes affecting the trade. This includes an intensive understanding of the use of measuring devices, precision instruments, tools, machinery, safety procedures, and materials used in the specific trade. They must also have the ability to utilize various instructional methods so that others will gain knowledge of the safety precautions, work sequences, procedures, and other trade practices consistent with the objectives to be accomplished. As appropriate with the objectives, they may be required to have knowledge of related subjects such as written and oral communications, shop mathematics, trade science, trade theory, and organizational relationships, policies, and practices that are usually taught in formalized programs such as apprenticeship programs.

In conducting training courses, training leaders, Type B, also furnish input in developing course outlines, job breakdowns, and testing and evaluation materials in the form of technical data, interpretation of specialized terminology, and information gained from personal experience, study of technical orders, trade magazines, and manufacturer's manuals, and completion of courses conducted by manufacturers or Federal agencies.

They revise and adapt daily lesson plans, based on course outline and needs of organization, portraying order of subject matter presentation, summaries, assignments, demonstrations, aids, and interim questions; develop and administer quizzes or informal examinations to test progress of class; administer previously prepared written and practical work assignment tests designed to measure progress of trainees and adequacy of training; prepare periodic appraisals for each trainee and maintain progress charts showing type of work and equipment worked on and performance rating on each type of work.

During that period of time in which training leaders exercise direct control over the student's activities, the trainers certify attendance; counsel students who appear to be falling behind in level of proficiency and suggest how improvement can be made; maintain classroom decorum, and report disciplinary problems to shop supervision.

TRAINING LEADER GRADING TABLE

Target Grade or Highest Level of Trade Skill and Knowledge Required (by the training leader)	Training Leader WL/NL Grades	
Grade	Type A	Type B
1		1
2	1	2
3	2	3
4	3	4
5	4	5
6	5	6
7	6	7
8	7	8
9	8	9
10	9	10
11	10	11
12	11	12
13	12	13
14	13	14
15	14	15

Federal Wage System Job Grading Standard for Supervisors

Table of Contents

WORK COVERED	2
WORK NOT COVERED.....	2
CODES AND TITLES	3
NOTES TO USERS.....	4
GRADING PLAN.....	6
FACTOR I, NATURE OF SUPERVISORY RESPONSIBILITY	7
FACTOR II, LEVEL OF WORK SUPERVISED	13
FACTOR III, SCOPE OF WORK OPERATIONS SUPERVISED	16
FACTOR III POINT CONVERSION CHART	20
GRADING TABLES.....	21
FINAL GRADE DETERMINATION.....	25

WORK COVERED

This standard is used to grade the jobs of supervisors who, as a regular and recurring part of their jobs, and on a substantially full-time and continuing basis, exercise technical and administrative supervision over subordinate workers in accomplishing trades and labor work.

The supervisory jobs covered by this standard have as their paramount requirement (1) experience in and knowledge of trades and labor work, *and* (2) skill and knowledge in supervising subordinate workers. Supervisors are accountable to agency management for the quantity and quality of the work done, and for assuring efficient and economical work operations. They assign, direct, and review the work of subordinates, and evaluate their work performance; plan, schedule, and coordinate work operations; solve problems related to the work supervised; determine material, equipment, and facilities needed; explain and gain the support of subordinates for management policies and goals (for example, cost reduction); work to achieve the objectives of Government-wide programs and policies, e.g., labor management relations and equal employment opportunity; deal with employees and union representatives on employee suggestions, complaints, grievances, and other matters, sometimes including labor-management contract negotiations; and perform a wide variety of other technical and administrative duties required in carrying out their responsibilities.

WORK NOT COVERED

This standard should not be used to grade the work of:

1. Supervising other workers when such supervisory work does not have as the "paramount requirement" for its performance experience in and a knowledge of trades crafts or labor work. (See the discussion of coverage in the Notes to Users section of this standard, and the basic guidelines for distinguishing trade, craft, and laboring jobs from General Schedule (GS) positions, contained in the Introduction to the Position Classification Standards.)
2. Supervising other workers in accomplishing trades and labor work when such supervisory duties are not performed as a regular and recurring part of the job and on substantially full-time and continuing basis. For example, excluded from coverage of this standard is supervisory work performed only (a) in the absence of the regular supervisor, (b) to assist a supervisor in meeting emergency workloads, (c) on a rotating or part-time basis with other employees, or (d) for training purposes to gain experience for a higher grade job. Note that this exclusion does not apply to supervisory jobs which meet the coverage requirements of this standard for extended periods of time but only on a seasonal basis (e.g., 6 months every year).
3. Leading prevailing rate workers as a regular and recurring part of the job, and on a substantially full-time and continuing basis, in accomplishing trades and labor work. Leaders perform duties such as setting the work pace, passing on to other workers the instructions received from supervisors, assigning the immediate tasks to be performed by

individual members of the group led, and assuring that their work assignments are carried out. (See the job grading standard for Leader jobs or standards for nonsupervisory trades and labor jobs as applicable.)

4. Exercising authority for technical direction, coordination, and oversight of trades and labor work programs, projects, and operations when such authority does not include either direct or indirect responsibility (through subordinate supervisors) for supervising nonsupervisory workers in accomplishing the work involved. Such jobs do not have continuing responsibility for all the work operations of one or more subordinate organizational units, or for the quality and quantity of the work performed by subordinate nonsupervisory workers. Rather, such jobs typically function as an extension of higher level management in exercising intensive technical oversight and control over particular work operations and projects which, because of their high priority, criticality, and/or importance to mission accomplishment, require special management attention.

