

**GENERAL SERVICES ADMINISTRATION
FEDERAL SUPPLY SERVICE
AUTHORIZED FEDERAL SUPPLY SCHEDULE CATALOG/PRICE LIST**

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order is available through *GSA Advantage!*, a menu-driven database system. The INTERNET address for *GSA Advantage!* is <http://www.qsaadvantage.gov>.

SCHEDULE TITLE: 736 - Temporary Administrative *and* Professional Staffing Services (TAPS)
FSC Group: 736

Contract No. GS-07F-5424R

Modification Number: P005

CONTRACT PERIOD: November 1, 2009 through October 31, 2014

For more information on ordering from the Federal Supply Schedule for Temporary, Administrative and Professional Staffing Services click on the Ordering Procedures button at <http://www.qsa.gov/tempservices>.

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CONTRACTOR' S ADMINISTRATION SOURCE: Roger Deutsch, Executive Vice President
Robert Green, President

BUSINESS SIZE: Small

**GENERAL SERVICES ADMINISTRATION
FEDERAL SUPPLY SERVICE
AUTHORIZED FEDERAL SUPPLY SCHEDULE CATALOG/PRICE LIST**

1a. TABLE OF AWARDED SPECIAL ITEM NUMBER(S) (SINS)

SIN	DESCRIPTION
736-1	Administration Support and Clerical Occupations
736-2	Automatic Data Processing Occupations
736-3	General Services and Support Occupations
736-4	Information and Arts, Including Miscellaneous Occupations
736-5	Technical and Professional Occupations

1b. LOWEST PRICED MODEL NUMBER AND PRICE FOR EACH SPECIAL ITEM NUMBER

N/A

2. MAXIMUM ORDER

\$100,000 per SIN

In accordance with FAR 8.404(b)(3), each schedule contract has an established maximum order threshold. This threshold represents the point where it is advantageous for the ordering office to seek a price reduction. Note that the maximum order threshold does not represent a maximum task order \$ value allowed for each task awarded. It represents the point at which consideration of further discounts may be made by the client/customer.

3. MINIMUM ORDER

\$100 unless the contractor agrees to accept a smaller order amount.

4. GEORGRAPHIC COVERAGE (DELIVERY AREA)

Nationwide (50 states, Washington, DC, and Puerto Rico)

Wage Determination within the contract is replaced with a new Wage Determination determined as the Preponderance of Work Location, the existing price list spreadsheet is replaced with the attached updated approved pricing spreadsheets (Baseline) for the non-professional positions which reflects the added positions, and the updated wage determination pricing for the location identified as their preponderance of work location, which is identified as follows:

States: North Carolina, Virginia

Area: North Carolina Counties of Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans

Virginia Counties of Chesapeake, Gloucester, Hampton, Isle of Wight,

James City, Mathews, Newport News, Norfolk, Poquoson, Portsmouth,

Southampton, Suffolk, Surry, Virginia Beach, Williamsburg, York

Wage Determination # 05-2543 Revision # 7 Dated: 05/29/2008

Caliper, Inc. may now perform work at any of the locations listed in the attached "**Index of Register of Wage Determinations under the Service Contract Act**" as all locations are hereby deemed included in their contract.

5. POINT(S) OF PRODUCTION

N/A

6. DISCOUNT FROM LIST PRICES

N/A

7. QUANTITY DISCOUNT(S)

None

- 8. PROMPT PAYMENT TERMS**
Net 30
- 9a. Government Purchase Cards are accepted at or below the micro-purchase threshold.
- 9b. Government Purchase Cards are accepted above the micro-purchase threshold.
- 10. FOREIGN ITEMS**
None
- 11a. TIME OF DELIVERY**
N/A
- 11b. EXPEDITED DELIVERY**
N/A
- 11c. OVERNIGHT AND 2-DAY DELIVERY**
N/A
- 11d. URGENT REQUIREMENTS**
Agencies can contact the Contractor's representative to initiate a faster delivery process. Customers are encouraged to contact the contractor for the purpose of requesting accelerated delivery.
- 12. FOB POINT**
N/A
- 13. ORDERING ADDRESS**
Same as contractor
- 14. PAYMENT ADDRESS**
Same as contractor
- 15. WARRANTY PROVISION**
Standard Commercial Warranty. Customer should contact contractor for a copy of applicable warranty.
- 16. EXPORT PACKING CHARGES**
N/A
- 17. TERMS AND CONDITIONS OF GOVERNMENT PURCHASE CARD ACCEPTANCE**
N/A
- 18. TERMS AND CONDITIONS OF RENTAL, MAINTENANCE, AND REPAIR (IF APPLICABLE)**
N/A
- 19. TERMS AND CONDITIONS OF INSTALLATION (IF APPLICABLE)**
N/A
- 20. TERMS AND CONDITIONS OF REPAIR PARTS INDICATING DATE OF PARTS PRICE LISTS AND ANY DISCOUNTS FROM LIST PRICES (IF AVAILABLE)**
N/A
- 20a. TERMS AND CONDITIONS FOR ANY OTHER SERVICES (IF APPLICABLE)**

N/A

21. LIST OF SERVICE AND DISTRIBUTION POINTS (IF APPLICABLE)

N/A

22. LIST OF PARTICIPATING DEALERS (IF APPLICABLE)

N/A

23. PREVENTIVE MAINTENANCE (IF APPLICABLE)

N/A

24a. SPECIAL ATTRIBUTES SUCH AS ENVIRONMENTAL ATTRIBUTES (e.g. recycled content, energy efficiency, and/or reduced pollutants)

N/A

24b. Section 508 Compliance for EIT

N/A

25. DUNS NUMBER

115256430

26. NOTIFICATION REGARDING REGISTRATION IN CENTRAL CONTRACTOR REGISTRATION (CCR) DATABASE

Contractor has an Active Registration in the CCR database.

PRICE LIST

Wage Determination # 05-2543 Revision # 7 Dated: 05/29/2008

Skill Category	
736-1	GSA Price
Accounting Clerk I	\$21.07
Accounting Clerk II	\$24.61
Accounting Clerk III	\$27.15
Administrative Assistant	\$35.95
Court Reporter	\$27.69
Data Entry Operator I	\$19.46
Data Entry Operator II	\$23.65
Dispatcher, Motor Vehicle	\$24.61
Document Preparation Clerk	\$20.88
Duplicating Machine Operator	\$30.93
General Clerk I	\$33.44
General Clerk II	\$20.09
General Clerk III	\$22.13
Housing Referral Assistant	\$24.67
Messenger Courier	\$24.67
Order Clerk I	\$27.69
Order Clerk II	\$31.14
Personnel Assistant (Employment) I	\$23.76
Personnel Assistant (Employment) II	\$35.95
Production Control Clerk	\$23.54
Receptionist	\$19.15
Scheduler, Maintenance	\$20.24
Secretary II	\$21.25
Secretary III	\$22.38
Service Order Dispatcher	\$23.76
Supply Technician	\$35.95
Survey Worker	\$23.54
Travel Clerk I	\$19.15
Travel Clerk II	\$20.24
Travel Clerk III	\$21.25
Word Processor I	\$22.38
Word Processor II	\$24.73
Word Processor III	\$27.26
736-2	
Computer Operator I	\$25.55
Computer Operator II	\$28.19
Computer Operator III	\$31.06

Computer Operator IV	\$34.14
Computer Operator V	\$37.46
Computer Programmer I (1)	\$31.93
Computer Programmer II (1)	\$35.70
Computer Programmer III (1)	\$42.11
Computer Programmer IV (1)	\$42.11
Computer Systems Analyst I (1)	\$31.93
Computer Systems Analyst II (1)	\$35.70
Computer Systems Analyst III (1)	\$42.11
Peripheral Equipment Operator	\$25.55
Personal Computer Support Technician	\$34.14
736-3	
Machine-Tool Operator (Tool Room)	\$34.16
Tool And Die Maker	\$37.49
Forklift Operator	\$25.22
Material Coordinator	\$33.44
Material Expediter	\$33.44
Material Handling Laborer	\$18.86
Order Filler	\$18.42
Shipping Packer	\$22.03
Shipping/Receiving Clerk	\$22.03
Store Worker I	\$20.32
Stock Clerk	\$24.61
Tools And Parts Attendant	\$25.22
Warehouse Specialist	\$25.22
Aerospace Structural Welder	\$36.99
Aircraft Mechanic I	\$35.58
Aircraft Mechanic II	\$36.99
Aircraft Mechanic III	\$38.37
Aircraft Mechanic Helper	\$27.09
Aircraft, Painter	\$32.69
Aircraft Servicer	\$29.82
Aircraft Worker	\$31.19
Carpenter, Maintenance	\$30.15
Electrician, Maintenance	\$33.86
Electronics Technician Maintenance I	\$33.54
Electronics Technician Maintenance II	\$35.11
Electronics Technician Maintenance III	\$36.64
General Maintenance Worker	\$28.83
Ground Support Equipment Mechanic	\$35.58
Ground Support Equipment Servicer	\$29.82
Ground Support Equipment Worker	\$31.19
Heating, Ventilation And Air-	\$31.44

Conditioning Mechanic	
Heating, Ventilation And Air Conditioning Mechanic	\$32.68
Heavy Equipment Mechanic	\$31.71
Heavy Equipment Operator	\$31.44
Instrument Mechanic	\$31.31
Laboratory/Shelter Mechanic	\$30.15
Laborer	\$18.37
Machinery Maintenance Mechanic	\$33.01
Machinist, Maintenance	\$31.44
Maintenance Trades Helper	\$24.99
Millwright	\$40.38
Painter, Maintenance	\$30.15
Pipefitter, Maintenance	\$31.93
Plumber, Maintenance	\$30.62
Pneudraulic Systems Mechanic	\$31.44
Rigger	\$31.09
Scale Mechanic	\$28.83
Sheet-Metal Worker, Maintenance	\$31.44
Small Engine Mechanic	\$27.73
Telecommunications Mechanic I	\$35.54
Telecommunications Mechanic II	\$38.50
736-4	
Exhibits Specialist I	\$31.72
Exhibits Specialist II	\$38.31
Exhibits Specialist III	\$42.20
Illustrator I	\$32.60
Illustrator II	\$39.29
Illustrator III	\$46.79
Librarian	\$51.19
Library Aide/Clerk	\$18.17
Library Information Technology Systems Administrator	\$33.82
Library Technician	\$24.99
Media Specialist I	\$25.50
Media Specialist II	\$28.14
Media Specialist III	\$31.00
Photographer I	\$21.84
Photographer II	\$27.88
Photographer III	\$33.17
Photographer IV	\$36.48
Photographer V	\$43.46
Video Teleconference Technician	\$26.10
Graphic Artist	\$35.64

736-5	
Archeological Technician I	\$27.64
Archeological Technician II	\$28.64
Cartographic Technician	\$39.83
Civil Engineering Technician	\$36.80
Drafter/CAD Operator I	\$28.41
Drafter/CAD Operator II	\$31.39
Drafter/CAD Operator III	\$34.63
Drafter/CAD Operator IV	\$41.84
Engineering Technician I	\$26.76
Engineering Technician II	\$29.65
Engineering Technician III	\$33.39
Engineering Technician IV	\$39.83
Engineering Technician V	\$47.99
Engineering Technician VI	\$57.38
Environmental Technician	\$32.43
Laboratory Technician	\$30.48
Mathematical Technician	\$39.83
Paralegal/Legal Assistant I	\$24.78
Paralegal/Legal Assistant II	\$29.92
Paralegal/Legal Assistant III	\$35.87
Paralegal/Legal Assistant IV	\$42.71
Photo-Optics Technician	\$39.83
Technical Writer I	\$34.07
Technical Writer II	\$40.92
Technical Writer III	\$48.83

Caliper, Inc.

Labor Category Description

GSA Schedule 736 Special Item Number (SIN) 736-1

01040 COURT REPORTER

This position records examination, testimony, judicial opinions, judge's charge to jury, judgment or sentence of court, or other proceedings in a court of law by manual or machine shorthand. The Court Reporter reads portions of transcript during trial at the judge's request, and asks speakers to clarify inaudible statements. The Court Reporter transcribes recorded material using a typewriter, or dictates material into a recording machine.

01050 DATA ENTRY OPERATOR (Occupational Base)

This position operates keyboard-controlled data entry devices such as a computer, key-operated magnetic tape, or disc encoder to transcribe data into a format suitable for computer processing. Job task requires skill in operating an alphanumeric keyboard, and an understanding of transcribing procedures and relevant data entry equipment. Positions are classified into levels based on the following definitions:

01151 DATA ENTRY OPERATOR I

This position works under close supervision and follows specific procedures or detailed instructions. The Data Entry Operator I works from various standardized source documents that have been coded and require little or no selecting, coding or interpreting of data. Problems such as erroneous items and codes, or missing information are resolved at the supervisory level. Work is routine and repetitive.

01060 DISPATCHER, MOTOR VEHICLE (Motor Vehicle Utilization Assistant)

This position is responsible for the assignment of motor vehicles and drivers for conveyance of freight or passengers, and compiles lists of available vehicles. The assignment of vehicles is determined by factors such as length and purpose of trip, freight or passenger requirements, and preference of user. Additional responsibilities include the issuance of keys, record sheets, and driver credentials. The Dispatcher records time of departure, destination, cargo, expected time of return and investigates overdue vehicles. The Dispatcher may confer with customers to expedite or locate missing, misrouted, delayed or damaged merchandise, maintain record of mileage, fuel used, repairs made, and other expenses. The Dispatcher may establish service or delivery routes, supervise loading and unloading, issue

equipment to drivers, (such as hand trucks, dollies, and blankets), direct activities of drivers, assign helpers to drivers,-work at vehicle distribution centers, and assign vehicles to customer agencies.

01070 DOCUMENT PREPARATION CLERK (Document Preparer)

This position prepares documents such as brochures, books, periodicals, catalogs, and pamphlets for copying or photocopying. The Document Preparation Clerk cuts documents into individual standardized pages, using a paper cutter or razor knife. Document pages are reproduced as necessary to improve clarity or to adjust the standardized page size according to the limitations of the designated copy machine. The Document Preparation Clerk stamps standard symbols on pages or inserts instruction cards to notify Duplicating Machine Operator of special handling, prepares cover sheets and document folders for material, and index cards for files, and files folder according to index code and copies priority schedule.

01090 DUPLICATING MACHINE OPERATOR (Photocopy Machine Operator; Reproduction Worker)

This position operates one or more photocopying, photographic, mimeograph and duplicating office machines to make copies of documents such as letters, reports, directives, manuals, articles and bulletins. Additional responsibilities include: operating small binding machines, performing clerical duties associated with the request for printing and photographic services, preparing assembly sheets, printing requisitions with specifications for printing and binding, recording, delivering and collecting work. The Duplicating Machine Operator performs minor repairs preventive maintenance, and maintains an inventory of supplies and reproduction equipment paying particular attention to important variables indicated by trade name of machine.

01120 HOUSING REFERRAL ASSISTANT

This position provides housing information to an organization's employees moving to a new location. The Housing Referral Assistant will contact individuals or organizations such as landlords, real estate agents, mobile home dealers, trailer court managers and Chambers of Commerce by phone. May correspond to obtain listings of rental or sale properties, future housing prospects, and to develop a working relationship with the housing referral service. Job tasks include: compiling housing lists of rental property and properties for purchase. Periodically the Housing Referral Assistant communicates with contacts to update listings, ensures that property owners comply with the nondiscrimination policy, and counsels applicants with regard to special circumstances, e.g. medical or financial hardships, and availability of housing that will meet applicants' needs.

Job tasks include: providing information regarding community services, searches files, makes telephone calls and referrals, providing information regarding locations, owners, agents, price ranges, loans and other related information. The Housing Referral Assistant maintains daily records of office activities (including number of applicants, number of applicants placed, and agents solicited or listed), schedules appointments for housing inspectors, prepares reports as required, and replies to complaints, investigations and letters of inquiry.

01141 MESSENGER COURIER

The Messenger Courier delivers messages, documents, packages and mail to various business concerns or governmental agencies. An employee in this role may perform the following: miscellaneous errands, such as carrying mail within the base and sorting or opening incoming and outgoing mail, obtain receipts for articles delivered and keep a log of items received and delivered, or deliver items to offices and departments within an establishment. The Messenger Courier may use a bicycle, golf cart, or motorcycle to perform these duties.

(Note: Employees who regularly perform driving duties should be classified as a Driver Courier, which is listed under Transportation.)

01191 ORDER CLERK I

This position handles orders involving items that have readily identified uses and applications. The Order Clerk I may refer to a catalog, manufacturer's manual or similar document to insure that the proper item is supplied or to verify the price of order.

01192 ORDER CLERK II

This position handles orders that involve making judgments such as choosing which specific product or material from the establishment's product lines will satisfy the customer's needs, or determining the price to be quoted when pricing involves more than merely referring to a price list or making some simple mathematical calculations.

