



**Authorized Federal Supply Price
Schedule Federal Supply Schedule 736
Temporary, Administrative & Professional Staffing
Services**

Contract No.: GS-07F-0264T

Contract Period: April 1, 2007 thru March 31, 2012

Labor Categories and Rate Schedule

Special Item Numbers

- 736-1 Administrative Support and Clerical Occupations**
- 736-2 Automatic Data Processing Operator**
- 736-3 General Services and Support**
- 736-4 Information and Arts Occupations, including Miscellaneous**
- 736-5 Technical and Professional Position**

**The Spearhead Group, Inc.
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Houston, TX 77027**

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Email: sales@spearheadgroup.com

Website: www.spearheadgroup.com

**Contractor's Administrative Source: Vikki S. McCullough
Business Size: 8(a)/SDB, Minority, Woman Owned
Disadvantaged Business Enterprise**

**Prompt Payment Terms: Net 30
CCR Completed: Yes**

**DUNS: 102655552
Credit Card Accepted: Yes**

TABLE OF CONTENTS

COMPANY CAPABILITY SUMMARY	3
PROFESSIONAL STAFFING SERVICES.....	3
IT SERVICES	3
ENGINEERING SERVICES	3
CUSTOMER INFORMATION:	5
GSA PRICE LIST	8
LOCATION AUSTIN, TX.....	8
SIN 736-1	8
SIN 736-2	8
SIN 736-3	8
SIN 736-4	9
SIN 736-5	9
LOCATION: DALLAS, TX	10
SIN 736-1.....	10
SIN 736-2	10
SIN 736-3	10
SIN 736-4	11
SIN 736-5	11
LOCATION: FORT WORTH, TX	12
SIN 736-1	12
SIN 736-2	12
SIN 736-3	12
SIN 736-4	13
SIN 736-5	13
LOCATION: HOUSTON, TX	14
SIN 736-1	14
SIN 736-2	14
SIN 736-3	14
SIN 736-5	15
LOCATION: SAN ANTONIO, TX	16
SIN 736-1.....	16
SIN 736-2	16
SIN 736-3	16
SIN 736-4	17
SIN 736-5	17
JOB DESCRIPTIONS.....	18



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Company Capability Summary

The **Spearhead Group** is a minority, woman-owned, certified business including; **8(a)SDB** (Small Disadvantage Business), **HUB** (Historically Underutilized Business), **Texas CMBL** Centralized Master Bidders List , **CISV** (Catalog Information Systems Vendor) , **WBEA** (Women Business Enterprise Alliance), **NMSDC** (National Minority Supplier Development Council) and **DBE** (Disadvantaged Business Enterprise) certifications. The Spearhead Group is also a **GSA** contract holder for Temporary and Personnel Staffing. We have the technology, partnerships and expertise to help you find and hire talented job seekers and manage any process smoothly. The company has over 20 years service in the consulting and staffing arena providing local and nationwide staffing and consulting services.

STRATEGIC AREA(S) OF FOCUS

Professional Staffing Services

- Temporary, Temporary to Contract-to-Hire, Contract Staffing, Staff Augmentation
- Project Implementation, Executive Search services
- Administrative Clerical, Accounting, Project Management, Sales, Marketing, Purchasing, Human Resources

IT Services

- We provide a full range of consulting services to include Project management, Programming, Training and Hardware/Software Maintenance
- Technical Writers, Graphic Designers, Project Managers, PeopleSoft, Oracle and SAP Consultants, Network Consultants

Engineering Services

- Professional Engineers, Project Managers, Mechanical, Electrical, Civil, Process, Environmental, Architectural, QA/QC Engineers
- Designers/Drafters, HW/SW Civil/Piping, E/M, Arch /Civil/Piping, AutoCAD, Pro E., Cadra Cadkey, HP-OME 10/30 Unigraphics

The Spearhead Group has developed a set of core capabilities that will enhance our clients' business objectives. We have assembled the resources (technology and personnel) to address the Quality Assurance challenges in today's marketplace. Our research and economic development center goals are to foster economic growth and development through the Houston-Galveston area by developing viable and effective community projects that provide resources and technical assistance & training to the small business sector.