CODES AND TITLES

Occupational Code

The occupational code of a supervisory job is normally the same as the code for the kind of work that is supervised. When work of more than one occupation is supervised, the occupational code of a supervisory job is the same as the code of the occupation which best reflects the overall nature of the work operations supervised and/or is the most important for recruitment, selection, placement, and other personnel purposes. Usually, *but not always*, this is the occupational code appropriate for the highest level of nonsupervisory work supervised. If no single occupation predominates, the 01 code of the most appropriate job family, or in some instances a job code that includes multiple trades and craft occupations, is used.

Titles

Supervisory jobs covered by this standard are identified by the job title of the occupation selected above followed by the title of *Supervisor*.

The job titles established in accordance with these instructions are to be used for all official personnel actions and reporting purposes. However, for purposes such as organizational designations, local titles, and signs, agencies may establish and use their own official organizational or functional titles. For example, the organizational title for a supervisor who is head of a Carpentry Branch might be Chief, Carpentry Branch. General instructions for titling and coding supervisory jobs are in Part I of Job Grading System for Trades and Labor Occupations.

NOTES TO USERS

Coverage

The determination that this standard is to be used to grade jobs involving supervisory duties requires two decisions, both of which must be made as discussed below:

The first decision concerns the pay category which applies to the job being graded--the selection of the pay system under which the job involved should be paid. Title 5 of the United States Code exempts from coverage under the General Schedule only those supervisors in jobs having trades, crafts, or laboring experience and knowledge as the "paramount requirement" to accomplish the primary duty of the job. For the purpose of determining the pay category of jobs primarily involving supervisory work, the "paramount requirement" is the most important or chief requirement for the performance of the primary supervisory duty for which the job exists.

1. That a job requires trades, crafts, or laboring experience and knowledge does not necessarily mean that this requirement is paramount. Experience and knowledge in trades and crafts work that can be obtained through other means such as on-the-job training or work experience as an equipment specialist, production controller, or engineering technician does not meet the intent of the "paramount requirement." In addition to determining the nature of the experience and knowledge, it is necessary to distinguish between trades and crafts and related knowledges. Knowledge of production, repair, maintenance, and similar work operations which emphasize aspects of work such as workflow, equipment capabilities, materials, skills, and amounts of time required to accomplish work operations are related to trades and crafts but are *not* examples of trades and crafts knowledge. It is important to note that the larger the scope of work functions supervised or the higher the location of the supervisory job in the chain of supervision above the nonsupervisory workforce, the more likely it is that managerial knowledge and skill constitute the "paramount requirement" rather than any trade, craft, or laboring experience which may be desirable or necessary.
2. The second decision which must be made involves a determination as to whether the nature and extent of the supervisory work performed are sufficient to warrant selection of this standard for grading purposes.

As a matter of policy, the requirements which must be met for coverage of a job under this supervisory standard are significantly more stringent than the procedures governing grade level determinations involving nonsupervisory jobs and/or performance of "mixed" duties at different grade levels.

Jobs which do not meet the requirements for use of this standard must be graded under the nonsupervisory grade structure of the Federal Wage System (FWS) using nonsupervisory job grading standards (e.g., Leader), or other guidance and instructions issued by the Office of Personnel Management.

Working supervisors

Supervising other workers in accomplishing trades and labor work is excluded from coverage by this standard when such supervisory duties are not performed as a regular and recurring part of the job and on a substantially full-time and continuing basis. (See exclusion statement 2 under Work Not Covered.) However, care must be used to distinguish such excluded work from supervisory duties, performed by working supervisors, *which are covered by this standard*. For example, some covered supervisors, in addition to the exercise of supervisory responsibilities, personally perform nonsupervisory trades and labor work. Typically, supervisory duties are performed by such "working" supervisors throughout the workday (or work shift) as needed or otherwise appropriate. Thus, the supervisory duties are mingled with the accomplishment of other regular nonsupervisory work. The amount of time spent by working supervisors in accomplishing supervisory duties, as distinct from regular nonsupervisory work, varies with work situations and operating needs. However, the supervisory responsibility assigned to the supervisor remains in effect and continues to be exercised even when, as discussed above, the supervisor is personally engaged at various times in nonsupervisory work. Therefore, the percentage of time spent in the performance of supervisory duties should not be considered in determining whether working supervisory jobs meet the criteria for coverage under this standard. Rather, in addition to all other criteria, users of the standard must consider whether supervisory responsibility has been assigned officially by competent management authority.

Interrupted assignment as supervisor

In some work situations, assignment of supervisory responsibility is interrupted for relatively short periods of time, e.g., 2 weeks, before being resumed. For example, typical of such a situation is one in which a supervisor is responsible for directing subordinates in accomplishing work operations at a distant work location. On completion of the assigned work or project, the supervisor may return to the home base, installation, or office. A relatively short period of time then may pass before the supervisor is given a new supervisory assignment. For the purposes of this standard, interruptions in the exercise of supervisory responsibility for "home" leave or reassignment to a new duty station does not preclude a supervisory job from meeting the requirement of this standard that supervisory duties be performed on a substantially full-time and continuing basis. Such jobs are covered by this standard if they meet all other criteria for coverage.