01261 PERSONNEL ASSISTANT I

This position performs a variety of tasks including, but not limited to, clerical and secretarial duties. The work is under general supervision of higher-level personnel in preparation of various human resource tasks throughout compensation, benefits, staffing/employment, EEO procedures and policy administration. The Personnel Assistant I is expected to exercise discretion at all times; limited judgment may be necessary at times. This assistant may be required to operate general office equipment such as: typewriter, personal computer, copier, adding machine, and facsimile.

01262 PERSONNEL ASSISTANT II

This position serves as a clerical expert in independently processing the most complicated types of personnel actions, e.g., temporary employment, rehires, and dismissals. In this position, one may perform tasks beyond routine clerical such as: pre-employment drug screening and new hire orientation, responding to routine questions on policy and procedures, and/or provide reports on employee turnover or time and attendance. This assistant may be asked to evaluate and consolidate information from various sources under short deadlines, such as internal or external survey information, reporting on company employment statistics (retention, equal opportunity reporting, etc). The Personnel Assistant II may provide guidance to lower level Personnel Assistants. This level requires extensive knowledge of various office software packages. Guidance is provided as needed. Completed written work receives close technical review from higher-level personnel office employees. Work may be checked occasionally.

01263 PERSONNEL ASSISTANT III

This position performs work in support of human resource professionals that requires a good working knowledge of personnel procedures, guides, and precedents. Job tasks may include interviewing applicants, obtaining references, and recommending placement in a well-defined occupation. At this level, assistants typically have a range of personal contacts within and outside the organization, in addition to handling employee-sensitive material. Therefore, the Assistant must be tactful, discrete, and articulate. This Assistant may be involved in identifying potential issues and grievance procedures, in addition to documenting necessary information to avoid company threat. The Personnel Assistant III may make recommendations to human resource professionals on job classification, wage rates, and employee salaries. The use of computers may be relied on heavily for organizational and reporting purposes. Advanced experience with office software packages may be needed. This Assistant may perform some clerical work in addition to the above duties. Supervisor will review completed work against stated objectives.

01270 PRODUCTION CONTROL CLERK

This position compiles and records production data for industrial establishments to compare records and reports on volume of production, consumption of material, quality control, and other aspects of production. May perform any combination of the following duties: compile and record production data from customer orders, work tickets, product specifications, and individual worker production sheets following prescribed recording procedures and using different word processing techniques. This Clerk calculates such factors as types and quantities of items produced, materials used, amount of scrap, frequency of defects, and worker and department production rates, using a computer, calculator, and/or spreadsheets. Additional tasks include: writing production reports based on data compiled, tabulated and

computed, following prescribed formats, maintaining files of documents used and prepared, compiling detailed production sheets or work tickets for use by production workers as guides in assembly or manufacture of products. This Clerk prepares written work schedules based on established guidelines and priorities, compiles material inventory records and prepares requisitions for procurement of materials and supplies charts production using chart, graph, or pegboard based on statistics compiled for reference by production and management personnel. This Clerk also sorts and distributes work tickets or material and may compute wages from employee time cards and post wage data on records used for preparation of payroll.

01280 RECEPTIONIST

This position greets visitors, determining nature of visits and directing visitors to appropriate persons. The Receptionist may also have other duties such as recording and transmitting messages; keeping records of calls placed; providing information to callers and visitors; making appointments; keeping a log of visitors; and issuing visitor passes. In this position, one may also work on a computer and perform other routine clerical work that may occupy the major portion of the worker's time.

01290 RENTAL CLERK

This position performs clerical duties concerned with rental and management of public housing projects answers telephone and responds to requests for maintenance, complaints, rental information or, as appropriate, forwards calls to senior officials. The Rental Clerk receives rental payments and other income, assesses late charges, applies cancellation stamp required by government housing agency, writes receipts, and prepares rental transmittal forms and collection logs for government accounting system. This Clerk receives security deposits and prepares tenant receipts, prepares bank deposits, maintains tenant files, and follows up on income re-certifications.

01300 SCHEDULER, MAINTENANCE

This position schedules vehicle repairs and lubrication for vehicle-maintenance, schedules vehicles for lubrication or repairs based on date of last lubrication and mileage traveled or urgency of repairs. The Maintenance Scheduler contacts garage to verify availability of facilities, notifies parking garage workers to deliver specified vehicles, and maintains a file of requests for services.

01320 SERVICE ORDER DISPATCHER

This position receives, records, and distributes work orders to service crews upon customers' requests for service on articles or utilities purchased from wholesale or retail establishment or utility company, records information, such as name, address, article to be repaired, or service

to be rendered, prepares work order and distributes to service crew, schedules service calls and dispatches service crew. The Service Order Dispatcher calls or writes the customer to insure satisfactory performance of service, keeps record of service calls and work orders, may dispatch orders and relay messages and special instructions to mobile crews and other departments using radio or cellular telephone equipment.

01410 SUPPLY TECHNICIAN

This position performs limited aspects of technical supply management work (e.g., inventory management, storage management, cataloging, and property utilization) related to depot, local, or other supply activities. Work usually is segregated by commodity area or function, and controlled in terms of difficulty, complexity, or responsibility. Assignments usually relate to stable or standardized segments of technical supply management operations; or to functions or subjects that are narrow in scope or limited in difficulty. The work generally involves individual case problems or supply actions. This work may require consideration of program requirements together with specific variations in or from standardized guidelines. Assignments require:

(a) a good working knowledge of the governing supply systems, programs, policies, nomenclature, work methods, manuals, or other established guidelines; (b) an understanding of the needs of the organization serviced; and (c) analytical ability to define or recognize the dimension of the problems involved, to collect the necessary data to establish the facts, and take or recommend action based upon application or interpretation of established guidelines.

01420 SURVEY WORKER (Interviewer)

This position interviews people to obtain information on topics such as public issues or consumer buying habits, contacts people at home business or by telephone following specified sampling procedures, or approaches them at random on street. The Survey Worker asks questions relative to items on a form or questionnaire, records answers, assists persons in filling out forms, and may review, sort, classify and file forms according to specified procedures and criteria. This worker may participate in federal, state or local census surveys.

01530 TRAVEL CLERK (Occupational Base)

This position plans itinerary and schedules travel accommodations for military and civilian personnel with dependents according to travel orders using knowledge of routes, types of carriers, and travel regulations. This Clerk verifies travel orders to insure costs, availability, and convenience of different types of carriers to select most advantageous route and carrier; notifies personnel of travel dates, baggage, limits and medical and visa requirements, and determines that all clearances have been obtained. The Travel Clerk assists personnel in completing travel forms and other business transactions pertaining to travel, may deliver personnel files and travel orders to persons prior to departure, meet and inform arriving personnel of available facilities and housing and furnish other information, and may arrange for motor transportation for arriving or departing personnel.

01531 TRAVEL CLERK I

Under close supervision or following specific procedures and detailed instructions, The Travel Clerk I arranges travel on one or two modes of transportation. Travel is usually recurrent by the same modes, carriers, routes and same major points of origin and destination, seldom involving special transportation privileges or requiring special allowances or planning for supplemental transportation facilities. When such services are required, they do not occur in such variety or with such frequency as to create problems of timing or coordination.

01532 TRAVEL CLERK II

Travel usually involves the use of two or more modes of transportation. Information on carriers, modes and facilities is readily available since most carriers servicing the area maintain local facilities or publish information regularly. Single carriers or connecting carriers have schedules that are easily coordinated using readily obtainable timetables or guides.

Travel is frequently recurrent. A substantial number of problems arise because of rerouting, and there are often side trips requiring changes of transportation. Travel is usually to areas accessible by direct line, or established connecting points and normal modes of transportation. Travel is not always planned well in advance so there may be major problems of scheduling or accommodations.

Travel involves special transportation privileges or special allowances and requires authorization or planning for supplemental or special transportation facilities, and when such services are required, they usually do not occur in such variety or with such frequency as to create major problems of timing or coordination.

Within general guidelines, employees select and apply appropriate travel guides, methods, techniques, and work sequences to effectively accomplish the work. The majority of assignments are performed without technical assistance, but unusually difficult travel situations or problem cases encountered during the course of the work are referred to the supervisor before decision or commitment. Review of work is for compliance with regulatory guides and program policies and for soundness of decisions and conclusions.

01533 TRAVEL CLERK III

At this level, all major modes of transportation are used, as most individual trips involve combinations of more than one mode. Travel is varied, often not recurrent and periodically requires planning for relatively inaccessible intermediate or destination points. Routings are diverse and there is a necessity for frequent rerouting, re-planning, or rearranging, with many side trips requiring changes in modes of travel and creating substantial difficulty in routing and scheduling connections.

A substantial amount of travel involves special allowances or requires authorization and planning for supplementary or special transportation facilities. It is frequently difficult to obtain the required information.

The incumbent is characterized by independence of action, with very little instruction, guidance, and review, except for review of accomplishments of broad objectives and conformance to policy. The incumbent is viewed as the authority on travel matters, including the furnishing of advice and information to travelers, administrative officials and others; and has responsibility as the principal liaison with all elements, carriers, and facilities.

01610 WORD PROCESSOR (Occupational Base)

This position uses automated systems, such as word processing equipment, personal computers, or work stations linked to a larger computer or local area network, to produce a variety of documents, such as correspondence, memos, publications, forms, reports, tables and graphs. The Word Processor uses one or more word processing software packages; may also perform routine clerical tasks, such as operating copiers, filing, answering telephones, ad sorting and distributing mail.

Excluded are:

- a. Typists using automatic or manual typewriters with limited or no text-editing capabilities; workers in these positions are not typically required to use word processing software packages;
- b. Key Entry Operators, Accounting Clerks, Sales Clerks, and other clerks who may use automated word processing equipment for purposes other than typing composition;
- c. Positions requiring subject-matter knowledge to prepare and edit text using automated word processing equipment.

01611 WORD PROCESSOR I

This position produces a variety of standard documents, such as correspondence, form letters, reports, tables and other printed materials. Work requires skill in typing; a knowledge of grammar, punctuation and spelling; and ability to use reference guides and equipment manuals. The Word Processor I performs familiar, routine assignments following standard procedures, seeks further instructions for assignments requiring deviations from established procedures.

01612 WORD PROCESSOR II

This position uses knowledge of varied and advanced functions of one software type, knowledge of varied functions of different types of software, or knowledge of specialized or technical terminology to perform such typical duties as:

a. Editing and reformatting written or electronic drafts. Examples include: correcting function codes; adjusting spacing formatting and standardizing headings, margins, and indentations.

b. Transcribing scientific reports, lab analysis, legal proceedings, or similar material from voice tapes or handwritten drafts. Work requires knowledge of specialized, technical, or scientific terminology.

Work requires familiarity with office terminology and practices. Incumbent corrects copy, and questions originator of document concerning missing information, improper formatting, or discrepancies in instructions. Supervisor sets priorities and deadlines on continuing assignments, furnishes general instructions for recurring work and provides specific instructions for new or unique projects.

GSA Schedule 736 Special Item Number (SIN) 736-2

14000 INFORMATION TECHNOLOGY OCCUPATIONS

This category includes occupations concerned with the utilization of the computer in the analysis and solution of business, scientific, engineering and other technical problems to include the following: operating electronic, optical, and electromechanical machines that record, store, process, and transcribe data from magnetic tape or other sources to solve mathematical, engineering, accounting, or technical problems, to keep records or to supply information; programming computer languages to perform mathematical, engineering and scientific computations or auditing, payroll, mailing list and text handling functions; and storing and retrieving computer files.

14040 COMPUTER OPERATOR (Occupational Base)

The Computer Operator monitors and operates the control console of either a mainframe digital computer or a group of minicomputers, in accordance with operating instructions, to process data. Work is characterized by the following:

- Studies operating instructions to determine equipment setup needed.
- Loads equipment with required items (tapes, cards, paper, etc.).
- Switches necessary auxiliary equipment into system;
- Diagnoses and corrects equipment malfunctions;
- Reviews error messages and makes corrections during operation or refers problems;
- Maintains operating record.

This operator may test run new or modified programs and assists in modifying systems or programs. Included within the scope of this definition are fully qualified Computer Operators, and trainees working to become fully qualified operators.

14041 COMPUTER OPERATOR I

The Computer Operator I works under close personal supervision and is provided detailed written or oral guidance before and during assignments. As instructed, this worker resolves common operating problems and may serve as an assistant operator working under close supervision or performing a portion of a more senior operator's work.

14042 COMPUTER OPERATOR II

The Computer Operator II processes scheduled routines that present few difficult operating problems (e.g., infrequent or easily resolved error conditions). In response to computer output instructions or error conditions, this worker applies standard operating or corrective procedure, refers problems that do not respond to preplanned procedure, and may serve as an assistant operator, working under general supervision.

14043 COMPUTER OPERATOR III

The Computer Operator III processes a range of scheduled routines. In addition to operating the system and resolving common error conditions, this worker diagnoses and acts on machine stoppage and error conditions not fully covered by existing procedures and guidelines (e.g., resetting switches and other controls or making mechanical adjustments to maintain or restore equipment operations). In response to computer output instructions or error conditions, the Computer Operator III may deviate from standard procedures if standard procedures do not provide a solution and refers problems which do not respond to corrective procedures to a person of supervisory or higher individual contributor level.

14044 COMPUTER OPERATOR IV

The Computer Operator IV adapts to a variety of nonstandard problems that require extensive operator intervention (e.g. frequent introduction of new programs, applications, or procedures). In response to computer output instructions or error conditions, this worker chooses or devises a course of action from among several alternatives and alters or deviates from standard procedures if standard procedures do not provide a solution (e.g. reassigning equipment in order to work around faulty equipment or transfer channels); then refers problems if necessary. Typically, completed work is submitted to users without supervisory review.

14045 COMPUTER OPERATOR V

The Computer Operator V resolves a variety of difficult operating problems (e.g. making unusual equipment connections and rarely used equipment and channel configurations to direct processing through or around problems in equipment, circuits, or channels or reviewing test run requirements and developing unusual system configurations that will allow test programs to process without interfering with ongoing job requirements). In response to computer output instructions and error conditions or to avoid loss of information or to conserve computer time, operator deviates from standard procedures. Such actions may

materially alter the computer unit's production plans. This operator may spend considerable time away from the control station providing technical assistance to lower level operators and assisting programmers, systems analysts, and subject matter specialists with resolution of problems.

14070 COMPUTER PROGRAMMER (Occupational Base)

The Computer Programmer performs programming services for establishments or for outside organizations that may contract for services, converts specifications (precise descriptions) about business or scientific problems into a sequence of detailed instructions to solve problems by electronic data processing (EDP) equipment, i.e. digital computers; draws program flow charts to describe the processing of data, and develops the precise steps and processing logic which, when entered into the computer in coded language (COBOL, FORTRAN, or other programming language) to cause the manipulation of data to achieve desired results. The Computer Programmer tests and corrects programs, prepares instructions for operators who control the computer during runs, modifies programs to increase operating efficiency or to respond to changes in work processes, and maintains records to document program development and revisions.

At levels I, II and III, Computer Programmers may also perform programming analysis such as: gathering facts from users to define their business or scientific problems, and to investigate the feasibility of solving problems through new or modified computer programs; developing specifications for data inputs, flow, actions, decisions, and outputs; and participating on a continuing basis in the overall program planning along with other EDP personnel and users. In contrast, at level IV, some programming analysis must be performed as part of the programming assignment. The analysis duties are identified in a separate paragraph at levels I, II, III, and IV. However, the systems requirements are defined by systems analysts or scientists.

Positions are classified into levels based on the following definitions:

14071 COMPUTER PROGRAMMER I

The Computer Programmer I assists higher level staff by performing elementary programming tasks which concern limited and simple data items and steps which closely follow patterns of previous work done in the organization, e.g. drawing flow charts, writing operator instructions, or coding and testing routines to accumulate counts, tallies, or summaries. This worker may perform routine programming assignments (as described in Level II) under close supervision.

In addition to assisting higher level staff, the Computer Programmer I may perform elementary fact-finding concerning a specified work process, e.g., a file of clerical records which is treated as a unit (invoices, requisitions, or purchase orders, etc.) and then report findings to higher level staff. May receive training in elementary fact-finding. Detailed step-by-step instructions are given for each task, and any deviation must be authorized by a supervisor. Work is closely monitored in progress and reviewed in detail upon completion.

14072 COMPUTER PROGRAMMER II

At this level, initial assignments are designed to develop competence in applying established programming procedures to routine problems. This Computer Programmer performs routine programming assignments that do not require skilled background experience but do require knowledge of established programming procedures and data processing requirements, and works according to clear-cut and complete specifications. The data are refined, and the format of the final product is very similar to that of the input, or is well defined when significantly different, i.e., there are few, if any, problems with interrelating varied records and outputs.