THE SPEARHEAD GROUP combines the breadth and reach of a larger, impersonal national search firm with the flexibility, personal service and results that only an exclusive collection of highly focused, exceptionally motivated recruiters with hands on industry experience can provide. Whether your hiring situation necessitates short or long term contractors, direct hire, contract to hire, or outsourced recruiting services, THE SPEARHEAD GROUP has the solution that will keep your business productive.

“Our people get the job done --- right!”

CUSTOMER INFORMATION:

1a. TABLE OF AWARDED SPECIAL ITEM NUMBERS (SINs)

SIN	DESCRIPTION
736-1	Administrative Support and Clerical Occupations
736-2	Automatic Data Processing Occupations
736-4	Information and Arts Occupations Including Miscellaneous Occupations
736-5	Technical and Professional Occupations

1b. LOWEST PRICED MODEL NUMBER AND PRICE FOR EACH SIN: N/A

2. MAXIMUM ORDER*: \$100,000 per SIN

*If the best value selection places your order over the Maximum Order identified in this catalog/pricelist, you have an opportunity to obtain a better schedule contract price. Before placing your order, contact the aforementioned contactor for a better price. The contractor may (1) offer a new price for this requirement (2) offer the lowest price available under this contract or (3) decline the order. A delivery order that exceeds the maximum order may be placed under the schedule contract in accordance with FAR 8.404.

3. MINIMUM ORDER: \$100 unless the contractor agrees to accept a smaller order amount

4. GEOGRAPHIC COVERAGE:

Austin, TX	Wage Determination	05-2503	Revision 02	dated 12/06/2006
Dallas, TX	Wage Determination	05-2509	Revision 27	dated 12/19/2006
Fort Worth, TX	Wage Determination	05-2513	Revision 01	dated 09/01/2006
Houston, TX	Wage Determination	05-2515	Revision 02	dated 12/06/2006
San Antonio, TX	Wage Determination	05-2521	Revision 02	dated 01/05/2007

5. POINT(S) OF PRODUCTION: N/A

6. DISCOUNT FROM LIST PRICES: N/A

7. QUANTITY DISCOUNTS: Five or more positions

8. PROMPT PAYMENT TERMS: Net 30

9a. Government Purchase Cards are accepted at of below the micro-purchase threshold.

9b. Government Purchase Cards are not 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 affect a faster delivery. Customers are encouraged to contact the contractor for the purpose of requesting accelerated delivery.
- 12. FOB POINT:** N/A
- 13a. ORDERING ADDRESS:** The Spearhead Group, Inc.
4615 Southwest Freeway, Suite 470
Houston, TX 77027
- 14. PAYMENT ADDRESS:** The Spearhead Group, Inc.
4615 Southwest Freeway, Suite 470
Houston, TX 77027
- 15. WARRANTY PROVISION:** Standard Commercial Warranty. Customer should contact contractor for a copy of the warranty.
- 16. EXPORT PACKING CHARGES:** N/A
- 17. TERMS AND CONDITIONS OF GOVERNMENT PURCHASE CARD ACCEPTANCE:**
(any thresholds above the micro-purchase level) 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 LIST AND ANY DISCOUNTS FROM LIST PRICES (IF APPLICABLE)**
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. PREVENTATIVE MAINTENANCE (IF APPLICABLE):**
N/A
- 24a. SPECIAL ATTRIBUTES SUCH AS ENVIRONMENTAL ATTRIBUTES (i.e., recycled content, energy efficiency and/or reduced pollutants):**
N/A
- 24b. SECTION 508 COMPLIANCE FOR EIT:**
N/A

25. **DUNS NUMBER:** 10265552

26. **NOTIFICATION REGARDING REGISTRATION IN CENTRAL CONTRACTOR REGISTRATION (CCR) DATABASE:** Contractor has an Active Registration in the CCR database.