Supervisory jobs with correctional responsibilities

Because of the great variety of Federal work operations and missions, considerable care is needed in applying this standard. One of the most complex situations demanding such care is that in which worker-inmates are supervised in accomplishing trades and labor work at correctional facilities. Because of differences among such facilities, particularly with respect to the nature and needs of the worker-inmate populations and security considerations involved, there may be significant differences in the purpose and nature of the "supervision" exercised. However, at most correctional facilities, both factory-style production and facility maintenance work operations may be supervised with a strong business-like emphasis on profitability, cost

control, efficiency, and adherence to work schedules. Although supervisors in such work settings do not have the same administrative responsibilities as supervisors of Federal employees, that lack is more than offset by their significant role in training, counseling, motivating, and maintaining discipline and security in relation to a workforce with special and unusually difficult needs. This standard applies to such jobs if they meet the basic coverage requirements.

Definitions of terms

For the purpose of this standard, certain terms used have the following meaning:

1. *Administrative accountability* is responsibility for matters such as attendance, leave, vacation schedules, grievances, and discipline.
2. *Organizational segment* is a part of a larger organization which is typically identified separately on official organizational charts by designations such as unit, section, branch, division, or shop. However, there is little consistency in the use of such designations by Federal agencies. For example, the scope of the work operations accomplished by a section at one Federal installation may be greater than the scope of similar work operations performed by a division or shop at a different facility. To assure consistent interpretation of the intent of this standard, it is stressed that all references in this standard to more than one organizational segment, for example, "coordination of organizational segments or groups," are intended to refer to organizations whose work operations, together, are of such scope that they must be carried out under the direction of one or more levels of supervision.
3. *Substantive work* is that work which directly carries out the main purpose or mission of the work operations supervised, and primarily determines the technical qualifications required to carry out effectively the responsibilities of the supervisory job being graded.
4. *Technical accountability* is responsibility for the quantity and quality of the work performed by subordinates, requiring the application by the supervisor of knowledge of the methods, techniques, procedures, tools, materials, and practices of the involved occupation (or occupations).

GRADING PLAN

The instructions and criteria contained in this standard are based on studies of trades and labor jobs in both the Federal and private sectors. The provisions of this standard are designed to assure that the grade levels of supervisory jobs under the FWS result in compensation that is consistent with private sector practice for comparable jobs and in full conformance with the pay policies established by the Office of Personnel Management (OPM) for FWS supervisors.

This standard contains instructions and job grading criteria which apply to all trades and labor supervisory jobs which meet the requirements for coverage under this standard.

The grading plan in this standard provides for grading supervisory jobs under a 19 level supervisory grade structure. However, there are only 18 permissible grade levels. Grade 18 is the highest permissible grade level; grade 19 is used only for pay setting purposes. The grading plan consists of three factors, grading tables, and instructions for their application.

The following three factors are used for grading supervisory jobs:

- Factor I. Nature of Supervisory Responsibility
- Factor II. Level of Work Supervised
- Factor III. Scope of Work Operations Supervised

The following sections of the standard provide a fuller description of the three grading factors and the instructions for applying them to supervisory jobs.

FACTOR I, NATURE OF SUPERVISORY RESPONSIBILITY

This factor considers the nature of the supervisory duties performed, and the type and degree of responsibility for control over the work supervised. The factor describes four basic supervisory situations. These, in sequence, depict successively higher levels of supervisory responsibility and authority for scheduling work operations, planning use of resources (i.e., subordinate workers, equipment, facilities, materials, and tools) to accomplish scheduled or unscheduled work, directing subordinates in performing work assignments, and carrying out administrative duties.

To determine the level of supervisory responsibility which applies:

- Compare the job being graded with the nature and degree of responsibility described in the supervisory situations below.
- Select the supervisory situation which represents the highest level of supervisory responsibility that is fully met. Do not select a higher level which is not completely met, even if some of the characteristics of the higher level match those of the job being graded. In such cases, select the "lower" situation but note, for later consideration, that the job being graded exceeds the level of responsibility represented by the situation selected. (**Note:**--jobs must meet or exceed the criteria in Situation #1 to be evaluated under this standard.)

It should also be noted that the following supervisory situations are only intended to reflect different levels of supervisory authority and responsibility. They are not comprehensive or detailed descriptions of supervisory jobs. Consequently, in comparing a supervisory job being graded with the supervisory situations below, there usually will be duties or other aspects of the job which have not been mentioned in the descriptions of the supervisory situations. Such duties or other aspects of the job, which have been omitted from the descriptions of the supervisory

situations, cannot be considered or credited in determining whether the job meets or exceeds the level represented by the description of a particular supervisory situation.

Under these instructions for applying Factor I, it is possible that two supervisory jobs, one the superior of the other, may both warrant the selection and crediting of the same supervisory situation. Usually, differences recognized when applying grading Factors II and III will be sufficient to provide proper grade distinctions between two such jobs.

Note: The presence or absence of centralized production planning organizations is not to be considered as an offsetting factor in determining which of the following supervisory situations apply.

Situation #1

Supervisors are primarily responsible for supervising workers, either directly or through subordinate leaders, in accomplishing trades and labor work operations in a segment of an organization, a group, or work shift. Supervisors perform the following:

Planning

- Plan the use of workers, equipment, facilities, materials, and tools on a day-to-day or project-by-project basis;
-
- Adhere to work priorities, project schedules, resources, and detailed work plans established by higher level supervisors;
- Follow customary work cycles and sequences in planning work assignments;
- Track and report progress on work assignments and request authority to adjust worker assignments and to use overtime, equipment, and materials to meet schedules; and
- Recommend changes to schedules, priorities, and work sequences as necessary and make minor deviations in procedures or redirect resources under their control to overcome problems such as equipment failure, material delays, or unplanned absences.