The Computer Programmer II maintains and modifies routine programs, makes approved changes by amending program flow charts, developing detailed processing logic, and coding changes, tests and documents modifications and writes operator instructions, may write routine new programs using prescribed specifications, and may confer with EDP personnel to clarify procedures, processing logic, etc.

In addition, the Computer Programmer II may evaluate simple interrelationships in the immediate programming area confers with user representatives to gain an understanding of the situation sufficient to formulate the needed change, and implements the change upon approval of the supervisor or higher level staff. The incumbent is provided with charts, narrative descriptions of the functions performed, an approved statement of the product desired (e.g., a change in a local establishment report), and the inputs, outputs, and record formats. This Worker reviews objectives and assignment details with higher level staff to insure thorough understanding; uses judgment in selecting among authorized procedures and seeks assistance when guidelines are inadequate, significant deviations are proposed, or when unanticipated problems arise. Work is usually monitored in progress, and all work is reviewed upon completion for accuracy and compliance with standards.

14073 COMPUTER PROGRAMMER III

As a fully qualified Computer Programmer, this Worker applies standard programming procedures and detailed knowledge of pertinent subject matter in a programming area such as a record keeping operation (supply, personnel and payroll, inventory, purchasing, insurance payments, depositor accounts, etc.); a well-defined statistical or scientific problem; or other standardized operation or problem. The incumbent works according to approved statements of requirements and detailed specifications.

While the data are clear cut, related, and equally available, there may be substantial interrelationships of a variety of records and several varied sequences of formats are usually produced. The programs developed or modified typically are linked to several other programs in that the output of one becomes the input for another. This Computer Programmer recognizes probable interactions of other related programs with the assigned program(s) and is familiar with related system software and computer equipment, and solves conventional programming problems, (In small organizations, may maintain programs that

concern or combine several operations, i.e. users, or develop programs where there is one primary user and the others give input.)

The Computer Programmer III performs such duties as developing, modifying, and maintaining assigned programs, designing and implementing modifications to the interrelation of files and records within programs in consultations with higher level staff. This Worker monitors the operation of assigned programs and responds to problems by diagnosing and correcting errors in logic and coding; implements and/or maintains assigned portions of a scientific programming project, applying established scientific programming techniques to well-defined mathematical, statistical, engineering, or other scientific problems usually requiring the translation of mathematical notation into processing logic and code. (Scientific programming includes assignments such as: using predetermined physical laws expressed in mathematical terms to relate one set of data to another; the routine storage and retrieval of field test data, and using procedures for real-time command and control, scientific data reduction, signal processing, or similar areas.) This Programmer tests, documents work, writes and maintains operator instructions for assigned programs, and confers with other EDP personnel to obtain or provide factual data.

In addition, this Programmer may carry out fact-finding and programming analysis of a single activity or routine problem, applying established procedures where the nature of the program, feasibility, computer equipment, and programming language have already been decided. Job tasks may require the incumbent to analyze present performance of the program and take action to correct deficiencies based on discussion with the user and consultation with and approval of the supervisor or higher-level staff. This Programmer may assist in the review and analysis of detailed program specifications, and in program design to meet changes in work processes.

The Computer Programmer III works independently under specified objectives; applies judgment in devising program logic and in selecting and adapting standard programming procedures, resolves problems and deviations according to established practices, and obtains advice where precedents are unclear or not available. This Worker, may guide or instruct lower level programmers; supervise technicians and others who assist in specific assignments, works on complex programs under close direction of higher level staff or supervisor, and may assist higher level staff by independently performing moderately complex tasks assigned, and performing complex tasks under close supervision. Work at a level above this is deemed Supervisory or Individual Contributor. Completed work is reviewed for conformance to standards, timeliness, and efficiency.

14100 COMPUTER SYSTEMS ANALYST (Occupational Base)

The Computer Systems Analyst analyzes business or scientific problems for resolution through electronic data processing, gathers information from users, defines work problems, and, if feasible, designs a system of computer programs and procedures to resolve the problems. This Worker develops complete specifications or enables other Computer Programmers to prepare required programs and analyzes subject-matter operations to be

automated; specifies number and types of records, files, and documents to be used and outputs to be produced; prepares work diagrams and data flow charts; coordinates tests of the system and participates in trial runs of new and revised systems; and recommends computer equipment changes to obtain more effective operations. The Computer Systems Analyst may also write the computer programs.

Positions are classified into levels based on the following definitions:

14101 COMPUTER SYSTEMS ANALYST I

At this level, initial assignments are designed to expand practical experience in applying systems analysis techniques and procedures. This Analyst provides several phases of the required systems analysis where the nature of the system is predetermined, uses established fact-finding approaches, knowledge of pertinent work processes and procedures, and familiarity with related computer programming practices, system software, and computer equipment.

This Worker carries out fact finding and analyses as assigned, (usually of a single activity or a routine problem); applies established procedures where the nature of the system, feasibility, computer equipment and programming language have already been decided; may assist a higher level systems analyst by preparing the detailed specifications required by computer programmers from information developed by the higher level analyst, and may research routine user problems and solve them by modifying the existing system when the solutions follow clear precedents. When cost and deadline estimates are required, results receive closer review.

The supervisor defines objectives, priorities, and deadlines. Incumbents work independently; adapt guides to specific situations; resolve problems and deviations according to established practices; and obtain advice where precedents are unclear or not available. Completed work is reviewed for conformance to requirements, timeliness, and efficiency. This position may supervise technicians and others who assist in specific assignments. Work at a level above this is deemed Supervisory or Individual Contributor.

14102 COMPUTER SYSTEMS ANALYST II

This Analyst applies systems analysis and design skills in an area such as a record keeping or scientific operation. A system of several varied sequences or formats is usually developed, e.g. the analyst develops systems for maintaining depositor accounts in a bank, maintaining accounts receivable in a retail establishment, maintaining inventory accounts in a manufacturing or wholesale establishment, or processing a limited problem in a scientific project. This position requires competence in most phases of system analysis and knowledge of pertinent system software and computer equipment and of the work processes, applicable regulations, workload, and practices of the assigned subject-matter area. Job duties require the incumbent to be able to recognize probable interactions of related computer systems and predict impact of a change in assigned system.

The Computer Systems Analyst II reviews proposals which consist of objectives, scope, and user expectations; gathers facts, analyzes data, and prepares a project synopsis which compares alternatives in terms of cost, time, availability of equipment and personnel, and recommends a course of action; upon approval of synopsis, prepares specifications for development of computer programs. Duties also include the ability to determine and resolve data processing problems and coordinate the work with program, users, etc. This worker orients user personnel on new or changed procedures, may conduct special projects such as data element and code standardization throughout a broad system, working under specific objectives and bringing to the attention of the supervisor any unusual problems or controversies.

In this position, the incumbent works independently under overall project objectives and requirements, and appraises supervisor about progress and unusual complications. Guidelines usually include existing systems and the constraints imposed by related systems with which the incumbent's work must be meshed. This worker adapts design approaches successfully used in precedent systems, works on a segment of a complex data processing scheme or broad system, as described for Computer Systems Analyst, level III, works independently on routine assignments and receives instructions and guidance on complex assignments. Work is reviewed for accuracy of judgment, compliance with instructions, and to insure proper alignment with the overall system. Completed work is reviewed for timeliness, compatibility with other work, and effectiveness in meeting requirements. This analyst may provide functional direction to lower level assistants on assigned work.

14103 COMPUTER SYSTEMS ANALYST III

The Computer Systems Analyst III applies systems analysis and design techniques to complex computer systems in a broad area such as manufacturing, finance management, engineering, accounting, or statistics, logistics planning, material management, etc. Usually, there are multiple users of the system; however, there may be complex one-user systems, e.g., for engineering or research projects. This position requires competence in all phases of systems analysis techniques, concepts, and methods and knowledge of available system software, computer equipment, and the regulations, structure, techniques, and management practices of one or more subject-matter areas. Since input data usually come from diverse sources, this worker is responsible for recognizing probable conflicts and integrating diverse data elements and sources, and produces innovative solutions for a variety of complex problems.

The Computer Systems Analyst III maintains and modifies complex systems or develops new subsystems such as an integrated production scheduling, inventory control, cost analysis, or sales analysis record in which every item of each type is automatically processed through the full system of records. The incumbent guides users in formulating requirements, advises on alternatives and on the implications of new or revised data processing systems, analyzes resulting user project proposals, identifies omissions and errors in requirements and conducts feasibility studies. This analyst recommends optimum approach and develops system design for approved projects, interprets information and informally arbitrates between system users when conflicts exist.

14160 PERSONAL COMPUTER SUPPORT TECHNICIAN

The Personal Computer Support Technician provides support to distributed PC/networking environment including installation, testing, repair, and troubleshooting for stand-alone PCs, PCs linked to networks, printers, and other computer peripherals. Support responsibilities include software installation, and configurations. This technician performs technical, operational, and training support to users of personal computers either by telephone, or on-site for PC desktop hardware and software packages. Job duties require the technician to install and test personal computers, printers, and other peripherals, configure operating system, load shrink-wrap programs and other application software programs. In this position, the incumbent troubleshoots computer problems, performs hardware and software diagnostics, coordinates needed repairs, resolves computer system problems, including coordination between users and components of a local area network, and participates in the evaluation of system configuration and software.

GSA Schedule 736 Special Item Number (SIN) 736-3

19000 MACHINE TOOL OPERATION AND REPAIR OCCUPATIONS

This category includes occupations concerned with setting up and operating machine tools, and using hand tools to make or repair (shape, fit, finish, assemble) metal parts, tool, gauges, models, patterns, mechanism, and machines.

19010 MACHINE-TOOL OPERATOR (TOOLROOM)

Someone in this position specializes in operating one or more than one type of machine tool (e.g., jig borer, grinding machine, engine lathe, milling machine) to machine metal for use in making or maintaining jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). Work typically involves: planning and performing difficult machining operations which require complicated setups or a high degree of accuracy, setting up machine tool or tools (e.g., installing cutting tools and adjusting guides, stops, working tables, and other controls to handle the size of stock to be machined.

The Machine Tool Operator determines proper feeds, speeds, tooling, and operation sequence or selects those prescribed in drawings, blueprints, or layouts). Work also involves using a variety of precision measuring instruments, making necessary adjustments during machining operation to achieve requisite dimensions to very close tolerances. This worker may be required to select proper coolants and cutting and lubricating oils to recognize when tools need dressing, and to dress tools. In general, the work of a Machine-Tool Operator (Tool room) at the skill level called for in this classification, requires extensive knowledge of machine shop and tool room practice usually acquired though considerable on-the-job training and experience.

19040 TOOL AND DIE MAKER

The Tool and Die Maker constructs and repairs jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). Work typically involves: planning and laying out work according to models, blueprints, drawings, or other written or oral specifications, understanding the working properties of common metals and alloys, selecting appropriate materials, tools, and processes required to complete task, making necessary shop computations, and setting up and operating various machine tools and related equipment. Work for someone in this position also involves using various Tool and Die Maker's hand tools and precision measuring instrument, working to very close tolerances, heat-treating metal parts and finished tools and dies to achieve required qualities, and fitting and assembling parts to prescribed tolerances and allowances. In general, the Tool and Die Maker's work requires rounded training in machine shop and tool room practice usually acquired through formal apprenticeship or equivalent training and experience.

21000 MATERIALS HANDLING AND PACKING OCCUPATIONS

This category includes occupations concerned with preparing and arranging materials and products in bulk and non-bulk forms for distribution or storage; moving and loading or unloading equipment, materials, and products; operating or tending pipelines pumps and valves to transfer liquids; driving forklifts and related material-handling machinery and equipment; and using scoops, hand trucks, and wheelbarrows to load and move materials.

21030 MATERIAL COORDINATOR

The Material Coordinator coordinates and expedites flow of material, parts, and assemblies within or between departments in accordance with production and shipping schedules or department supervisors' priorities. In this job, the Material Coordinator reviews production schedules and confers with department supervisors to determine material required or overdue and to locate material, requisitions material and establishes delivery sequences to departments according to job order priorities and anticipated availability of material; arranges for in-plant transfer of materials to meet production schedules, and with department supervisors for repair and assembly of material and its transportation to various departments, and examines material delivered to production departments to verify if type specified.

This Worker may monitor and control movement of material and parts along conveyor system, using remote-control panel board, compute amount of material needed for specific job orders, applying knowledge of product and manufacturing processes and using adding machine; compile report of quantity and type of material on hand, move or transport material from one department to another, using hand or industrial truck; may compile perpetual production records in order to locate material in process of production, using manual or computerized system, and maintain employee records.

21040 MATERIAL EXPEDITER

The Material Expediter executes the following: locates and moves materials and parts between work areas of plant to expedite processing of goods, according to pre-determined schedules and priorities, and keeps related record, reviews production schedules inventory reports, and work orders to determine types, quantities, and availability of required material and priorities of customer orders, confers with department supervisors to determine materials overdue and to inform them of location, availability, and condition of materials, locates and moves materials to specified production areas, using cart or hand truck, and records quantity and type of materials distributed and on hand. Work may include the following tasks: directing Power-Truck Operator or Material Handling Laborer to expedite movement of materials between storage and production areas, compare work ticket specifications with material at work stations to verify appropriateness of material in use, prepare worker production records and timecards, and may update and maintain inventory records, using computer terminal.

21050 MATERIAL HANDLING LABORER

This person will perform physical tasks to transport or store materials or merchandise. Duties involve one or more of the following: manually loading or unloading freight cars, trucks, or other transporting devices; unpacking, shelving, or placing items in proper storage locations; or transporting goods by hand truck, cart, or wheelbarrow.

Excluded from this definition are workers whose primary function involves:

- a. Participating directly in the production of goods (e.g., moving items from one production station to another or placing them on or removing them from the production process);
- b. Stocking merchandise for sale;
- c. Counting or routing merchandise;
- d. Operating a crane or heavy-duty motorized vehicle such as forklift or truck;
- e. Loading and unloading ships (alongshore workers);
- f. Traveling on trucks beyond the establishment's physical location to load or unload merchandise.

21071 ORDER FILLER

The Order Filler fills shipping or transfer orders for finished goods from stored merchandise in accordance with specifications on sales slips, customers' orders, or other instructions. This worker may, in addition to filling orders and indicating items filled or omitted, keep records of outgoing orders, requisition additional stock or report short supplies to supervisor, and perform other related duties.

21080 PRODUCTION LINE WORKER (FOOD PROCESSING)

This position refers to an employee employed in a food processing plant whose duties involve several of the following: loading and unloading commodities from rail cars, trucks, or other conveyances, placing merchandise in proper storage location and transporting the merchandise by hand truck, push-pull, or forklift; blends merchandise ingredients into pre-determined quality by heating, mixing, re-heating, etc. The Production Line Worker monitors blending operation to ensure that finished products meets customer's requirements, monitors flow of product into appropriate container; labels container with identifying information supplied by customer, and places containers into appropriate shipping container. Must have knowledge of various types and sizes of shipping containers and special requirements of customers.

21110 SHIPPING PACKER

Someone in this position prepares finished products for shipment or storage by placing them in shipping containers, the specific operations performed being dependent upon the type, size, and number of units to be packed, the type of container employed, and method of shipment. Work requires the placing of items in shipping containers, and may involve one or more of the following: knowledge of various items of stock in order to verify content, selection of appropriate type and size of container, inserting enclosures in container; using excelsior or other material to prevent breakage or damage, closing and sealing container, and applying labels or entering identifying data on container.

Exclude packers who also make wooden boxes or crates.

21140 STORE WORKER I

The Store Worker I will perform the following tasks at an establishment whose primary function is that of the resale of merchandise in a retail environment, move merchandise by use of non-motorized equipment that is intended for display and resale purposes, include the cleaning of merchandise on or in display fixtures utilizing various merchandise techniques common to retail trade. Merchandise may be displayed by a predetermined placement system using labels or other identifying marks. This worker will maintain the display sales area by straightening merchandise to give a neat, full, and salable appearance, removing damaged or outdated merchandise, and displaying merchandise in such a manner to maintain freshness and sale dates, may determine display or sale requirements from existing inventory, may be required to keep inventory forms of merchandise stocked and merchandise returned to storage, may be required to affix labels to merchandise indicating sale price, item description, or other information, and may be required to offer customer or patron assistance with the location or selection of merchandise.

Note: this class excludes any work performed in a warehouse, see warehousing classifications.

21150 STOCK CLERK (Shelf Stocker; Store Worker II)

The Stock Clerk receives, stores, and issues equipment, materials, supplies, merchandise, foodstuffs, or tools, and compiles stock records of items in stockroom, warehouse or storage yard. This worker sorts, or weighs incoming articles to verify receipt of items on requisition or invoice, examines stock to verify conformance to specifications, stores articles in bins, on floor or on shelves, according to identifying information, such as style, size or type of material, fills orders or issues supplies from stock, prepares periodic, special or perpetual inventory of stock, and requisitions articles to fill incoming orders. This worker also compiles reports on use of stock handling equipment, adjustments of inventory counts and stock records, spoilage of or damage to stock, location changes, and refusal of shipments,

may mark identifying codes, figures, or letters on articles, may distribute stock among production workers, keeping records of material issued, may make adjustments or repairs to articles carried in stock, and may cut stock to size to fill order.