GSA Price List

Location Austin, TX	
Job/ Role	GSA Rate
SIN 736-1	
Accounting Clerk I	22.63
Accounting Clerk II	26.92
Accounting Clerk III	28.95
Court Reporter	30.26
Order Clerk I	24.24
Order Clerk II	26.48
Data Entry Operator I	23.31
Data Entry Operator II	28.12
General Clerk I	20.66
General Clerk II	25.60
General Clerk III	27.72
Receptionist	23.71
Personal Assistant (Employment) I	28.08
Personal Assistant (Employment) II	31.10
Personal Assistant (Employment) III	34.08
Secretary I	26.41
Secretary II	32.80
Secretary III	34.32
Word Processor I	25.39
Word Processor II	27.92
Word Processor III	30.65
SIN 736-2	
Computer Operator I	26.62
Computer Operator II	28.95
Computer Operator III	34.72
Computer Operator IV	38.01
Computer Operator V	42.10
Computer Programmer I	38.24
Computer Programmer II	47.11
Computer Programmer III	48.94
Computer Programmer IV	48.94
Computer Systems Analyst I	48.94
Computer Systems Analyst II	48.94
Computer Systems Analyst III	48.94
Peripheral Equipment Operator	26.62
Personal Computer Support Technician	40.81
SIN 736-3	
Fork Lift Operator	24.32
Shipping/Receiving Clerk	25.93
Laborer	21.57

AUSTIN continued	
Job Role	GSA Rate
SIN 736-4	
Illustrator I	36.05
Illustrator II	46.00
Illustrator III	48.91
Librarian	41.51
Library Technician	30.66
Photographer I	29.51
Photographer II	32.26
Photographer III	41.02
Photographer IV	44.82
Photographer V	53.21
SIN 736-5	
Civil Engineering Technician	46.00
Drafter/CAD Operator I	32.92
Drafter/CAD Operator II	36.05
Drafter/CAD Operator III	39.64
Drafter/CAD Operator IV	46.00
Engineering Technician I	25.49
Engineering Technician II	29.75
Engineering Technician III	33.57
Engineering Technician IV	39.84
Engineering Technician V	46.39
Engineering Technician VI	52.20
Environmental Technician	38.70
Graphic Artist	39.28
Laboratory Technician	33.48
Mathematical Technician	46.00
Paralegal /Legal Assistant I	33.33
Paralegal /Legal Assistant II	37.63
Paralegal/Legal Assistant III	47.94
Paralegal/Legal Assistant IV	57.00
Photo-Optics Technician	46.26
Technical Writer I	31.16

Location: Dallas, TX	
Job /Role	GSA Rate
Sin 736-1	
Accounting Clerk I	26.38
Accounting Clerk II	29.16
Accounting Clerk III	32.13
Court Reporter	31.08
Order Clerk I	23.54
Order Clerk II	28.27
Data Entry Operator I	23.54
Data Entry Operator II	25.87
General Clerk I	21.25
General Clerk II	24.14
General Clerk III	27.16
Receptionist	26.16
Personal Assistant (Employment) I	26.94
Personal Assistant (Employment) II	31.03
Personal Assistant (Employment) III	36.02
Secretary I	30.14
Secretary II	32.17
Secretary III	36.62
Word Processor I	25.26
Word Processor II	27.77
Word Processor III	31.08
SIN 736-2	
Computer Operator I	27.77
Computer Operator II	31.59
Computer Operator III	38.01
Computer Operator IV	42.06
Computer Operator V	46.88
Computer Programmer I	39.50
Computer Programmer II	47.78
Computer Programmer III	48.94
Computer Programmer IV	48.94
Computer Systems Analyst I	48.94
Computer Systems Analyst II	48.94
Computer Systems Analyst III	48.94
Peripheral Equipment Operator	27.20
Personal Computer Support Technician	42.06
SIN 736-3	
Fork Lift Operator	28.81
Shipping/Receiving Clerk	25.05
Laborer	22.07

DALLAS continued	
Job Role	GSA Rate
SIN 736-4	
Illustrator I	38.33
Illustrator II	46.32
Illustrator III	51.37
Librarian	53.82
Library Technician	26.32
Photographer I	27.79
Photographer II	31.86
Photographer III	38.62
Photographer IV	44.58
Photographer V	50.54
SIN 736-5	
Civil Engineering Technician	38.96
Drafter/CAD Operator I	29.98
Drafter/CAD Operator II	34.93
Drafter/CAD Operator III	38.38
Drafter/CAD Operator IV	46.13
Engineering Technician I	28.00
Engineering Technician II	30.82
Engineering Technician III	33.91
Engineering Technician IV	40.86
Engineering Technician V	48.91
Engineering Technician VI	58.18
Environmental Technician	38.59
Graphic Artist	39.76
Laboratory Technician	40.41
Mathematical Technician	42.38
Paralegal /Legal Assistant I	32.25
Paralegal /Legal Assistant II	38.89
Paralegal/Legal Assistant III	46.67
Paralegal/Legal Assistant IV	55.10
Photo-Optics Technician	42.38
Technical Writer I	37.49