Work Direction

- Assign work to individuals and provide technical direction and/or help in accomplishing difficult work steps and processes;
- Observe work in progress to anticipate and resolve problems, reassign personnel within group supervised, and coordinate work among workers and other supervisors to maintain work progress to meet schedules;

- Inspect completed work for quality and work order requirements; and
- Report possible or actual work delays to their supervisors.

Administration

- Support and explain management programs to their subordinates;
- Recommend performance ratings, training, disciplinary actions, changes in performance standards, and the most suitable applicants for vacancies;
- Advise and counsel workers on how to improve their performance and explain new work techniques;
- Investigate grievances and complaints, resolve them informally, and notify supervisors of those of sufficient importance or seriousness;
- Assure safety and housekeeping practices are observed; and
- Maintain work reports and records and assist supervisors in planning overall leave schedules.

Situation #2

Supervisors in Situation #2 are responsible for supervising workers directly or through subordinate leaders *and/or* supervisors in accomplishing the work of an *organizational segment or group*. Supervisors in Situation #2 differ from supervisors in Situation #1 primarily in planning work operations of greater scope and complexity; determining the sequence, priority, and time for the performance of particular operations within the limits of broader work schedules and time limits; and exercising greater administrative authority. In addition to the duties described in Situation #1, supervisors in Situation #2 perform the following:

Planning

- Plan use of subordinate workers equipment, facilities, materials on a week-to-week or month-to-month basis;
- Establish deadlines, priorities, and work sequences, and plan work assignments based on general work schedules, methods, and policies set by higher level supervisors;
- Coordinate work with supporting or related work functions controlled by other supervisors;
- Determine the number and types of workers needed to accomplish specific projects;

- Redirect individual workers and resources to accomplish unanticipated work (e.g., work resulting from "open and inspect" types of work orders);
- Inform higher level supervisors of the need to revise work schedules and re-estimate labor and other resources; and
- Participate with their superiors in the initial planning of current and future work schedules, budget requests, staffing needs, estimates, and recommendations as to scheduling projected work.

Work Direction

- Investigate work related problems such as excessive costs or low productivity and determine causes;
- Implement corrective actions within their authority to resolve work problems; and
- Recommend solutions to staffing problems, engineering requirements, and work operations directed by other supervisors.

Administration

- Plan and establish overall leave schedule;
- Determine training needs of subordinates and arrange for its accomplishment, set performance standards, and make formal appraisals of subordinate work performance; and
- Initiate recommendations for promotion or reassignment of subordinates.

Situation #3

Supervisors in Situation #3 are responsible for the overall direction and coordination of subordinate work activities and functions. Supervisors in Situation #3 differ from supervisors in Situations #1 and #2 primarily in that the work operations are of such scope, volume, and complexity that they are (1) carried out by subordinate supervisors in two or more separate organizational segments or groups, and (2) controlled through one or more levels of supervision.

In addition to the duties described in Situation #2, supervisors in Situation #3 perform the following:

Planning

- Plan on a quarterly or longer basis the overall use of subordinate personnel and other resources under their control;
- Determine resource requirements, materials, and the number of subordinates and the types of skill necessary to accomplish long-range work schedules;
- Allocate resources and distribute work to organizational segments or groups under their control;
- Analyze work plans developed by subordinate supervisors and monitor the status of their work in relation to the overall schedule requirements, including unanticipated or emergency requirements;
- Obtain prior approval of changes that would modify or deviate overall work schedules or affect work operations controlled by supervisors not under their control; and
- Provide information and advice to higher level supervisors, management officials, and staff organizations on feasibility of work assignments as scheduled, budget estimates, and workload data to assist in developing or reviewing proposed long-range schedules and work requirements, and may participate with superiors in planning conferences and meetings.

Work Direction

- Assign and explain work requirements and operating instructions to subordinate supervisors and set deadlines and establish the sequence of work operations to be followed;
- Maintain balanced workloads by shifting assignments, workers, and other resources under their control to achieve the most effective work operations;
- Review and analyze work accomplishments, cost, and utilization of subordinates to evaluate work progress, control costs, and anticipate and avoid possible problems by recommending corrective action to superiors;
- Participate with management officials and/or engineering personnel to develop qualitative and/or quantitative work standards;
- Evaluate work operations and review completed work and inspection reports to assure that standards are met; and
- Coordinate work operations with the supervisors of other organizations and functions.

Administrative

- Assure that subordinate supervisors effectively carry out policies to achieve management objectives;
- Recommend promotion or reassignment of subordinate supervisors, make formal appraisals of their performance, and determine their training needs;
- Schedule leave of subordinate supervisors, review personnel actions and performance appraisals initiated by them, and act on personnel problems referred by subordinate supervisors, and maintain administrative records; and
- Serve as a management representative at hearings, meetings, and negotiations involving labor management relations.

Situation #4

Supervisors in Situation #4 differ from supervisors in Situation #3 in the nature of their participation with other management officials in (1) the planning and establishment of long-range work requirements and schedules, (2) the authority deriving from their responsibilities as the highest level "blue-collar" subject matter expert for work accomplished under their direction, and (3) the work activities and functions under their direction are typically controlled through two or more levels of supervision. In addition to the duties described in Situation #3, supervisors in Situation #4 perform the following:

Planning

- Provide direct input or participate in meetings and/or conferences with engineering, production control, and other personnel involving the initial analysis of long-range work requirements (typically, 6 months or longer in advance of the beginning of actual work operations);
- Review the immediate and long-range requirements of the organizational segments and groups supervised based on workload forecasts, and develop, for approval by their superiors, plans for meeting long-range resource requirements;
- Plan the allocation of resources and the distribution of work to subordinate supervisors, and determine the internal plan to be followed by the subordinate supervisors in applying those resources to accomplish work operations;
- Evaluate resources required to accomplish the proposed work "packages" or program(s) in relation to the resources committed to ongoing and previously scheduled work operations and recommend changes to superiors concerning previously planned work schedules; and

- Participate fully with higher level management officials and staff organizations in studying and developing recommendations concerning changes in specifications requirements, work techniques, and standards; revision of organizational structures, responsibilities, and relationships; and improvement or modernization of equipment, facility layout, and workflow.