21210 TOOLS AND PARTS ATTENDANT (Tool Crib Attendant)

This incumbent receives, stores, and issues hand tools, machine tools, dies, replacement parts, shop supplies and equipment, such as measuring devices, in an industrial establishment. The Tools and Parts Attendant does the following: keeps records of tools issued to and returned by workers, searches for lost or misplaced tools, prepares periodic inventory or keeps perpetual inventory and requisitions stock as needed, unpacks and stores new equipment; visually inspects tools or measures with micrometer for wear or defects and reports damaged or worn-out equipment to superiors; may coat tools with grease or other preservative, using a brush or spray gun, and may attach identification tags or engrave identifying information on tools and equipment using electric marking tool.

21410 WAREHOUSE SPECIALIST (Warehouse Worker)

As directed, the Warehouse Specialist performs a variety of warehousing duties that require an understanding of the establishment's storage plan. Work involves most of the following: verifying materials (or merchandise) against receiving documents, noting and reporting discrepancies and obvious damages, routing materials to prescribed storage locations; storing, stacking, or palletizing materials in accordance with prescribed storage methods, rearranging and taking inventory of stored materials, examining stored materials and reporting deterioration and damage, removing material from storage and preparing it for shipment. This worker may operate hand or power trucks in performing warehousing duties.

Note: Exclude workers whose primary duties involve shipping and receiving work (see Shipping/Receiving Clerk), order filling (see Order Filler), or operating forklifts (see Forklift Operator).

23000 MECHANICS AND MAINTENANCE AND REPAIR OCCUPATIONS

This category includes occupations concerned with maintaining and repairing buildings, grounds, and related facilities; installing, repairing, rebuilding, and maintaining in efficient operating condition a wide variety of engines and mechanical equipment designed for use in domestics, commercial, industrial, and agricultural activities.

23010 AEROSPACE STRUCTURAL WELDER

This worker performs fusion welding on aircraft and ground support equipment to a qualified Welding Procedures Specification (WPS), performs structural fusion welding on aerospace parts and components per the requirements of specifications as prescribed by Engineering Drawings and Work Orders. The incumbent is required to read and understand engineering drawings and welding symbols, fabricates manufacture-welded parts from engineering drawing with out direct supervision, performs fusion welding and torch brazing for ground

support equipment, ensuring the procedure is completed per the requirements of the national welding and brazing codes and specifications. This welder welds a wide variety of materials such as aluminum, magnesium, alloyed and low alloy steel, stainless steel and nickel alloy steels. The incumbent is required to have knowledge of the materials to select the correct filler materials and shielding gas when generating the Weld Procedure Specification (WPS), and produce flight critical welds and assist in the development process of generating Weld Procedure Specifications as mandated by welding codes and specifications. The Aerospace Structural Welder determines the sequence of welding in order to prevent or reduce the amount of warp to the weld, designs and fabricates weld holding fixtures as necessary to perform individual welding projects, performs pre-heat and post weld stress relief operations, maintains weld records. The incumbent may perform duties as a Qualified Weld Inspector by inspecting own welds and those of less qualified welders, and may perform duties such as training and re-certification in the various welding processes.

23020 AIRCRAFT MECHANIC (Airframe and Power Plant Mechanic Occupational Base)

This mechanic services, repairs, and overhauls aircraft and aircraft engines to ensure airworthiness. **(See Aerospace Structural Welder for employees whose primary duty involves welding.)**

23021 AIRCRAFT MECHANIC I

The Aircraft Mechanic I troubleshoots malfunctions in aircraft structure, landing gear, flight surfaces and controls, anti-icing, pneudraulic, engines, auxiliary power unit, and ventilation and heating systems. This mechanic repairs, replaces, and rebuilds aircraft structures, such as wings and fuselage, and functional components including rigging, surface controls, and plumbing and hydraulic units, using hand tools, power tools, machines, and equipment such as shears, sheet metal brake, welding equipment, rivet gun, and drills. This worker reads and interprets manufacturers' and airline's maintenance manuals, service bulletins, technical data, engineering data, and other specifications to determine feasibility and method of repairing or replacing malfunctioning or damaged components.

This mechanic performs 100-hour, progressive, isochronal, phase, periodic, and other hourly or calendar inspections, examines reciprocating engines for cracked cylinders and oil leaks, and listens to operating engine to detect and diagnose malfunctions, such as sticking or burnt valves, inspects jet engines and components for cracks, corrosion, foreign object damage, burned areas, distortions, security, warping, wear, and missing segments. Inspects jet engine turbine blades to detect cracks, distortion, corrosion, burn-out, security, or breaks, tests engine operation, using testing equipment, such as ignition analyzer, compression checker, distributor timer, ammeter, and jet calibration (Jetcal) tester, to locate source of malfunction.

Work involves: replacing or repairing worn or damaged components, such as carburetors, alternators, magnetos, fuel controls, fuel pumps, oil pumps, and engine mounted gearboxes, and compressor bleed valves using hand tools, gauges, and testing equipment; removing engine from aircraft, using hoist or forklift truck, disassembling and inspecting parts for

wear, cracks, security, or other defects, and repairing or replacing defective engine parts and reassembles and installs engine in aircraft.

Job duties require that this mechanic: adjusts, repairs, or replaces electrical wiring system and aircraft accessories, performs preflight, thru-flight, and post-flight maintenance inspections, performs miscellaneous duties to service aircraft, including flushing crankcase, cleaning screens and filters, greasing moving parts, and checking brakes. This incumbent supervises the jacking and towing of aircraft, enters in the maintenance records description of the work performed and verifies the work was performed satisfactorily, may service engines and airframe components at line station making repairs, short of overhaul, required to keep aircraft in safe operating condition, may specialize in work, repair and modification of structural, precision, and functional spare parts and assemblies, and may specialize in engine repair. This worker may be required to be licensed by Federal Aviation Administration.

23022 AIRCRAFT MECHANIC II

This mechanic maintains repairs and modifies aircraft structures and structural components of moderate difficulty, maintains and repairs aircraft components including but not limited to flight controls, engines, hydraulics, pneumatics, fuel systems, and mechanical components, applies technical knowledge of airframe and power plant systems in determining equipment malfunctions and applies required expertise in restoring equipment condition and or operation, and applies comprehensive technical expertise to solve moderate to complex problems by interpreting technical documentation such as; blueprints or manufactures' manuals.

Job requirements: must have a thorough knowledge of aircraft mechanical component troubleshooting, repair procedures and replacement of parts, requires broad knowledge of aircraft sheet metal/structural modifications and repair, must have basic knowledge of electrical theory, must have thorough knowledge of aircraft unique tools such as test equipment, torque wrenches, dial indicators, micrometers, sheet metal brakes and sheers. This job requires working knowledge of technical publications. The incumbent receives technical guidance, as required, from supervisor or higher-level technician, and may be required to make entries in aircraft logs and records. Must be able to prioritize workload to maintain schedules on assigned projects.

23023 AIRCRAFT MECHANIC III

A person in this position does the following; maintains repairs and modifies aircraft structures, structural components and engines of complex to extreme difficulty, maintains and repairs aircraft components including but not limited to flight controls, engines, hydraulics, pneumatics, fuel systems and mechanical components, and applies technical knowledge of airframe and power plant systems in determining equipment malfunctions and applies technical expertise in restoring equipment condition and operation.

This worker also applies professional technical expertise and guidance to solve complex problems by interpreting technical data such as blueprints or manufactures' manuals. Work

typically requires a thoroughly comprehensive knowledge of aircraft mechanical component troubleshooting/repair procedures and replacement of components, a thorough knowledge of aircraft sheet metal/structural modification and repair and the ability to determine functionality of non-complex electrical systems. A detailed knowledge of aircraft unique tools such as test equipment, torque wrenches, dial indicators, micrometers, cable tensiometers, sheet metal brakes and sheers, etc. is required.

The incumbent must possess the experience and ability to provide technical support to structural/mechanical engineers and customers alike, must possess excellent organizational skills in prioritizing workload to meet aircraft delivery schedule. This worker will be required to make entries in aircraft logs and records, and is responsible for providing guidance and technical expertise to lower level technicians throughout all aircraft modifications and/or maintenance efforts.

23040 AIRCRAFT MECHANIC HELPER (Airframe and Power plant Mechanic Helper)

The person assists Aircraft Mechanic in servicing, repairing and overhauling aircraft and aircraft engines, performing any combination of the following duties: adjusts and replaces parts such as control cables, fuel tanks, spark plugs, tires, batteries and filters, using mechanic's tools, removes inspection plates, cowling, engine covers, floor boards and related items to provide access for inspection and repair, and replaces items when work is completed, assists in towing and jacking aircraft, and disconnects instruments, ignition systems, and fuel and oil lines. This mechanic assists in dismantling, repairing, overhauling or replacing parts and assemblies such as engines, plumbing and hydraulic systems, and aircraft structural sections, performs routine duties such as furnishing materials, tools and supplies to mechanic; lifting and holding materials in place during operation; cleaning work areas and machines, tools and equipment, cleans aircraft, interior and exterior parts and assemblies with solvents or other cleaning solutions, assists in jacking and towing aircraft; Inflates tires, fills gasoline tanks and oil reservoirs, and greases aircraft, using grease gun, and may assist flight line mechanic, worker, or servicer in servicing and repairing aircraft prior to flight.

23050 AIRCRAFT, PAINTER

The Aircraft Painter coats surfaces of aircraft with paint, lacquer, epoxy, resin or other material, using brushes, rollers, spray guns and other devices, removes old paint from aircraft, using liquid paint remover and scraper. Smooths surface with sandpaper and steel wool, roughens aluminum surfaces with acid solution and steel wool to insure that paint adheres to surface, masks and covers portions of surfaces not to be painted, and paint insignia, letters or numerals on aircraft surface, using stencils.

23060 AIRCRAFT SERVICER (Airport Utility Worker)

The Aircraft Servicer (Airport Utility Worker) services aircraft, performing any combination of the following tasks, directs incoming and outgoing aircraft near terminal or flight line

parking area to assist pilot's maneuvering of the aircraft on ground, using hand or light signals or drives light truck with guiding sign, and secures aircraft in parking position with blocks, stakes, and tie downs.

The Aircraft Servicer (Airport Utility Worker) does the following tasks: operates service vehicles to replenish fuel, oil, water, waste system chemicals, oxygen, hydraulic fluid, and to remove waste, enters in the maintenance records description of the servicing performed, checks for fuel contamination by draining sumps and fuel drains; operates ground support equipment such as electrical power supply and engine starting units, examines tires for specified air pressure and condition, assists in jacking and towing aircraft, removes and replaces defective tires, positions and removes boarding platforms to unload or load aircraft passengers, unloads and loads luggage and cargo, using tow truck with luggage carts, and cleans exterior or interior of aircraft, using portable platform ladders, brushes, rags, water hose, and vacuum. The Aircraft Servicer may de-ice aircraft wings and assemblies, load and unload containers of food, beverages, and dishes for in-flight meal services, trace lost luggage for customers and prepare lost baggage claims, and install drag chutes or retrieve them and send them to parachute shop for repacking.

23080 AIRCRAFT WORKER

The Aircraft Worker makes repairs to aircraft following orders of higher grade worker, assists in troubleshooting malfunctions in aircraft structure, landing gear, flight surfaces and controls, anti-icing, pneudraulic, engines, auxiliary power unit, and ventilation and heating systems, removes, cleans, reinstalls, or replaces defective parts, accessories, and components such as worn gaskets, couplings, and fittings, bad actuators, accumulators, gauges, sections of corroded fuel and oil lines, This worker may supervise the jacking and towing of aircraft, makes adjustments and settings such as cable tension and seat movement settings and adjustments; obtains standard parts such as fuel and oil line connections and fittings, cable linkage, and spark plug cables and harnesses by referring to parts manuals and by making comparisons with samples, may perform pre-flight, thru-flight, and post-flight maintenance inspections, enter in the maintenance records description of the work performed, and services engines and aircraft components at line station making repairs, short of overhaul required to keep aircraft in safe operating condition.

23130 CARPENTER, MAINTENANCE

The Carpenter, Maintenance performs the carpentry duties necessary to maintain in good repair building woodwork and equipment such as bins, cribs, counters, benches, partitions, doors. Work involves most of the following: planning and laying out of work from blueprints, drawings, models, or verbal instructions, using a variety of carpenter's hand tools, portable power tools and standard measuring instruments, and making standard shop computations relating to dimensions of work; and selecting materials necessary for the work. In general, the work of the maintenance carpenter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

23160 ELECTRICIAN, MAINTENANCE

An Electrician performs a variety of electrical trade functions such as the installation, maintenance, or repair of equipment for the generation, distribution, or utilization of electric energy. Work involves most of the following: installing or repairing any of a variety of electrical equipment such as generators, transformers, switchboards, controllers, circuit breakers, motors, heating units, conduit systems, or other transmission equipment; working from blueprints, drawings, layouts, or other specifications, locating and diagnosing trouble in the electrical system or equipment, working standard computations relating to load requirements of wiring or electrical equipment, and using a variety of electrician's hand tools and measuring and testing instruments. In general, the work of the maintenance electrician requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

23180 ELECTRONICS TECHNICIAN, MAINTENANCE (Occupational Base)

The Electronics Technician, Maintenance maintains, repairs, troubleshoots, modifies and installs various types of electronic equipment and related devices such as electronic transmitting and receiving equipment (e.g., radar, radio, television, telecommunication, sonar, and navigational aids); personal and main frame computers and terminals, industrial, medical, measuring, and controlling equipment; and industrial robotic devices. The successful incumbent applies technical knowledge of electronics principles in determining equipment malfunctions, and applies skill in restoring equipment operation, evaluates performance and reliability of prototype or production mode, and recommends changes in circuitry or installation specifications to simplify assembly and maintenance.

23181 ELECTRONICS TECHNICIAN MAINTENANCE I

The Electronics Technician Maintenance I applies basic technical knowledge to perform simple or routine tasks following detailed instructions, performs such tasks as replacing components, wiring circuits, repairing simple electronic equipment; and taking test readings using common instruments such as digital multi-meters, signal generators, semiconductor testers, curve tracers, and oscilloscopes. This person works under close supervision receiving technical guidance from supervisor or higher-level technician. Work is checked frequently for accuracy.

23182 ELECTRONICS TECHNICIAN MAINTENANCE II

The Electronics Technician Maintenance II applies basic and some advanced technical knowledge to solve routine problems by interpreting manufacturers' manuals or similar documents. Work requires familiarity with the interrelationships of circuits and judgment in planning work sequence, in selecting tools, testing instruments, and is reviewed for compliance with accepted practices. This technician works under immediate supervision and achieves technical guidance, as required, from supervisor or higher-level technician.

23183 ELECTRONICS TECHNICIAN MAINTENANCE III

The Electronics Technician Maintenance III applies advanced technical knowledge to solve complex problems that typically cannot be solved solely by referencing manufacturers' manuals or similar documents. Examples of such problems include determining the location and density of circuitry, evaluating electromagnetic radiation, isolating malfunctions, and incorporating engineering changes. Work typically requires an understanding of the interrelationships of circuits, exercising independent judgment in performing such tasks as making circuit analyses, calculating wave forms, and tracing relationships in signal flow, using complex test instruments such as high frequency pulse generators, frequency synthesizers, distortion analyzers, and complex computer control equipment. Work may be reviewed by supervisor for general compliance with accepted practices. This position may provide technical guidance to lower level technicians.

23370 GENERAL MAINTENANCE WORKER

The General Maintenance Worker performs general maintenance and repair of equipment and buildings requiring practical skill and knowledge (but not proficiency) in such trades as painting, carpentry, plumbing, masonry, and electrical work. Work involves a variety of the following duties: replacing electrical receptacles, wires, switches, fixtures, and motors, using plaster or compound to patch minor holes and cracks in walls and ceilings, repairing or replacing sinks, water coolers, and toilets painting structures and equipment; repairing or replacing concrete floors, steps, and sidewalks, replacing damaged paneling and floor tiles, hanging doors and installing door locks, replacing broken window panes, and performing general maintenance on equipment and machinery.

Excluded are:

- a. Craft workers included in a formal apprenticeship or progression program based on training and experience;
- b. Skilled craft workers required to demonstrate proficiency in one or more trades;
- c. Workers performing simple maintenance duties not requiring practical skill and knowledge of a trade (e.g., changing light bulbs and replacing faucet washers).