Work Direction

The work direction in Situation #4 is the same as that described in Situation #3.

Administration

- Develop and establish internal procedures (e.g., meetings, content, and timing of reports) to be followed by subordinate supervisors to assure effective control and direction of work activities, organizations, and personnel supervised; and
- Identify long-range training needs for all levels of subordinate supervisors and workers and submit justification and funding requests to superiors and arrange for the accomplishment of the training.

FACTOR II, LEVEL OF WORK SUPERVISED

This factor concerns the level and complexity of the work operations supervised, and their effect on the difficulty and responsibility of the supervisor's job.

To determine the level of nonsupervisory work to be credited under this factor, as indicated in steps 1 and 2 below, consider all substantive work, whether under the direct or indirect supervision of the job being graded, for which the supervisor is technically accountable. Credit should not be given under this factor for work operations involving only administrative responsibility by the supervisor.

Determine the level of work supervised in accordance with the following two steps:

Step 1. Identify the occupation (or various occupations) directly involved in accomplishing the work assignments and projects which reflect the main purpose or mission of the work operations for which the supervisor is accountable.

The number of subordinates in an occupation does not, in itself, determine the occupation (or different occupations) to be identified. For example, where the primary purpose or mission of the work operations supervised is the manufacture of machined parts, the supervisor might direct machinists and machine tool operators in manufacturing the parts, as well as toolmakers in making special tools for use by the machinists and machine tool operators in the machining operations supervised. In this situation, the machinist and machine tool operator occupations would be properly identified as being directly involved in accomplishing the primary purpose of the work operations supervised. In contrast, the toolmaking occupation should not be identified

because, in the particular situation described in this example, toolmaking is performed as a supporting (facilitating) function.

On the other hand, where the primary purpose of the work operations supervised is the manufacture of tools, the supervisor might direct toolmakers in the manufacture of the tools, as well as machinists and machine tool operators in making parts for the tools. In this situation, the toolmakers, machinists, and machine tool operators all contribute directly to the manufacture of the tools. Accordingly, the toolmaker, machinist, and machine tool operator occupations should all be identified because all are directly involved in accomplishing the primary purpose and mission of the work supervised.

Thus, in accomplishing step 1, one or more occupations must be identified, as appropriate, depending on the nature of the work operations involved. When a supervisor is accountable for two or more separate or different functions, each with its own primary purpose or mission, the different occupations directly involved in carrying out each of the separate functions must be identified, even if one of the functions is significantly smaller in terms of the number of subordinates involved.

Step 2. Determine the grade of the highest level nonsupervisory work accomplished by subordinates who, under normal job controls, perform the work of one or more of the occupations identified in step 1 above. In determining the grade level to be credited, care must be used to make certain that the grades of the subordinate jobs really reflect the level and complexity of the work operations supervised and their effect on the difficulty and responsibility of the supervisor's job. For example, in some work situations, nonsupervisory jobs may have been given one or more extra (higher) grades such as for:

- exercising "shift," "watch," "small shop chief," or "crew chief" responsibility;
- accomplishing work with extraordinary independence and freedom from supervision;
- demonstrating special occupational expertise;
- assisting the supervisor in the planning of work operations;
- serving as senior workers and reviewers of the work performed by other workers in the same unit or group (i.e., by co-worker under the supervisory job being graded); and
- performing higher level work under the technical supervision of a different supervisor (i.e., not under the direct or indirect supervision of the supervisor whose job is being graded).

If nonsupervisory jobs have been given higher grades in situations such as those described above, the extra grade (or grades) should not be credited in determining the level of work supervised.

The grade arrived at by these steps normally is the level of work supervised to be credited in determining the grade of a supervisory job. However, there is one situation in which special rules apply.

Constructed level of work supervised:

There are exceptional situations in which the use of a constructed level of work supervised is permitted. These unusual circumstances arise when the nonsupervisory performance level that is normal (i.e., usual or typical) for the kind of work operations involved temporarily is not reflected in any of the jobs supervised. For example, this may occur when all subordinate jobs have been redesigned to permit use of workers who have limited skills and are being trained for a period of time, such as 3 to 6 months, to enable them to work at the normal performance level. For the purpose of this standard, the nonsupervisory level that is "normal" for work operations is the nonsupervisory grade that would result if the work operations involved were organized and work assignments were made in the most cost effective manner possible, consistent with production or other work objectives.

Great care must be used to assure that the construction of a level of work supervised is warranted. Use of a constructed level is not permitted when operations and work assignments have been redesigned for use on a continuing, permanent basis rather than for use during temporary periods of training.

Similar care must be used to make certain that constructed grades are realistic and only reflect the normal level of work by individual workers in accomplishing the kind of work operations involved.

For example, in some situations, the fabrication of a product or the accomplishment of other kinds of work operations may require the performance of different tasks, in sequence, by different employees. If use of a constructed level of work supervised were warranted, it is emphasized that the grade to be constructed and credited usually would not be the grade that would result if one nonsupervisory worker were performing all the tasks involved in accomplishing the work operations supervised. Rather, the grade to be constructed would be the grade appropriate for one nonsupervisory worker performing only the range of tasks typically assigned to one worker.