23380 GROUND SUPPORT EQUIPMENT MECHANIC

The Ground Support Equipment Mechanic diagnoses malfunctions and repairs Ground Support Equipment (GSE), advises and trains lower grade workers on diagnosis and repair of less complex repair/maintenance problems, inspects and approves completed maintenance actions, solves repair problems by studying drawings, wiring diagrams and schematics, and

technical publications; uses automated maintenance data systems to monitor maintenance trends, analyze equipment requirements, maintain equipment records, and document maintenance actions, and analyzes, diagnosis, and repairs GSE using conventional and digital multi-meters, voltmeters, ohmmeters, frequency counters, oscilloscopes, circuit card testers, transistor testers, and hand tools.

This mechanic maintains external fuel and grounding systems, performs scheduled and unscheduled maintenance on GSE, inspects, tests, and operates GSE to determine equipment serviceability and proper operation, services equipment with fuel, oil, water, coolant, hydraulic fluid, refrigerant, and compressed air, diagnoses mechanical and electronic circuitry malfunctions using visual and auditory senses, test equipment, and technical publications. This work also does the following: disassembles and assembles malfunctioning GSE accessories and components, removes, disassembles repairs, cleans, treats for corrosion, assembles, and reinstalls GSE components and accessories, stencils and marks GSE in accordance with technical publications, stores, handles, labels, uses, and disposes of hazardous materials and waste in accordance with all state, local, and federal environmental standards and regulations. This mechanic prepares GSE for storage and mobility deployment; and operates, cleans, inspects, and services GSE towing vehicles. In addition to maintaining vehicle records, this mechanic maintains and updates paper and electronic equipment records, provides dispatch service for GSE, including positioning equipment to support aircraft maintenance and flying operations, practices good housekeeping, tool control, Foreign Object Damage prevention, and safety at all times.

23381 GROUND SUPPORT EQUIPMENT SERVICER

The Ground Support Equipment Servicer inspects, tests, and operates GSE to determine equipment serviceability and proper operation, services equipment with fuel, oil, water, coolant, hydraulic fluid, refrigerant, and compressed air, prepares Ground Support Equipment (GSE) for storage and transportation, uses automated maintenance data systems to maintain equipment records, and document maintenance actions and maintains external fuel and grounding systems. In addition, this servicer stencils and marks GSE in accordance with technical publications, stores, handles, labels, uses, and disposes of hazardous materials and waste in accordance with all state, local, and federal environmental standards and regulations, operates, cleans, inspects, and services GSE towing vehicles. This worker maintains vehicle records, maintains and updates paper and electronic equipment records, provides dispatch service for GSE, including positioning equipment to support aircraft maintenance and flying operations, and practices good housekeeping, tool control, Foreign Object Damage prevention and safety at all times.

23382 GROUND SUPPORT EQUIPMENT WORKER

The Ground Support Equipment Worker makes repairs to Ground Support Equipment (GSE) following orders of a higher-grade worker, troubleshooting malfunctions of GSE using conventional and digital multi-meters, voltmeters, ohmmeters, frequency counters, oscilloscopes, circuit card testers, transistor testers, and hand tools, prepares GSE for storage

and transportation, uses automated maintenance data systems to maintain equipment records, and document maintenance actions, maintains external fuel and grounding systems. This worker performs scheduled and unscheduled maintenance on GSE, inspects, tests, and operates GSE to determine equipment serviceability and proper operation, services equipment with fuel, oil, water, coolant, hydraulic fluid, refrigerant, and compressed air, disassembles and assembles malfunctioning GSE accessories and components.

In addition, the Ground Support Equipment Worker removes, disassembles repairs, cleans, treats for corrosion, assembles, and reinstalls GSE components and accessories, stencils and marks GSE in accordance with technical publications, stores, handles, labels, uses, and disposes of hazardous materials and waste in accordance with all state, local, and federal environmental standards and regulations, operates, cleans, inspects, and services GSE towing vehicles; maintains vehicle records, maintains and updates paper and electronic equipment records, provides dispatch service for GSE, including positioning equipment to support aircraft maintenance and flying operations, and practices good housekeeping, tool control, Foreign Object Damage prevention and safety at all times.

23410 HEATING, VENTILATION, AND AIR-CONDITIONING MECHANIC

The Heating, Ventilation, and Air-Conditioning Mechanic installs, services and repairs environmental-control systems in residences, department stores, office buildings, and other commercial establishments, utilizing knowledge of refrigeration theory, pipefitting and structural layout, mounts compressor and condenser units on platform or floor, using hand tools, following blueprints or engineering specifications, fabricates, assembles and installs ductwork and chassis parts, using portable metalworking tools and welding equipment, and installs evaporator unit in chassis or in air-duct system, using hand tools. This mechanic also cuts and bends tubing to correct length and shape, using cutting and bending equipment and tools, cuts and threads pipe, using machine-threading or hand-threading equipment, joins tubing or pipes to various refrigerating units by means of sleeves, couplings or unions, and solders joints, using torch, forming complete circuit for refrigerant, installs expansion and discharge valves in circuit.

This worker connects motors, compressors, temperature controls, humidity controls, and circulating ventilation fans to control panels and connects control panels to power source; installs air and water filters in completed installation, injects small amount of refrigerant into compressor to test systems and adds Freon gas to build up prescribed operating pressure. This mechanic observes pressure and vacuum gauges and adjusts controls to insure proper operation, tests joints and connections for gas leaks, using gauges or soap-and-water solution, wraps pipes in insulation batting and secures them in place with cement or wire bands, replaces defective breaker controls, thermostats, switches, fuses and electrical wiring to repair installed units, may install, repair and service air conditioners, ranging from fifteen to twenty tons cooling capacity in warehouses and small factory buildings.

23411 HEATING, VENTILATION, AND AIR CONDITIONING MECHANIC (Research Facility)

The Heating, Ventilation, and Air Conditioning Mechanic (Research Facility) installs, modifies and repairs refrigeration – hermetic, semi-hermetic, mechanical, screw, scroll and centrifugal units to 1100 tons; air conditioning, ventilation; reverse osmosis systems, computer rooms; process coolers; ice machines; evaporative cooling; air compressing and related control systems, including pneumatic, DDC, and building control systems equipment. This person performs difficult installation tasks involving assembly, testing, calibrating, and adjusting of temperature control and environmental control systems such as air conditioning plants, air environmental control systems, air distribution systems and complex dual equipment cooling installations, specialized refrigerated warehouses and facilities, and evaporative mechanical ventilation, and dehumidification systems.

The Heating, Ventilation, and Air Conditioning Mechanic (Research Facility) installs new or repaired component and performs complex modifications of systems and components in accordance with applicable electrical publications and directives, and will maintain and repair specialized laboratory equipment such as fume hoods, de-ionized water systems, bio-clean systems, vacuum systems, cascade refrigeration systems, and laboratory sinks. This mechanic may perform complex repair of systems component such as compressors, condensers, heat pumps regulators, fluid and refrigerant gas lines valves, meters, gages, thermostats, pumps, mechanical linkage, and electrical sensing, switching and controlling devices including pneumatic controls, variable speed drives, digital controlled devices, electronic, hydraulic heating and cooling and economizer systems.

23430 HEAVY EQUIPMENT MECHANIC

The Heavy Equipment Mechanic analyzes malfunctions and repairs, rebuilds and maintains power equipment, such as cranes, power shovels, scrapers, paving machines, motor graders, trench-digging machines, conveyors, bulldozers, dredges, pumps, compressors and pneumatic tools. This worker operates and inspects machines or equipment to diagnose defects, dismantles and reassembles equipment, using hoists and hand tools, examines parts for damage or excessive wear, using micrometers and gauges, replaces defective engines and subassemblies, such as transmissions, and tests overhauled equipment to insure operating efficiency. The mechanic welds broken parts and structural members, may direct workers engaged in cleaning parts and assisting with assembly and disassembly of equipment, and may repair, adjust and maintain mining machinery, such as stripping and loading shovels, drilling and cutting machines, and continuous mining machines.

23440 HEAVY EQUIPMENT OPERATOR

The Heavy Equipment Operator operates heavy equipment such as cranes, clamshells, power shovels, motor graders, heavy loaders, carryalls, bulldozers, rollers, scrapers, and large industrial tractors with pan or scrapper attachments. Equipment is used to excavate, load, or move dirt, gravel, or other materials. Operator may read and interpret grade and slope stakes and simple plans, and may grease, adjust and make emergency repairs to equipment.

23460 INSTRUMENT MECHANIC

The Instrument Mechanic installs, repairs, maintains, and adjusts indicating, recording, telemetering, and controlling instruments used to measure and control variables, such as pressure, flow, temperature, motion, force, and chemical composition, using hand tools and precision instruments. This worker disassembles malfunctioning instruments, examines and tests mechanism and circuitry for defects; troubleshoots equipment in or out of control system and replaces or repairs defective parts, reassembles instrument and tests assembly for conformance with specifications, using instruments, such as potentiometer, resistance bridge, manometer, and pressure gauge; inspects instruments periodically, and makes minor calibration adjustments to insure functioning within specified standards. This mechanic may adjust and repair final control mechanisms, such as automatically controlled valves or positioners, and may calibrate instruments according to established standards.

23465 LABORATORY/SHELTER MECHANIC

The Laboratory/Shelter Mechanic performs and, on occasion, will work alone performing removal, repair and installation to a variety of items pertaining to rebuilding and the repair of air transport galley laboratories, communications shelters, trailers and vans; this worker removes, repairs or replaces broken screws, bolts riv-nuts, pop rivets, brackets, skids, floors, and luge, etc. This person fills holes, dents and grooves on the various shelters with filler materials such as Scotch Weld, silastic, and plastic filler, fits positions and attaches patches, removes old and worn gaskets and replaces insuring that gasket is fitted properly to assure water tightness. On occasion, this mechanic removes, makes minor repairs, installs minor appliances, installs the various marking and identifications plates, works with higher-grade employees in providing estimates as to man-hours required to accomplish repairs. On familiar projects, this mechanic works with technical manuals and repair specifications and procedures, properly laying out and installing equipment racks, brackets, tool boards, holding devices, benches, mounts tables, etc.

This mechanic removes, repairs and/or replaces filters, blowers and heaters, visually locates defective operating hardware making repairs as required to items such as doors, handles, locks, hinges, fastening devices, etc., and checks all exterior seams for tightness and fit, making repairs as necessary. The Laboratory/Shelter Mechanic works with higher graded employees in performing structural repair, assists higher graded employee in the water test area performing high and low pressure tests and fording tests, performs pull test on shelter lifting eyes according to specifications, and inspects the shelter during these tests watching

for any deficiencies. When deficiencies are noted, he/she makes on the spot repair or returns shelter to the line for necessary repair.

23530 MACHINERY MAINTENANCE MECHANIC

The Machinery Maintenance Mechanic repairs machinery or mechanical equipment. Work involves most of the following: examining machines and mechanical equipment to diagnose source of trouble, dismantling or partly dismantling machines and performing repairs that mainly involve the use of hand tools in scraping and fitting parts. Responsibilities include replacing broken or defective parts with items obtained from stock, and ordering the production of a replacement part by a machine shop or sending the machine to a machine shop for major repairs. Duties also include preparing written specifications for major repairs or for the production of parts ordered from machine shops, reassembling machines and making all necessary adjustments for operation. In general, the work of a Machinery Maintenance Mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

Excluded from this classification are workers whose primary duties involve setting up or adjusting machines.

23550 MACHINIST, MAINTENANCE

The Machinist, Maintenance produces replacement parts and new parts in making repairs of metal parts of mechanical equipment. Work involves most of the following: interpreting written instructions and specifications, planning and laying out of work, using a variety of machinist's hand tools and precision measuring instruments, setting up and operating standard machine tools. This incumbent is responsible for the shaping of metal parts to close tolerances, making standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining; knowledge of the working properties of the common metals, selecting standard materials, parts, and equipment required for this work; and fitting and assembling parts into mechanical equipment. In general, the machinist's work normally requires a rounded training in machine-shop practice, usually acquired through a formal apprenticeship or equivalent training and experience.

23580 MAINTENANCE TRADES HELPER

The Maintenance Trades Helper assists one or more workers in the skilled maintenance trades by performing specific or general duties of lesser skill such as: keeping a worker supplied with materials and tools, cleaning working area, machine, and equipment; assisting journeyman by holding materials or tools; and performing other unskilled tasks as directed by journeyman. The kind of work the helper is permitted to perform varies from trade to trade. In some trades the helper is confined to supplying, lifting, and holding materials and

tools, and cleaning working areas and in others, the worker is permitted to perform specialized machine operations, or parts of a trade that are also performed by workers on a full-time basis.

23640 MILLWRIGHT

The Millwright installs new machines or heavy equipment, and dismantles and installs machines or heavy equipment when changes in the plant layout are required. Work involves most of the following: planning and laying out work; interpreting blueprints or other specifications, using a variety of hand tools and rigging; making standard shop computations relating to stresses, strength of materials, and centers of gravity, aligning and balancing equipment, selecting standard tools, equipment and parts to be used, and installing and maintaining in good order power transmission equipment such as drives and speed reducers. In general, the Millwright's work normally requires a rounded training and experience in the trade acquired through a formal apprenticeship or equivalent training and experience.

23760 PAINTER, MAINTENANCE

The Painter, Maintenance paints and redecorates walls, woodwork and fixtures. Work involves the following: knowledge of surface peculiarities and types of paint required for different applications, preparing surface for painting by removing old finish or by placing putty or filler in nail holes and interstices, and applying paint with spray gun or brush. This person may mix colors, oils, white lead and other paint ingredients to obtain proper color or consistency. In general, the work of the maintenance painter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

23790 PIPEFITTER, MAINTENANCE

The Pipefitter, Maintenance installs or repairs water, steam, gas or other types of pipe and pipefitting. Work involves most of the following: laying out work and measuring to locate position of pipe from drawings or other written specifications, cutting various sizes of pipe to correct lengths with chisel and hammer, oxyacetylene torch or pipe-cutting machines, threading pipe with stocks and dies. This person is responsible for bending pipe by hand-driven or power-driven machines, assembling pipe with couplings and fastening pipe to hangers, making standard shop computations relating to pressures, flow and size of pipe required; and making standard tests to determine whether finished pipes meet specifications. In general, the work of the Maintenance Pipefitter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

Workers primarily engaged in installing and repairing building sanitation or heating systems are excluded.

23810 PLUMBER, MAINTENANCE

The Plumber, Maintenance assembles, installs and repairs pipes, fittings and fixtures of heating, water, and drainage systems, according to specifications and plumbing codes, studies building plans and working drawings to determine work aids required, and sequence of installations. This worker inspects structure to ascertain obstructions to be avoided to prevent weakening of structure resulting from installation of pipe, and locates and marks position of pipe and pipe connections and passage holes for pipes in walls and floors. This worker cuts openings in walls and floors to accommodate pipe and pipe fittings, using hand tools and power tools, cuts and threads pipe, using pipe cutters, cutting torch, and pipe-threading machine, bends pipe to required angle by use of pipe-bending machine, or by placing pipe over block and bending it by hand.

The Plumber, Maintenance assembles and installs valves, pipefittings, and pipes composed of metals, such as iron, steel, brass and lead, and nonmetals, such as glass, vitrified clay, and plastic. This person joins pipe by use of screws, bolts, fittings, solder, plastic solvent, and caulks joints, fills pipe system with water or air and reads pressure gauges to determine whether system is leaking, installs and repairs plumbing fixtures, such as sinks, commodes, bathtubs, water heaters, hot water tanks, garbage disposal units, dishwashers, and water softeners. This person repairs and maintains plumbing by replacing washers in leaky faucets, mending burst pipes, and opening clogged drains, and may weld holding fixtures to steel structural members.

23820 PNEUDRAULIC SYSTEMS MECHANIC

The Pneudraulic Systems Mechanic maintains, modifies, and repairs hydraulic and pneumatic systems and components that actuate mechanisms or produce, control, and regulate the flow of fluids (liquids and gases), tests for and isolates malfunctions in hydraulic and pneumatic systems or components, utilizing technical manuals and schematics, and modifies, repairs or disassembles and overhauls systems or components.

23850 RIGGER

A Rigger assembles rigging to lift and move equipment or material in manufacturing plant or shipyard, selects cables, ropes, pulleys, winches, blocks, and sheaves, according to weight and size of load to be moved, attaches pulley and blocks to fixed overhead structures, such as beams, ceilings, and gin pole booms, with bolts and clamps, attaches load with grappling devices, such as loops, wires, ropes and chains, to crane hook, gives directions to Bridge-or-Gantry-Crane Operator or Hoisting Engineer engaged in hoisting and moving loads to insure safety of workers and material handled, using hand signals, loudspeaker, or telephone. The Rigger also sets up, braces, and rigs hoisting equipment, using hand tools and power wrenches, splices rope and wire cables to make or repair slings and tackle, and may direct workers engaged in hoisting machinery and equipment into ships.