Caution must also be used to avoid considering the nature and level of the supervisor's personal contribution of technical subject-matter/occupational knowledge and skill to the accomplishment of day-to-day work operations. This factor (Factor II) concerns only the level of work performed by subordinates, whether actual or constructed. It is not intended to credit "supervisory" responsibility over the level of the supervisor's own personal contributions to work accomplishment. Such personal contributions should be graded, as appropriate, by the application of nonsupervisory job grading standards. Construction of a level of work supervised which is based on the work done by the supervisor is not permitted. (See the instructions later in this standard for grading mixed supervisory-nonsupervisory jobs.)

Finally, it should be noted that there may be situations under this factor in which the level of work supervised, as determined under the provisions of this standard, will not be the highest level of work for which the involved supervisor has technical accountability. For example, when the highest graded work supervised involves support or facilitating work which is not creditable under this factor or when the highest level of work supervised is based upon a single job which does not accurately reflect the level and complexity of work operations supervised, it should not be credited as the level of work supervised. *Seldom, if ever, should a single job serve as a basis for a base level grade determination.* Usually, the work aspects of a single job fail to provide valid indicators as to the actual level and complexity of the work operations supervised and their effect on difficulty and responsibility of the supervisor's job. However, when the above situations occur, note that fact for later consideration. (Reference *Grade Level Adjustments* discussed in the FINAL GRADE DETERMINATION section below.)

FACTOR III, SCOPE OF WORK OPERATIONS SUPERVISED

This factor considers the scope of the job's supervisor responsibility in terms of: (1) the scope of the assigned work function and organizational authority; (2) the variety of functions the job is required to supervise; and (3) the physical dispersion, work coordination, and location of subordinate employees. This factor is divided into three subfactors, which are in turn subdivided into levels with points assigned to each level. An appropriate level is selected for each subfactor and the corresponding point values are totaled. The total points are then converted to specific levels under Factor III using the conversion chart located at the end of this factor.

Subfactor A. Scope of Assigned Work Function and Organizational Authority

This subfactor measures the scope of the assigned work function or mission, i.e., the purpose of the job in the organization, the extent and nature of the job's authority in relation to the organizational assignment, and the importance of the jobs' decisions. To determine the proper subfactor level for a job, careful judgment must be used to identify the actual supervisory authorities assigned to the job and how they are exercised.

Level A-1 (30 points)

Supervisors at this level have first level supervisory and decision authority over a single work function. Decisions made at this level are clearly defined or virtually automatic since higher level management has already established a course of action and a methodology for implementation.

Level A-2 (45 points)

At this level, supervisors have first or second level supervisory and decision authority over an organizational segment which typically has been established on the basis of being a distinct work function or mission; or a designated geographic location or work area. Supervisors make routine decisions regarding execution of policy which has been interpreted or established by the next higher level. At this level, subordinate supervisors and/or leaders may be necessary to accomplish work operations. Supervisors at this level react to variations in the workplace and maintain a balanced workload between subordinate work groups, making adjustments in workload as necessary. Decisions typically involve the work or assignments and how they are completed.

Level A-3 (75 points)

Supervisors at this level have second level or higher supervisory and decision authority for work functions or a portion of a mission requirement (e.g., a specific program in a designated geographic location or a specific function). The scope of the mission or work functions at this level typically requires supervisors to utilize several subordinate supervisors and leaders through structured working relationships among subordinate groups of employees, formal procedures for scheduling and assigning work and work results, and the issuance of instructions through subordinate supervisors and leaders. At this level supervisors make interpretive decisions within the program limits established at higher levels.

Level A-4 (110 points)

At this level, supervisors have supervisory authority for major work functions or missions. The scope and diversity of work at this level requires supervisors to utilize a large group of subordinate supervisors and leaders typically through two or more levels of supervision to control and manage work functions or missions. Supervisors at this level exercise planning and programming decision authority for the execution of policy made at higher organizational levels. At this level, supervisors must continually evaluate and improve operational effectiveness by studying the work structure and methods, examining various alternatives, calculating benefits to be achieved, and recommending basic changes.

Subfactor B. Variety of Function

This subfactor evaluates the difficulties of technical supervision of work functions which may vary from being essentially similar to markedly dissimilar. Similar or related work functions have a common or related body of knowledges, skills, work procedures, and tools, for example, pipefitting and plumbing, carpentry and wood working, aircraft mechanic and aircraft engine mechanic, or machining and machine tool operating. Supervision of dissimilar or unrelated work functions require broader technical knowledges and planning and coordination skills than those required for supervision of similar work functions.

For evaluation purposes, work that represents "mixed jobs" or a combination of two or more recognized occupations is evaluated on the basis of the separate occupations, series coverage, and grade level criteria such as Utility Systems Operating, 5406. (Note: Work which is incidental or in support of the primary function has no affect on this subfactor, for example, a laborer driving a truck to a work site in support of the work function or a materials handler operating a forklift or warehouse tractor.)

Level B-1 (25 points)

Supervisors at this level direct the work of subordinates in accomplishing an assigned function in one or more similar or related occupations at grades 1-7.

Level B-2 (35 points)

This level is similar to the preceding level except that supervisors at this level direct the work of subordinates in two or more dissimilar or unrelated occupations at grades 1-7.

Level B-3 (50 points)

Supervisors at this level direct the work of subordinates in one or more similar or related occupations at grades 8-13.

Level B-4 (60 points)

This level is similar to the preceding level except that supervisors at this level direct the work of subordinates in dissimilar or unrelated occupations at grades 8-13.