23870 SCALE MECHANIC

The Scale Mechanic installs, calibrates, and repairs weighing scales, using hand tools, power tools, and standard test weights, moves scale into position, using hoists and rollers, inserts shims between scale base and foundation to level scale, secures scale to foundation, using hand tools. This worker tests scale, using certified weights, and adjusts pivots, dial settings, and pendulums to ensure that weight indication meets legal specifications, turns setscrews to adjust spring scales disassembles scales and repairs or replaces worn or damaged parts, such as pivots and bearings. This worker straightens, cleans, and repaints structural parts of scale, and may install, adjust and repair electronically controlled scales.

23890 SHEET-METAL WORKER, MAINTENANCE

The Sheet-Metal Worker, Maintenance fabricates, installs and maintains in good repair the sheet-metal equipment and fixtures (such as machine guards, grease pans, shelves, lockers, tanks, ventilators, chutes, ducts, metal roofing) of an establishment. Work involves most of the following: planning and laying out all types of sheet-metal maintenance work from blueprints, models, or other specifications, setting up and operating all available types of sheet-metal working machines, using a variety of hand tools in cutting, bending, forming, shaping, fitting and assembling, and installing sheet-metal articles as required. In general, the work of the maintenance sheet-metal worker requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

23910 SMALL ENGINE MECHANIC

The Small Engine Mechanic repairs fractional-horsepower gasoline engines used to power lawnmowers, garden tractors, and similar machines, using hand tools, locates causes of trouble, dismantles engines, using hand tools, and examines parts for defects, replaces or repairs parts, such as rings and bearings, cleans and adjusts carburetor and magneto, starts repaired engines and listens to sounds to test performance.

23930 TELECOMMUNICATIONS MECHANIC (Occupational Base)

The Telecommunications Mechanic installs, removes, tests, troubleshoots, programs, maintains, and repairs voice and non-voice communications systems including intercom and public address systems, alarm systems, digital switching equipment, miscellaneous telephone, radio, fire alarms, intrusion alarms and compute data circuits, and related apparatus required in central switching office.

23931 TELECOMMUNICATIONS MECHANIC I

The Telecommunications Mechanic I installs, removes, maintains, modifies, troubleshoots, and repairs voice and/or non-voice communications systems including intercom and public address systems, alarm systems, teletype equipment, and electronic and electromechanical

telephone key systems/PBAXs; terminal and communications equipment, including line drivers. This mechanic runs cables, key cables, or house wire to all telephone sets, terminal connectors, lugs, pins, or screws, associated with key telephone equipment and/or terminating equipment for non-voice circuits.

23932 TELECOMMUNICATIONS MECHANIC II

The Telecommunications Mechanic II installs, tests, troubleshoots, programs, maintains, and repairs digital switching equipment, attendant consoles, power and ringing relay racks, miscellaneous telephone, radio, fire alarms, intrusion alarms, and computer data circuits and related apparatus required in the central switching office. This worker analyzes system failures and other unusual system occurrences to isolate the source of the problem and determine whether the failure is caused by software, hardware, or other factors. Employees in this position maintain manual and/or computerized central office records, including detail records, traffic analysis records, cable records, line records, subscriber service records, and spare parts inventories.

23960 WELDER, COMBINATION, MAINTENANCE

This incumbent welds metal components together to fabricate or repair products, such as machine parts, plant equipment, mobile homes, motors and generators, according to layouts, blueprints or work orders, using brazing and a variety of arc and gas welding equipment. This worker welds metal parts together, using both gas welding or brazing and any combination of arc welding processes, performs related tasks such as thermal cutting and grinding, repairs broken or cracked parts, fills holes and increases size of metal parts, positions and clamps together components of fabricated metal products preparatory to welding. This worker may locate and repair cracks in industrial engine cylinder heads, using inspection equipment and gas torch, may perform repairs only and be required to pass employer performance tests or standard tests to meet certification standards of governmental agencies or professional and technical associations.

Note: Employees welding aircraft and ground support equipment should be classified as an Aerospace Structural Welder.

GSA Schedule 736 Special Item Number (SIN) 736-4

13000 INFORMATION AND ARTS OCCUPATIONS

This category includes occupations concerned with the communication of information and ideas through audio, visual, or pictorial means, the collection, custody, presentation, display, and interpretation of art works, cultural objects, and other artifacts, or a branch of fine or applied arts such as industrial design, interior design, or musical composition.

13010 EXHIBITS SPECIALIST (Occupational Base)

The Exhibits Specialist constructs and installs exhibit structures, electric wiring, and fixtures of materials, such as wood, plywood, and fiberglass, using hand tools and power tools. This Specialist studies sketches or scale drawings for temporary or permanent display or exhibit structures to determine type, amount, and cost of material needed. The Specialist confers with exhibit planning and art personnel to discuss structural feasibility of plans and to suggest alternate methods of displaying objects in exhibit; cuts, assembles, and fastens parts to construct framework, panels, shelves, and other exhibit components of specified materials, using hand tools and power tools. The Exhibits Specialist sprays or brushes paint, enamel, varnish, or other finish on structures, or creates special effects by applying finish with cloth, sponge, or fingers to prepare structure for addition of fittings.

This Specialist would mount fittings and fixtures, such as shelves, panel boards, and shadow boxes to framework, using hand tools or adhesives; install electrical wiring, fixtures, apparatus, audiovisual components, or control equipment in framework, according to design specifications, install or affix murals, photographs, graphs, mounted legend materials, and graphics in framework or on fixtures assemblies. Typically, the Exhibits Specialist duties also include the following: installing or arranging structures in exhibit galleries working with maintenance and installation personnel, tests electrical, electronic, and mechanical components of exhibit structure to verify operation, may maintain inventory of building materials, tools, and equipment, and order supplies as needed for construction of exhibit fixtures; assigning duties to, and supervising work of carpentry, electrical, and other craft workers engaged in constructing and installing exhibit components.

13011 EXHIBITS SPECIALIST I

At this level, the Exhibits Specialist brings to the job manual dexterity, mechanical skill, and/or artistic skill, plus aptitude for learning exhibits techniques. They perform duties related to the fabrication, finishing and repair of exhibits while acquiring training in museum or exhibits techniques.

13012 EXHIBITS SPECIALIST II

At this level, the Exhibits Specialist perform independently the phases of work in which they are proficient, and receive training in the more complex processes. Duties relate to the fabrication, finishing and maintenance of exhibits that require a high degree of manual dexterity and moderate but varied artistic skills. Generally, they work from accurate scale drawings, blueprints or sketches with instructions as to the materials to be used and the colors to be matched. On the phases of the work with which they are thoroughly familiar, and within the framework of accepted and proven methods and techniques, there is considerable latitude of choice in execution. The supervisor checks their work at the completion of each phase on work that involves several processes or stages of development.

13013 EXHIBITS SPECIALIST III

At this level, the Exhibits Specialist is responsible for the construction of portions of more complex exhibits, such as models, three-dimensional training aids, or complex exhibit cases and other exhibit furniture. Complexity of work may be indicated by: (a) subject matter which requires extensive study and search of the literature; (b) the need to demonstrate the significance of an event or development; (c) the need to present the development or evaluation of an event; and (d) subject matter involving several disciplines. Another area of work at this level includes the planning of detailed work processes and actual restoration work on historic structures or valuable items, or the construction of replicas or models requiring greater skill than is required for the work at the Exhibits Specialist II level. At level III, Exhibits Specialists are comparatively free to use judgment in selecting work methods and materials, and developing techniques and color schemes.

13040 ILLUSTRATOR (Occupational Base)

The Illustrator prepares illustrations and drawings using common art media to depict medical and scientific subjects or technical equipment, renders preliminary or final products such as assembly and component drawings, exploded views, functional, perspective and isometric drawings, and schematic diagrams from rough sketches or notes provided by subject matter specialists, using art media such as oil, water color or pen-and-ink. This person lays out proposed illustrations in conformity with established style and format taking into account perspective, angle of view, and artistic effect, discusses illustration or drawing at various stages of completion with higher-grade illustrator or supervisor, and makes changes as necessary.

13041 ILLUSTRATOR I

Duties for this position require the ability to use common media such as tempera, oils, pen-and-ink, or pencil with average skill. The Illustrator I copies drawings, either by tracing or freehand; applies coloring or wash to line drawings; letters by hand or by use of templates, and does detail or background work on illustrations which have been prepared by an illustrator of higher grade. When working with scientific subjects and technical equipment

this Illustrator acquires basic knowledge of subject matter field and develops information about the field of work that will be illustrated. When working in the general fields of illustrating, someone in this position acquires necessary information about subject of the illustrations or applies general knowledge to the subject.

13042 ILLUSTRATOR II

The Illustrator II usually is assigned to projects involving several of the common art media such as pen-and-ink, pencil, tempera, wash, oils, and airbrush over a period of time. These projects require the Illustrator to be proficient in the use of these media and in executing acceptable drawings in many styles. Generally, Illustrator II executes drawings that have been conceived by others and presented in the form of rough sketches. This illustrator does not exercise an extensive knowledge of the subject matter involved when preparing medical, scientific or technical equipment illustrations, but does acquire information about the subject assigned to illustrate and develop a background of subject matter knowledge through carrying out these illustrating assignments. However, the kind of illustrating work assigned does not require an extensive prior knowledge about the subjects illustrated.

13050 LIBRARY AIDE/CLERK

The Library Aide/Clerk works under the supervision of Librarian and Library Technician at the main circulation desk following simple repetitive tasks including; issuing library cards, explaining library rules and borrowing procedures, recording information such as reports of lost or damaged items, requests for materials, and overdue materials and refers this information to Library Technician or Librarian. This Worker contacts borrowers by telephoning or issuing overdue notices, shelves books, magazines, and other materials under supervision of Library Technician or Librarian, accesses and enters limited routine information in a few screens of automated database, performs routine clerical duties such as referring callers or visitors to appropriate staff, and assists Library Technician with processing duties such as labeling and stamping and preparing materials such as posters or book lists for events.

13054 LIBRARY INFORMATION TECHNOLOGY SYSTEMS ADMINISTRATOR

The Library Information Technology Systems Administrator administers and supports daily operational requirements of library and information computer network systems including workstation, file servers, and web servers. Duties typically involve the installation of hardware, software, systems upgrades, network accounts, network security, and web page design, interface and updates, planning and implementing long-range automation plan, period reports, and local system design documentation. This Administrator trains staff on software

applicable to their position, assists patrons with information technology, and provides instruction on computers and applications.

13058 LIBRARY TECHNICIAN

The Library Technician provides information service such as answering questions regarding card catalogs and assists in the use of bibliographic tools, such as Library of Congress catalog. The incumbent performs routine cataloging of library materials, files cards in catalog drawers according to system used, answers routine inquiries, and refers persons requiring professional assistance to Librarian. This Technician verifies bibliographic information on order requests, works or directs workers in maintenance of stacks or in section of department or division with tasks such as ordering or receiving section of acquisitions department, card preparation activities in catalog department, or limited loan or reserve desk operation of circulation department.

13070 PHOTOGRAPHER (Occupational Base)

The Photographer takes pictures requiring knowledge of photographic techniques, equipment, and processes. Typically, some familiarity with the organization's activities (i.e., scientific, engineering, industrial, technical, retail, commercial, etc.) and some artistic ability are needed at higher levels. Depending on the objectives of the assignment, photographers use standard equipment (including simple still, graphic, and motion picture cameras, video and television hand cameras, and similar commonly used equipment) and/or use special-purpose equipment (including specialized still and graphic cameras, motion picture production, television studio, and high speed cameras and equipment). At the higher levels, a complex accessory system of equipment may be used, as needed, with sound or lighting systems, generators, timing or measurement control mechanisms, or improvised stages or environments, etc. Work of photographers at all levels is reviewed for quality and acceptability. The Photographer may also develop, process, and edit film or tape, or may perform work described at lower levels as needed.

Positions are matched to the appropriate level based on the difficulty of, and responsibility for the photography performed, including the subject-matter knowledge and artistry required to fulfill the assignment. While the equipment may be an indication of the level of difficulty, photographers at the higher level may use standard equipment, as needed.

13071 PHOTOGRAPHER I

The Photographer I takes routine pictures in situations where several shots can be taken. This Photographer uses standard still cameras for pictures lacking complications, such as speed, motion, color contrast, or lighting. Photographs are taken for identification, employee publications, information, or publicity purposes. Workers must be able to focus, center, and provide simple flash-type lighting for an uncomplicated photograph. Typical subjects are employees who are photographed for identification, award ceremonies, interviews, banquets

or meetings; or external views of machinery, supplies, equipment, building, damaged shipments, or other subjects photographed to record conditions. Assignments usually are performed without direct guidance due to the clear and simple nature of the desired photograph.

13072 PHOTOGRAPHER II

This Photographer uses standard still cameras, commonly available lighting equipment and related techniques to take photographs, which involve limited problems of speed, motion, color contrast, or lighting. Typically, the subjects photographed are similar to those at Level I, but the technical aspects require more skill. Based on clear-cut objectives, this Worker determines shutter speeds, lens settings and filters, camera angles, exposure times, and type of film. This position requires familiarity with the situation gained from similar past experience to arrange for specific emphasis, balanced lighting, and correction for distortion, etc., as needed. The Photographer II may use 16mm or 35mm motion picture cameras for simple shots such as moving equipment or individuals at work or meetings, where available or simple artificial lighting is used. Ordinarily, there is opportunity for repeated shots or for retakes if the original exposure is unsatisfactory. This Photographer consults with supervisor or photographers that are more experienced when problems are anticipated.

13073 PHOTOGRAPHER III

The Photographer III selects from a range of standard photographic equipment for assignments demanding exact renditions, normally without opportunity for later retakes, when there are specific problems or uncertainties concerning lighting, exposure time, color, artistry, etc. Job tasks require this worker to discuss technical requirements with operating officials or supervisor and customize treatment for each situation according to a detailed request, vary camera processes and techniques, and use the setting and background to produce esthetics, as well as accurate and informative pictures. Typically, standard equipment is used at this level, although "specialized" photography can be performed using some special-purpose equipment under closer supervision.

In typical assignments, the Photographer III photographs the following: (1) drawings, charts, maps, textiles, etc., requiring accurate computation of reduction ratios and exposure times and precise equipment adjustments; (2) tissue specimens in fine detail and exact color when color and condition of the tissue may deteriorate rapidly; (3) medical or surgical procedures or conditions which normally cannot be recaptured; (4) machine or motor parts to show wear or corrosion in minute wires or gears; (5) specialized real estate, goods and products for catalogs or listings when salability is enhanced by the photography; (6) work, construction sites, or patrons in prescribed detail to substantiate legal claims, contracts, etc.; (7) artistic or technical design layouts requiring precise equipment settings; and (8) fixed objects on the ground or air-to-air objects which must be captured quickly and require directing the pilot to get the correct angle of approach. This person works independently; solves most problems through consultations with more experienced photographers, if available, or through reference sources.

13074 PHOTOGRAPHER IV

The Photographer IV uses special-purpose cameras and related equipment for assignments in which the photographer usually makes all the technical decisions, although the objective of the pictures is determined by operating officials. This Worker conceives and plans the technical photographic effects desired by operating officials and discusses modifications and improvements to their original ideas in light of the potential and limits of the equipment, improvises photographic methods and techniques or selects and alters secondary photographic features (e.g., scenes, backgrounds, colors, lighting). Many assignments afford only one opportunity to photograph the subject. Typical examples of equipment used at this level include ultra-high speed, motion picture production, studio television, animation cameras, specialized still and graphic cameras, electronic timing and triggering devices, etc.

Some assignments are characterized by extremes in light values and the use of complicated equipment. This photographer sets up precise photographic measurement and control equipment; uses high speed color photography, synchronized stroboscopic (interval) light sources, and/or timed electronic triggering; operates equipment from a remote point; or arranges and uses cameras operating at several thousand frames per second. In other assignments, selects and sets up motion picture or television cameras and accessories and shoots a part of a production or a sequence of scenes, or takes special scenes to be used for background or special effects in the production. This person works under guidelines and requirements of the subject-matter area to be photographed, and consults with supervisors only when dealing with highly unusual problems or altering existing equipment.

13075 PHOTOGRAPHER V

As a top technical expert, the Photographer V exercises imagination and creative ability in response to photography situations requiring novel and unprecedented treatment. This worker typically performs one or more of the following assignments: (1) develops and adapts photographic equipment or processes to meet new and unprecedented situations, e.g. works with engineers and physicists to develop and modify equipment for use in extreme conditions such as excessive heat or cold, radiation, high altitude, under water, wind and pressure tunnels, or explosions; (2) plans and organizes the overall technical photographic coverage for a variety of events and developments in phases of a scientific, industrial, medical, or research project; or (3) creates desired illusions or emotional effects by developing trick or special effects photography for novel situations requiring a high degree of ingenuity and imaginative camera work to heighten, simulate, or alter reality.

The Photographer V Independently develops, plans, and organizes the overall technical photographic aspects of assignments in collaboration with operating officials who are responsible for project substance. This worker uses imagination and creative ability to implement objectives within the capabilities and limitations of cameras and equipment, may exercise limited control over the substance of events to be photographed by staging actions, suggesting behavior of the principals, and rehearsing activities before photographs are taken.

13110 VIDEO TELECONFERENCE TECHNICIAN

The Video Teleconference Technician operates video teleconferencing equipment including powering up teleconferencing equipment, checking equipment for proper operation, setting audio levels, positioning camera functions, performing secure or non-secure setup; operate or assist in operating session control panel, studio control unit, and high-resolution graphics. Job tasks require this technician to provide assistance to users in conducting video teleconference sessions, which may include conference preparation, and monitor VTC equipment and system performance, reporting equipment and network problems to appropriate parties for maintenance or repair. The Video Teleconference Technician's responsibilities may include operation of briefing computers, projectors or other audiovisual equipment in conjunction with video teleconferencing services; may include scheduling video teleconferencing sessions, training personnel in operation of video teleconferencing equipment, and other audiovisual equipment associated with video teleconferencing services.

15080 GRAPHIC ARTIST

The Graphic Artist works with the courseware production team to design and develop graphic/visual effects used in courseware material. This position requires the use of specialized computer software to develop high quality computer illustrations, technical drawings, and animations supporting various media used within the training curriculum. The Graphic Artist is capable of using specialized hardware and/or software for video/audio capture and editing of multimedia presentations, incorporates principles of layout design throughout the courseware production process, and is responsible for quality control, review and revision of all aspects of graphics development.

GSA Schedule 736 Special Item Number (SIN) 736-5

30000 TECHNICAL OCCUPATIONS

This category includes occupations concerned with providing technical assistance to engineers and scientists in both laboratory and production activities as well as occupations concerned with independently operating and servicing technical equipment and systems. Characteristic of occupations in this category is the requirements for a knowledge of scientific, engineering, and mathematical theories, principles and techniques that are less than full professional knowledge but which, nevertheless, enables the technician to understand how and why a specific device or system operates.

The technician solves practical problems encountered in fields of specialization, such as those concerned with development of electrical and electronic circuits, and establishment of testing methods for electrical, electronic, electromechanical, and hydro-mechanical devices and mechanisms. Work involves the application of engineering principles in solving design, development, and modification problems of parts or assemblies for products or systems, and application of natural and physical science principles to basic or applied research problems in fields, such as metallurgy, chemistry, and physics. The technician may perform technical procedures and related activities independently. Workers with the title of Technician who are concerned primarily with maintenance and repair are classified with Mechanics and Maintenance and Repair Occupations.

30020 ARCHEOLOGICAL TECHNICIAN (Occupational Base)

This class provides technical support to professional Archeologist, utilizing a basic understanding of anthropological and archeological field techniques in connection with locating, testing and evaluating cultural resource sites, conducts pre-field office research, field surveys, and site testing, using a variety of reference materials. These worker interview with source individuals, aerial photographs and technical instruments, search areas of proposed projects for evidence of historic and re-historic archeological remains, and determine exact locations of sites and marks them on maps and aerial photographs.

30021 ARCHEOLOGICAL TECHNICIAN I

Under the direct supervision of archaeological crew chiefs and under the general supervision of field director/project, the Archeological Technician I performs unskilled and semi- skilled tasks at archaeological field sites. This person assists crew chief in activities associated with the excavation of project areas and found features, walks over project searching for archaeological materials such as historic and prehistoric remains, excavates, screens, back-fills excavated areas, assists in preparation of sketch maps and forms, and field photography, conducts simple surveys using compass, topographical map and aerial photographs. This worker determines the exact locations of sites and marks them on maps and/or aerial photographs, records information on archeological site survey form and prepares simple reports, and cleans, packages, and labels artifacts recovered from inventories and excavations and assists in the flotation of soil samples.

30022 ARCHEOLOGICAL TECHNICIAN II

Under the general supervision of field director/project, this archaeologist, performs skilled tasks, conducts hand excavations, completes plan and profile maps of excavated units, and completes standard feature and level forms, screens soils to recover artifacts. This technician performs flotation of soil samples, walk over, and shovel testing, catalogs, packages and labels archaeological artifacts, maintains field equipment and supplies, and conducts inventories of cultural resources in areas of proposed projects. This incumbent researches reference material such as state and national register files, historic documents, archeological reports, maps and aerial photos, and interviews source individuals concerning project areas,

performs on-the-ground area searches for surface and subsurface evidence of historic and prehistoric archeological remains.

This technician identifies and records historic and prehistoric cultural resource sites prepares Archeological Reconnaissance Reports (AARF's) and maps, and ensures that archeology work assignments are carried out in safe, timely manner according to established standards and procedures. This technician maintains the Archeological Reconnaissance schedule by estimating and reporting and expected time of completion of each project and updating the project planning board, reviews work in progress to see that standards for pre-field research, survey design, site recording, graphics and final report are being met, and advises other employees on methods of cultural resource inventory. This worker also provides written instructions, research materials and supplies to all involved in planning and operation of natural resource activities.

30030 CARTOGRAPHIC TECHNICIAN

This incumbent provides technical assistance to professional Cartographers in connection with the construction or revision of maps and charts. Work involves the solution of technical problems that require primarily the application of a practical knowledge of the methods and techniques by which maps and charts are constructed. The Cartographic Technician performs any, or a combination of duties such as: collecting, evaluating and selecting source materials, compiling information from source materials and developing a plan for using the information in accordance with product specifications. Duties could involve obtaining reliable measurements of earth's surface features such as elevations and distances from photographs by using photogram metric techniques and equipment, using drafting tools and automated equipment to make maps and charts, assembling aerial photographs into mosaics, and reviewing and editing map and chart manuscripts.

30060 DRAFTER/CAD OPERATOR (Occupational Base)

The Draft/CAD Operator performs drafting work manually or using a computer, requiring knowledge and skill in drafting methods, procedures, and techniques, prepares drawings of structures, facilities, land profiles, water systems, mechanical and electrical equipment, pipelines, duck systems, and similar equipment, systems, and assemblies. Drawings are used to communicate engineering ideas, design, and information. This operator uses recognized systems of symbols, legends, shadings, and lines having specific meanings in drawings.

Excluded are:

- a. Designers using technical knowledge and judgment to conceive, plan, or modify designs;
- b. Illustrators or graphic artists using artistic ability to prepare illustrations;

- c. Office drafters preparing charts, diagrams, and room arrangements to depict statistical and administrative data;
- d. Cartographers preparing maps and charts primarily using a technical knowledge of cartography;
- e. Positions below level I; workers in these trainee positions either trace or copy finished drawings under close supervision or, receive instruction in the elementary methods and techniques of drafting; and
- f. Supervisors.

Positions are classified into levels based on the following definitions.

30061 DRAFTER/CAD OPERATOR I

This operator prepares drawings or computer models of simple, easily visualized structures, systems, parts or equipment from sketches or marked-up prints, selects appropriate templates/computer programs or uses a compass and other equipment needed to complete assignments. Drawings and models fit familiar patterns and present few technical problems. Supervisor provides detailed instructions on new assignments, gives guidance when questions arise, and reviews completed work for accuracy. Typical assignments include:

- a. Revisions to the original drawings of a plumbing system by increasing pipe diameters.
- b. Drawing from sketches, the building floor plans, determining size, spacing and arrangement of freehand lettering according to scale.
- c. Drawing simple land profiles from predetermined structural dimensions and reduced survey notes.
- d. Tracing river basin maps and enters symbols to denote stream sampling locations, municipal and industrial waste discharges, and water supplies.
- e. Preparing a computer model of a room, building, structure from data, prints, photos.

30062 DRAFTER/CAD OPERATOR II

This operator prepares various drawings computer models of such units as construction projects or parts and assemblies, including various views, sectional profiles, irregular or reverse curves, hidden lines, and small or intricate details. Work requires use of most of the conventional drafting and CAD techniques and a working knowledge of the terms and

procedures of the occupation. The Draft/CAD Operator II makes arithmetic computations using standard formulas. Familiar or recurring work is assigned in general terms. Unfamiliar assignments include information on methods, procedures, sources of information, and precedents to follow. Simple revisions to existing drawings or computer models may be assigned with a verbal explanation of the desired results. More complex revisions are produced from sketches, computer models or specifications that clearly depict the desired product.

Typical assignments include:

- a. Preparing several views of a simple gear system from a layout and manual references and obtaining dimensions and tolerances from manuals and by measuring the layout.
- b. Preparing and revising detail and design drawings for such projects as the construction and installation of electrical or electronic equipment, plant wiring, and the manufacture and assembly of printed circuit boards. Drawings typically include details of mountings, frames, guards, or other accessories; conduit layouts; or wiring diagrams indicating transformer sizes, conduit locations and mountings.
- c. Drawing base and elevation views, sections, and details of new bridges or other structures, revising complete sets of roadway drawings for highway construction projects, or preparing block maps, indicating water and sewage line locations.

30063 DRAFTER/CAD OPERATOR III

This operator prepares complete sets of complex drawings or computer models that include multiple views, detail drawings, and assembly drawings. Drawings or models include complex design features that require considerable drafting skill to visualize and portray. Assignments regularly require the use of mathematical formulas to draw land contours or to compute weights, center of gravity, load capacities, dimensions, quantities of material, etc. The Draft/CAD Operator works from sketches, computer models, and verbal information supplied by an engineer, architect, or designer to determine the most appropriate views, detail drawings, and supplementary information needed to complete assignments. This operator selects required information from computer programs, and internet sites, precedents, manufacturers' catalogs, and technical guides. This operator independently resolves most of the problems encountered. Supervisor or design originator may suggest methods of approach or provide advice on unusually difficult problems. Typical assignments include:

- a. Prepares complete sets of drawings of test equipment to be manufactured from layouts, models, or sketches. Several cross-sectional and subassembly drawings are required. From information supplied by the design originator and from technical handbooks and manuals, this operator describes dimensions, tolerances, fits, fabrication techniques, and standard parts to use in manufacturing the equipment.
- b. From electronic schematics, information as to maximum size, and manuals giving dimensions of standard parts, determines the arrangement and prepares drawing of printed circuit boards.

c. From precedents, drafting standards, and established practices, prepares final construction drawings for floodgates, navigation locks, dams, bridges, culverts, levees, channel excavations, dikes and berms, prepares boring profiles, typical cross-sections, and land profiles; and delineates related topographical details as required.

d. Prepares final drawings for street paving and widening or for water and sewer lines having complex trunk lines; reduces field notes and calculates true grades. From engineering designs, lays out plan, profile and detail appurtenances required; and notifies supervisor of conflicting details in design.

Excludes drafter performing work of similar difficulty to that described at this level but who provides support for a variety of organizations that have widely differing functions or requirements.

30080 ENGINEERING TECHNICIAN (Occupational Base)

To be covered by these definitions, employees must meet all of the following criteria: Be able to provide semi-professional technical support for engineers working in such areas as research, design, development, testing, or manufacturing process improvement. Work pertains to electrical, electronic, or mechanical components or equipment. These technicians are required to have some practical knowledge of science or engineering. Some positions may require a practical knowledge of mathematics or computer science. Included are workers who prepare design drawings and assist with the design, evaluation, and/or modification of machinery and equipment.

Excluded are:

- a. Production and maintenance workers, including workers engaged in calibrating, repairing, or maintaining electronic equipment (see Maintenance Electronics Technicians);
- b. Model Makers and other craft workers;
- c. Quality Control Technicians and Testers;
- d. Chemical and other non-engineering laboratory technicians;
- e. Civil Engineering Technicians and Drafters;
- f. Positions (below Level I) which are limited to simple tasks such as: measuring items or regular shapes with a caliper and computing cross-sectional areas; identifying, weighing, and marking easy-to-identify items; or recording simple instrument readings at specified intervals; and engineers required to apply a professional knowledge of engineering theory and principles.

30081 ENGINEERING TECHNICIAN I

This technician performs simple routine tasks under close supervision or from detailed procedures. Work is checked in progress or on completion. This person performs one or a combination of such typical duties as:

- a. Assembling or installing equipment or parts requiring simple wiring, soldering, or connecting.
- b. Performing simple or routine tasks or tests such as tensile or hardness tests; operating and adjusting simple test equipment; records test data.
- c. Gathering and maintaining specified records of engineering data such as tests, drawings, etc.; performing computations by substituting numbers in specified formulas; plotting data and draws simple curves and graphs.

30082 ENGINEERING TECHNICIAN II

The Engineering Technician II performs standardized or prescribed assignments involving a sequence of related operations, follows standard work methods on recurring assignments but receives explicit instructions on unfamiliar assignments. Technical adequacy of routine work is reviewed on completion; non-routine work may be reviewed in progress. This technician performs at this level, one or a combination of such typical duties as:

- a. Following specific instructions, assembles or constructs simple or standard equipment or parts, servicing or repairing simple instruments or equipment;
- b. Conducting a variety of tests using established methods, preparing test specimens, adjusting and operating equipment, recording test data, and pointing out deviations resulting from equipment malfunction or observational errors;
- c. Extracting engineering data from various prescribed but non-standardized sources, processing the data following well-defined methods including elementary algebra and geometry, and presenting the data in prescribed form.

30083 ENGINEERING TECHNICIAN III

The Engineering Technician III performs assignments that are not completely standardized or prescribed, selects or adapts standard procedures or equipment, using fully applicable precedents, receives initial instructions, equipment requirements, and advice from supervisor or engineer as needed, performs recurring work independently. Work is reviewed for technical adequacy or conformity with instructions. This technician performs at this level one or a combination of such typical duties as:

- a. Constructing components, subunits, or simple models or adapts standard equipment; may troubleshoot and correct malfunctions;
- b. Following specific layout and scientific diagrams to construct and package simple devices and subunits of equipment.
- c. Conducting various tests or experiments which may require minor modifications in test setups or procedures as well as subjective judgments in measurement, selecting, preparing, and operating standard test equipment and records test data;
- d. Extracting and compiling a variety of engineering data from field notes, manuals, lab reports, etc., processing data, identifying errors or inconsistencies, selecting methods of data presentation.
- e. Assisting in design modification by compiling data related to design, specifications, and materials that are pertinent to specific items of equipment or component parts; developing information concerning previous operational failures and modifications, and using judgment and initiative to recognize inconsistencies or gaps in data and seek sources to clarify information.

30084 ENGINEERING TECHNICIAN IV

The Engineering Technician IV performs non-routine assignments of substantial variety and complexity, using operational precedents that are not fully applicable, such assignments that are typically parts of broader assignments, are screened to eliminate unusual design problems. This incumbent may plan such assignments. This technician receives technical advice from supervisor or engineer. Work is reviewed for technical adequacy (or conformity with instructions). This position may be assisted by lower level technicians and have frequent contact with professionals and others within the establishment, and performs one or a combination of such typical duties as:

- a. Developing or reviewing designs by extracting and analyzing a variety of engineering data, applying conventional engineering practices to develop, prepare, or recommend schematics, designs, specifications, electrical drawings and parts lists. (Examples of designs include: detailed circuit diagrams; hardware fittings or test equipment involving a variety of mechanisms; conventional piping systems; and building site layouts).
- b. Conducting tests or experiments requiring selection and adaptation or modification of a wide variety of critical test equipment and test procedures, preparing and operating equipment, recording data, measuring and recording problems of significant complexity that sometimes require resolution at a higher level, and analyzes data and prepares test reports.

- c. Applying methods outlined by others to limited segments of research and development projects, constructing experimental or prototype models to meet engineering requirements; conducts tests or experiments and redesigns as necessary and recording and evaluating data and reports findings.

30085 ENGINEERING TECHNICIAN V

This technician performs non-routine and complex assignments involving responsibility for planning and conducting a complete project of relatively limited scope or a portion of a larger and more diverse project, selects and adapts plans, techniques, designs, or layouts, contacts personnel in related activities to resolve problems and coordinate the work, reviews, analyzes, and integrates the technical work of others. Supervisor or professional engineer outlines objectives, requirements, and design approaches. Completed work is reviewed for technical adequacy and satisfaction of requirements. This incumbent may train and be assisted by lower level technicians, and performs one or a combination of the following:

- a. Designs, develops, and constructs major units, devices, or equipment; conducts tests or experiments; analyzes results and redesigns or modifies equipment to improve performance; and reports results.
- b. From general guidelines and specifications (e.g., size or weight requirements), develops designs for equipment without critical performance requirements that are difficult to satisfy such as engine parts, research instruments, or special purpose circuitry. Analyzes technical data to determine applicability to design problems; selects from several possible design layouts; calculates design data; and prepares layouts, detailed specifications, parts lists, estimates, procedures, etc. May check and analyze drawings or equipment to determine adequacy of drawings and design.
- c. Plans or assists in planning tests to evaluate equipment performance. Determines test requirements, equipment modification, and test procedures; conducts tests using all types of instruments; analyzes and evaluates test results, and prepares reports on findings and recommendations.