Level B-5 (70 points)

Supervisors at this level direct the work of subordinates in accomplishing assigned functions which are performed in similar or related occupations at grades 14-15.

Level B-6 (80 points)

This level is similar to the preceding level except that supervisors at this level direct the work of subordinates in dissimilar or unrelated occupations at grades 14-15.

Subfactor C. Workforce Dispersion

This subfactor evaluates the varying levels of difficulty associated with monitoring and coordinating the work of nonsupervisory and supervisory personnel who vary from being collocated to widely dispersed. Dispersion of workforce considers the duration of projects, number of work sites, frequency of dispersion, and the necessity to monitor and coordinate the work. (Note: It is possible to have no points credited for this subfactor if subordinate employees are located in the same contiguous work area with the supervisor, when dispersion occurs)

infrequently, or when dispersion is inherent, and the work is performed in the absence of direct supervision, e.g., operating a motor vehicle.)

Level C-1 (5 points)

Subordinate employees are located in several buildings or at work sites within a defined location such as a military base, National Park, or large Federal complex consisting of many multifloor buildings and support facilities. Work assignments vary in terms of duration; however, most assignments at this level are of a limited duration (e.g., assignments are typically accomplished within a few days or weeks). In addition, this level also includes off-base (i.e., within the local commuting area) facility support and maintenance assignments.

Level C-2 (15 points)

Subordinate employees are located in work groups of varying sizes at numerous job sites within large military bases (e.g., air rework facilities, supply depots, shipyards, and comparable Federal facilities). Employees or work groups at this level may on occasion work outside of the commuting area or across State lines. Work assignments at this level are typically on an ongoing basis and are accomplished within several weeks or months. For example, this would include employees who regularly repair, overhaul, and maintain ships in dry dock or aircraft at depots.

Level C-3 (30 points)

Subordinate employees (i.e., work teams) are located in one or more work areas and are routinely assigned work projects for varying lengths of time which cover large geographic areas such as two or more states. For example, this level would include employees who regularly service, troubleshoot, repair, and/or maintain equipment or machinery at missile, Loran, or communication sites.

Level C-4 (50 points)

Subordinate employees (i.e., work teams) are similar to those identified at Level C-3 except that employees at this level are routinely assigned work projects for varying lengths of time in foreign countries and/or aboard ships at sea.

FACTOR III POINT CONVERSION CHART

Level A	55 to 65 points
Level B	70 to 110 points
Level C	115 to 135 points
Level D	140 to 160 points
Level E	165 to 195 points
Level F	200 and Above

GRADING TABLES

This section of the standard contains grading tables and instructions for their use in making determinations. A separate grading table is provided for each of the four supervisory situations defined in this standard (Factor I).

Each table provides a different grade pattern that is geared to the particular supervisory situation to which it applies. For example, the table for supervisory Situation #1 cannot be used to grade jobs that meet the requirements for Situation #2.

The following steps must be followed in applying the grading tables:

Initial grade determination

To initially determine the grade level of the job being graded:

- Select the grading table that applies to the supervisory situation involved (Factor I);
- Find the appropriate level of work supervised (Factor II) in the left-hand column of the table; and
- Find the applicable level for work operations supervised (Factor III) at the top of the other columns on the table. The resulting grade level is shown in the space on the table created where the level of work supervised line crosses the scope of work operations supervised column.

GRADING TABLES

Supervisory Situation #1 (Factor I)						
Level of Work Supervised (Factor II)	Scope of Work Operations Supervised (Factor III)					
	A	B	C	D	E	F
Nonsupervisory Grades	Supervisory Grades					
1	1	1	2	2	3	4
2	1	2	2	3	4	5
3	2	2	3	4	5	6
4	2	3	4	5	6	7
5	3	4	5	6	7	8
6	4	5	6	7	8	9
7	5	6	7	8	9	10
8	6	7	8	9	10	11
9	7	8	9	10	11	12
10	8	9	10	11	12	13
11	9	10	11	12	13	14
12	10	11	12	13	14	15
13	11	12	13	14	15	16
14	12	13	14	15	16	17
15	13	14	15	16	17	18

Supervisory Situation #2 (Factor I)						
Level of Work Supervised (Factor II)	Scope of Work Operations Supervised (Factor III)					
	A	B	C	D	E	F
Nonsupervisory Grades	Supervisory Grades					
1	1	2	2	3	4	5
2	2	2	3	4	5	6
3	2	3	4	5	6	7
4	3	4	5	6	7	8
5	4	5	6	7	8	9
6	5	6	7	8	9	10
7	6	7	8	9	10	11
8	7	8	9	10	11	12
9	8	9	10	11	12	13
10	9	10	11	12	13	14
11	10	11	12	13	14	15
12	11	12	13	14	15	16
13	12	13	14	15	16	17
14	13	14	15	16	17	18
15	14	15	16	17	18	-

NOTE: Grade WS-18 is the highest grade permissible for FWS supervisors.

Supervisory Situation #3 (Factor I)					
Level of Work Supervised (Factor II)	Scope of Work Operations Supervised (Factor III)				
	B	C	D	E	F
Nonsupervisory Grades	Supervisory Grades				
1	4	5	5	6	7
2	5	5	6	7	8
3	5	6	7	8	9
4	6	7	8	9	10
5	7	8	9	10	11
6	8	9	10	11	12
7	9	10	11	12	13
8	10	11	12	13	14
9	11	12	13	14	15
10	12	13	14	15	6
11	13	14	15	16	17
12	14	15	16	17	18
13	15	16	17	18	-
14	16	17	18	-	-
15	17	18	-	-	-

NOTE: Grade WS-18 is the highest grade permissible for FWS supervisors.