30086 ENGINEERING TECHNICIAN VI

This technician independently plans and accomplishes complete projects or studies of broad scope and complexity, or serves as an expert in a narrow aspect of a particular field of engineering, e.g., environmental factors affecting electronic engineering. Complexity of assignments typically requires considerable creativity and judgment to devise approaches to accomplish work, resolve design and operational problems, and make decisions in situations where standard engineering methods, procedures, and techniques may not be applicable. Supervisor or professional engineer provides advice on unusual or controversial problems or policy matters. Completed work is reviewed for compliance with overall project objectives.

This worker may supervise or train and be assisted by lower level technicians, and performs, one or a combination of the following:

- a. Prepares designs and specifications for various complex equipment or systems (e.g., a heating system in an office building, or new electronic components such as solid state devices for instrumentation equipment).
- b. Plans approach to solve design problems; conceives and recommends new design techniques; resolves design problems with contract personnel, and assures compatibility of design with other parts of the system.
- c. Designs and coordinates test set-ups and experiments to prove or disprove the feasibility of preliminary design; uses untried and untested measurement techniques; and improves the performance of the equipment. May advise equipment users on redesign to solve unique operational deficiencies.
- d. Plans approach and conducts various experiments to develop equipment or systems characterized by (a) difficult performance requirements because of conflicting attributes such as versatility, size, and ease of operation; or (b) unusual combination of techniques or components. Arranges for fabrication of pilot models and determines test procedures and design of special test equipment.

30090 ENVIRONMENTAL TECHNICIAN

The Environmental Technician conducts tests and field investigations to obtain data for use by environmental, engineering and scientific personnel in determining sources and methods of controlling pollutants in air, water, and soil, utilizing knowledge of agriculture, chemistry, meteorology, and engineering principles and applied technologies. This worker conducts chemical and physical laboratory and field tests according to prescribed standards to determine characteristics or composition of solid, liquid, or gaseous materials and substances, using pH meter, chemicals, autoclaves, centrifuge spectrophotometer, microscope, analytical instrumentation, and chemical laboratory equipment.

This worker collects samples of gases from smokestacks, and collects other air samples and meteorological data to assist in evaluation of atmospheric pollutants; collects water samples from streams and lakes, or raw, semi-processed or processed water, industrial waste water, or water from other sources to assess pollution problem, and collects soil, silt, or mud to determine chemical composition and nature of pollutants. This worker prepares sample for testing, records data, and prepares summaries and charts for review, sets monitoring equipment to provide flow of information, installs, operates, and performs routine maintenance on gas and fluid flow systems, chemical reaction systems, mechanical equipment, and other test instrumentation.

This worker may operate fixed or mobile monitoring or data collection station, may conduct bacteriological or other tests related to research in environmental or pollution control

activity, may collect and analyze engine exhaust emissions to determine type and amount of pollutants, and may specialize in one phase or type of environmental pollution or protection and be identified according to specialty.

30210 LABORATORY TECHNICIAN (Laboratory Tester)

The Laboratory Technician (Laboratory Tester) performs laboratory tests according to prescribed standards to determine chemical and physical characteristics or composition of solid, liquid, or gaseous materials and substances for purposes such as quality control, process control, product development, or determining conformity to specifications. This incumbent sets up and adjusts laboratory apparatus, and operates grinders, agitators, centrifuges, ovens, condensers, and vibrating screens to prepare material for testing according to established laboratory procedure. This worker performs physical tests on samples of cement or raw materials and controls quality of materials and mix during manufacturing process.

Work involves running tests of the following: raw materials, such as aggregate, limestone, and sand, for such qualities as permeability, load-bearing capacity, or cohesiveness; dry and liquid substances used as ingredients in adhesives, propellants, lubricants, refractories, synthetic rubber, paint, paper, and other compounds for purity, viscosity, density, absorption or burning rate, melting point, or flash point, using viscometer, torsion balance scale, and pH meter; solutions used in processes, such as anodizing, waterproofing, cleaning, bleaching, and pickling, for chemical strength, specific gravity, or other specifications; materials for presence and content of elements or substances, such as hydrocarbons, manganese, natural grease or impurities, tungsten, sulfur, cyanide, ash or dust, and samples of manufactured products, such as cellophane or glassware, to verify conformity with heat resistance, tensile strength, ductibility, and other specifications, and examines materials, using microscope.

The Laboratory Technician (Laboratory Tester) records test results on standard forms, writes test reports describing procedures used, and prepares graphs and charts, cleans and sterilizes laboratory apparatus, may prepare chemical solutions according to standard formulae, and may add chemicals or raw materials to process solutions or product batches to correct deviations from specifications.

30240 MATHEMATICAL TECHNICIAN

The Mathematical Technician applies standardized mathematical formulas, principles, and methodology to technological problems in engineering and physical sciences in relation to specific industrial and research objectives, processes, equipment, and products. They confer with professional, scientific, and engineering personnel to plan project, analyzes raw data recorded on magnetic tape, punched cards, photographic film or other media, and select most practical and accurate combination and sequence of computational methods using algebra, trigonometry, geometry, vector analysis and calculus to reduce raw data to meaningful and manageable terms.

This technician selects most economical and reliable combination of manual, mechanical, or electronic data processing methods and equipment consistent with data reduction requirements, modifies standard formulas to conform to data processing method selected, translates data into numerical values, equations, flow charts, graphs or other media, analyzes processed data to detect errors. This worker may operate card punching or sorting machines, calculators, or data processing equipment.

30360 PARALEGAL/LEGAL ASSISTANT (Occupational Base)

The Paralegal/Legal Assistant performs a variety of legal assistance duties in an office providing legal assistance to attorneys or litigation teams. The Paralegal Assistant analyzes the legal impact of legislative developments and administrative and judicial decisions, opinions, determinations, and rulings, conducts research for the preparation of legal opinions on matters of interest; performs substantive legal analysis of requests for information under the provisions of various acts; or other similar legal support functions which require discretion and independent judgment in the application of specialized knowledge of laws, precedent decisions, regulations, agency policies, and judicial or administrative proceedings. Such knowledge is less than that represented by graduation from a recognized law school and may have been gained from formalized, professionally instructed agency, educational institution training, or from professionally supervised on-the-job training. While the paramount knowledge requirements of this occupational class are legal, some positions may also require a practical knowledge of subject matter areas related to the agency's substantive programs.

30361 PARALEGAL/LEGAL ASSISTANT I

The Paralegal/Legal Assistant I works under close supervision with required assistance readily available. Persons in this position typically perform the following:

- a. Consult prescribed sources of information for facts relating to matters of interest to the program;
- b. Review documents to extract selected data and information relating to specific items;
- c. Review and summarize information in prescribed format on case precedent and decisions;
- d. Search and extract legal references in libraries and computer-data banks;
- e. Attend hearings or court appearances to become informed on administrative and/or court procedures and the status of cases, and where necessary, assist in the presentation of charts and other visual information.

30362 PARALEGAL/LEGAL ASSISTANT II

At this level, the Paralegal/Legal Assistant II exercises more independent judgment than at the level I position. In this capacity the incumbent:

- a. Reviews case materials to become familiar with questions under consideration;
- b. Searches for and summarizes relevant articles in trade magazines, law reviews, published studies, financial reports, and similar materials for use of attorneys in the preparation of opinions, briefs, and other legal documents;
- c. Prepares digests of selected decisions or opinions which incorporate legal references and analyses of precedents involved in areas of well-defined and settled points of law;
- d. Interviews potential witnesses and prepares summary interview reports for the attorney's review;
- e. Participates in pre-trial witness conferences, notes possible deficiencies in case materials (e.g., missing documents, conflicting statements) and additional issues or other questionable matters, and requests further investigation by other agency personnel to correct possible deficiencies or personally conducts limited investigations at the pre-trial stage;
- f. Prepares and organizes trial exhibits, as required, such as statistical charts and photographic exhibits;
- g. Verifies citations and legal references on prepared legal documents;
- h. Prepares summaries of testimony and depositions;
- i. Drafts and edits non-legal memoranda, research reports and correspondence relating to cases.

30363 PARALEGAL/LEGAL ASSISTANT III

At this level, the Paralegal/Legal Assistant III participates in the substantive development of cases. In this capacity, the incumbent performs the following:

- a. Analyzes and evaluates case files against litigation worthiness standards;
- b. Notes and corrects case file deficiencies (e.g., missing documents, inconsistent material, leads not investigated) before sending the case on to the concerned trial attorney;

- c. Reviews and analyzes available precedents relevant to cases under consideration for use in presenting case summaries to trial attorneys;
- d. Gathers, sorts, classifies, and interprets data to discover patterns of possible discriminatory activity;
- e. Interviews relevant personnel and potential witnesses to gather
Information;
- f. Reviews and analyzes relevant statistics;
- g. Performs statistical evaluations such as standard deviations, analyses of variance, means, modes, and ranges as supporting data for case litigation;
- h. Consults with statistical experts on reliability evaluations;
- i. May testify in court concerning relevant data.

30364 PARALEGAL/LEGAL ASSISTANT IV

At this level, the Paralegal/Legal Assistant IV assists in the evaluation, development, and litigation of cases. In this capacity, the incumbent performs the following duties:

- a. Examines and evaluates information in case files, for case litigation worthiness and appropriate titles of law;
- b. Determines the need for additional information, independent surveys, evidence, and witnesses, and plans a comprehensive approach to obtain this information;
- c. Through on-site visits, interviews, and review of records on operations, looks for and evaluates the relevance and worth of evidence;
- d. Selects, summarizes, and compiles comparative data to examine and evaluate respondent's deficiencies in order to provide evidence of illegal practices or patterns;
- e. Reviews economic trends and forecasts at the national and regional level to evaluate the impact of successful prosecution and potential remedial provisions of ongoing investigations and litigation;
- f. Identifies types of record keeping systems and types of records maintained which would be relevant. Gathers, sorts, and interprets data from various record systems including computer information systems;

- g. Interviews potential witnesses for information and prepares witnesses for court appearances;
- h. Develops statistics and tabulations, such as standard deviations, regression analyses, and weighting, to provide leads and supportive data for case litigation. Prepares charts, graphs, and tables to illustrate results;
- i. Analyzes data, develops recommendations and justifications for the attorney(s) who will take the matter to court. Continues to work with the attorney(s) during the progress of the case, obtaining and developing further evidence and exhibits, providing administrative assistance, and maintaining custody of exhibits, documents, and files;
- j. May appear in court as a witness to testify concerning exhibits prepared supporting plaintiff's case.

30390 PHOTO-OPTICS TECHNICIAN

The Photo-Optics Technician sets up and operates photo-optical instrumentation to record and photograph data for scientific and engineering projects, operates and calibrates photo-optical equipment according to formalized procedures, maintenance manuals, and schematic diagrams, operates test equipment and performs analysis of data for engineering and scientific personnel. The Photo-Optic Technician may install and calibrate optical and photographic data collection equipment in missiles, aircraft, weaponry, weather or communication satellites, underwater devices, or other installations, may evaluate adequacy of data obtained to determine need for future changes in instrumentation, and may modify existing equipment and participate in planning and testing modified equipment and instrumentation procedures.

30460 TECHNICAL WRITER (Occupational Base)

Under general supervision, the Technical Writer writes and edits technical reports, brochures, and/or manuals for internal documentation, customer reference, or publication. This person researches and analyzes available literature and verifies copy with appropriate departments, and may coordinate production and distribution of materials.

30461 TECHNICAL WRITER I

The Technical Writer I revises or writes standardized material for reports, manuals, briefs, proposals, instruction books, catalogs, and related technical and administrative publications concerned with work methods and procedures, and installation, operation, and maintenance of machinery and other equipment. This worker receives technical direction from supervisor or senior writer, notes or manuals containing operating procedures and details manufacturer's catalogs, drawings and other data relative to operation, maintenance, and service of equipment. This writer may have access to blueprints, sketches, drawings, parts lists,

specifications, mockups, and product samples to integrate and delineate technology, operating procedure, and production sequence and detail.

This worker organizes material and completes writing assignment according to set standards regarding order, clarity, conciseness, style, and terminology, may maintain records and files of work and revisions, select photographs, drawings, sketches, diagrams, and charts to illustrate material, assist in laying out material for publication arrange for typing, duplication and distribution of material; may assist in writing speeches, articles, and public or employee relations releases, and may specialize in writing material regarding work methods and procedures.

30462 TECHNICAL WRITER II

In this capacity, the Technical Writer revises or writes material that is mostly standardized for reports, manuals, briefs, proposals, instruction books, catalogs, and related technical and administrative publications concerned with work methods and procedures, and installation, operation, and maintenance of machinery and other equipment. The incumbent receives assignment and technical information from a supervisor or senior writer, may be provided notes or manuals containing operating procedures and details, and may observe production, developmental or experimental activities to expand or verify the provided operating procedures and details.

This worker accesses manufacturers' catalogs, drawings and other data relative to operation, maintenance, and service of equipment, may have access to blueprints, sketches, drawings, parts lists, specifications, mockups, and product samples to integrate and delineate technology, operating procedure, and production sequence and detail. This writer organizes material and completes writing assignment according to set standards regarding order, clarity, conciseness, style, and terminology, may maintain records and files of work and revisions, may select photographs, drawings, sketches, diagrams, and charts to illustrate material, assist in laying out material for publication, and arrange for typing, duplication and distribution of material. This writer may draft speeches, articles, and public or employee relations releases, or specialize in writing material regarding work methods and procedures.

30463 TECHNICAL WRITER III

The Technical Writer III develops, writes, and edits material for reports, manuals, briefs, proposals, instruction books, catalogs, and related technical and administrative publications concerned with work methods and procedures, and installation, operation, and maintenance of machinery and other equipment, receives assignment from supervisor, observes production, developmental, and experimental activities to determine operating procedure and detail. This writer interviews production and engineering personnel and reads journals, reports, and other material to become familiar with product technologies and production methods, and reviews manufacturer's and trade catalogs, drawings and other data relative to operation, maintenance, and service of equipment.

The Technical Writer III studies blueprints, sketches, drawings, parts lists, specifications, mockups, and product samples to integrate and delineate technology, operating procedure, and production sequence and detail, organizes material and completes writing assignment according to set standards regarding order, clarity, conciseness, style, and terminology; and reviews published materials and recommends revisions or changes in scope, format, content, and methods of reproduction and binding. This worker may perform the following tasks: maintain records and files of work and revisions, select photographs, drawings, sketches, diagrams, and charts to illustrate material; assist in laying out material for publication, arrange for typing, duplication and distribution of material, write speeches, articles, and public or employee relations releases, edit, standardize, or make changes to material prepared by other writers or plant personnel. This incumbent may specialize in writing material regarding work methods and procedures.

COMPANY OVERVIEW

Caliper Inc., headquartered in Virginia Beach, Virginia, has been offering comprehensive staffing solutions to clients for two decades, incorporated in the State of Virginia in 1984; Caliper has grown from a single office in Norfolk, to having offices throughout Virginia and the eastern United States.

Caliper is a full-service staffing and recruiting firm that matches the strengths and skills of thousands of candidates with our clients. Caliper is a proven cost-effective, solution-based company assisting our clients in meeting their milestones and commitments. Caliper has over two decades of experience providing resources to support a number of government, commercial, and industrial clients throughout the United States.

Caliper maintains a team of project managers, recruiters, and operations professionals with extensive knowledge and experience recruiting quality personnel.

The foundation of Caliper's commercial practices is the quality of individuals we assemble to manage contracts. Our highly-trained staff functions as an extension of our customer's organization, providing staffing services and required technical support. We pride ourselves in being available to respond to client needs 7 days per week, 24 hours per day.

Caliper's recruiting model is driven by world class recruiters that are passionate about their jobs. Caliper's recruiting staff is comprised of dedicated, creative, high-energy, resilient, problem-solving individuals who are focused on customer service.

Caliper continuously operates in an active talent acquisition mode – this includes pre-sourcing, pre-screening, migrating, and recruiting candidates. Our recruiters are certified and trained to utilize best practices allowing them to recognize, engage, and effectively recruit qualified candidates. To ensure our recruiters stay abreast of current market trends, we practice open and continuous communication internally and externally with co-workers, candidates, customer contacts, industry peers, trade schools, and other outside influences – our seasoned recruiters develop long-term professional relationships with each group.

Caliper has instituted programs to address aging workforce, attrition, workforce and succession planning, and programs in place to find the next generation of workers, ensuring

that our clients never suffer from a shortage of employees. Caliper is a company that strives to reach the next generation of workers by offering faster recognition, market wages, health care programs, team culture, diversity, ethics, and trust. Caliper is a company ready to assist our customers with temporary staffing from resource allocation, work prioritization, continuous improvement, to overall excellence.