Supervisory Situation #4 (Factor I)				
Level of Work Supervised (Factor II)	Scope of Work Operations Supervised (Factor III)			
	C	D	E	F
Nonsupervisory Grades				
1	6	6	7	8
2	6	7	8	9
3	7	8	9	10
4	8	9	10	11
5	9	10	11	12
6	10	11	12	13
7	11	12	13	14
8	12	13	14	15
9	13	14	15	16
10	14	15	16	17
11	15	16	17	18
12	16	17	18	-
13	17	18	-	-
14	18	-	-	-
15	-	-	-	-

NOTE: Grade WS-18 is the highest grade permissible for FWS supervisors.

FINAL GRADE DETERMINATION

The grade level initially determined above usually will be the final grade resulting from application of the preceding sections of this standard. However, additional rules and grade adjustments may apply in some circumstances as indicated below.

Jobs of Full Assistants

When a supervisor is the full assistant on a full-time basis to a superior, and has direct day-to-day line authority over all personnel and work operations for which the superior is responsible, *the job of the superior is graded first*, without regard to the full assistant. The full assistant supervisor then is graded *one grade below the final grade of the superior*. (Full assistant jobs are "one-person" jobs clearly recognized as being in the "Number 2" spot of the organization or activity with full authority to act on all matters within established procedures for which the superior is responsible.)

Duties Performed in the Absence of a Superior

When a supervisor acts in the absence of a superior, the supervisor is graded on the basis of the supervisor's regular duties and responsibilities. No additional grade should be added for serving in the absence of the superior.

Mixed Supervisory-Nonsupervisory Jobs

When both supervisory responsibilities and nonsupervisory work are a regular and recurring part of a job, the supervisory duties and nonsupervisory work are first graded separately. The final grade of such a job is then determined by selecting the supervisory or the nonsupervisory grade which results in the higher pay rate for the job.

NOTE: When the final grade of such a job is based on its nonsupervisory work, the job is titled, coded, and graded as a nonsupervisory job. However, if the supervisory duties of such a job are considered significant for recruitment and selection purposes, a parenthetical supervisory indicator should be added to the basic nonsupervisory title, for example, Die Sinker (Supervisor), 3428-14.

Grade Level Adjustments

Both upward and downward changes from the tentative grade are required based on circumstances described below. In determining the adjustment to be made, a work situation requiring a downward grade adjustment balances and cancels a situation requiring an upward grade adjustment. Two strengthening situations outweigh a single weakening situation and, conversely, two weakening situations outweigh a single strengthening one. (**Note:** Upward grade adjustments do not apply to jobs properly graded at WS-18. Grade level adjustments may not exceed one grade level.) The following rules apply in making grade adjustments:

When the number of applicable situations calling for an upward grade adjustment exceeds the number of applicable situations requiring a downward adjustment, an upward adjustment of one grade is warranted.

- When the number of applicable situations calling for a downward grade adjustment exceeds the number of applicable situations requiring an upward grade adjustment, a downward adjustment of one grade is required.
- When the number of applicable situations calling for an upward grade adjustment is the same as the number of applicable situations requiring a downward grade adjustment, no grade adjustment is warranted.

A downward grade adjustment is indicated when the following situation is met:

Alignment between higher and lower level supervisors

When the grade of a supervisor's job, resulting from application of the grading table, would be the same as the grade of the supervisor's superior, the grade of the supervisory job being graded must be adjusted *downward*.

Upward grade adjustments are indicated in the following situations:

1. Borderline jobs

The grade of a supervisory job must be adjusted upward from the initially determined grade when both of the following conditions are met:

- The job being graded substantially exceeds the supervisory situation (Factor I) which was credited in applying the grading table; and
- The level of work supervised (Factor II) which was credited in applying the grade table is not the highest level of work performed by subordinate workers for which the supervisor has full technical accountability.

3. Work situations which impose special or unusual demands on the supervisor

In some situations, the nature of the work operations supervised, the mission to be accomplished, or other circumstances impose special demands on the supervisor involved. These special requirements may significantly affect the intensity of the supervisory effort, and the level of both technical and administrative knowledge and skill which must be applied.

In the situations noted below, the preceding provisions of this standard do not fully recognize and credit the impact on the supervisory job of such special requirements. Accordingly, when the following situation applies, the grade of the job being graded must be adjusted upward.

Special staffing requirements

In some work situations, special staffing requirements may impose on the supervisor a substantially greater responsibility for job design, job engineering, work scheduling, training, counseling, motivating, and maintaining security than that which is normally encountered in orienting, training, and supervising subordinates in accomplishing work. For example, special employment programs such as work-study, rehabilitation, and others, may be geared toward utilizing employees with very low level skills and inappropriate or no work experience. Other "staffing" situations, such as those at correctional institutions, also may involve exceptionally difficult attitudinal, motivational, control, and security problems. An upward grade adjustment may be made in determining the grade of a supervisor directly responsible or indirectly responsible (through subordinate supervisors) for work operations involving such exceptional conditions that affect the majority of the subordinate workforce when all of the following are present:

- The special staffing circumstances, rather than being temporary or intermittent in duration, affect the responsibilities of the supervisor on a permanent and continuing basis;
- Job assignments, work tasks, training, security measures, and other supervisory actions must be tailored to fit these special circumstances for individual workers; and
- Counseling and motivational activities are regular and recurring, and are essential to the effective handling of the special work situation.



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