Location: Fort Worth, TX	
Job Role	GSA Rate
Sin 736-1	
Accounting Clerk I	26.38
Accounting Clerk II	29.16
Accounting Clerk III	32.13
Court Reporter	31.08
Order Clerk I	24.21
Order Clerk II	28.27
Data Entry Operator I	23.54
Data Entry Operator II	25.87
General Clerk I	21.25
General Clerk II	24.14
General Clerk III	27.16
Receptionist	27.77
Personal Assistant (Employment) I	26.94
Personal Assistant (Employment) II	31.03
Personal Assistant (Employment) III	36.02
Secretary I	30.14
Secretary II	32.17
Secretary III	36.62
Word Processor I	25.26
Word Processor II	27.77
Word Processor III	31.08
SIN 736-2	
Computer Operator I	27.77
Computer Operator II	32.18
Computer Operator III	38.73
Computer Operator IV	42.84
Computer Operator V	47.79
Computer Programmer I	37.92
Computer Programmer II	47.78
Computer Programmer III	48.94
Computer Programmer IV	48.94
Computer Systems Analyst I	48.94
Computer Systems Analyst II	48.94
Computer Systems Analyst III	48.94
Peripheral Equipment Operator	27.77
Personal Computer Support Technician	42.84
SIN 736-3	
Fork Lift Operator	28.81
Shipping/Receiving Clerk	24.98
Laborer	23.20

FORT WORTH continued	
Job Role	GSA Rate
SIN 736-4	
Illustrator I	38.40
Illustrator II	46.35
Illustrator III	55.61
Librarian	53.82
Library Technician	25.89
Photographer I	25.20
Photographer II	29.62
Photographer III	35.39
Photographer IV	38.53
Photographer V	44.12
SIN 736-5	
Civil Engineering Technician	42.38
Drafter/CAD Operator I	30.14
Drafter/CAD Operator II	34.93
Drafter/CAD Operator III	38.38
Drafter/CAD Operator IV	46.13
Engineering Technician I	28.00
Engineering Technician II	32.12
Engineering Technician III	33.91
Engineering Technician IV	40.86
Engineering Technician V	48.91
Engineering Technician VI	58.18
Environmental Technician	35.41
Graphic Artist	37.95
Mathematical Technician	42.38
Paralegal /Legal Assistant I	31.89
Paralegal /Legal Assistant II	38.78
Paralegal/Legal Assistant III	46.37
Paralegal/Legal Assistant IV	55.10
Photo-Optics Technician	42.10
Technical Writer I	37.49

Location: Houston, TX	
Job Role	GSA Rate
SIN 736-1	
Accounting Clerk I	24.82
Accounting Clerk II	27.28
Accounting Clerk III	29.94
Court Reporter	33.59
Order Clerk I	26.16
Order Clerk II	29.16
Data Entry Operator I	22.96
Data Entry Operator II	27.69
General Clerk I	22.07
General Clerk II	25.53
General Clerk III	28.59
Receptionist	22.27
Personal Assistant (Employment) I	26.84
Personal Assistant (Employment) II	31.17
Personal Assistant (Employment) III	32.98
Secretary I	30.25
Secretary II	33.14
Secretary III	37.65
Word Processor I	23.11
Word Processor II	27.32
Word Processor III	30.81
SIN 736-2	
Computer Operator I	28.46
Computer Operator II	31.37
Computer Operator III	34.31
Computer Operator IV	40.92
Computer Operator V	43.00
Computer Programmer I	38.56
Computer Programmer II	46.61
Computer Programmer III	48.94
Computer Programmer IV	48.94
Computer Systems Analyst I	48.94
Computer Systems Analyst II	48.94
Computer Systems Analyst III	48.94
Peripheral Equipment Operator	28.46
Personal Computer Support Technician	40.92
SIN 736-3	
Fork Lift Operator	25.33
Shipping/Receiving Clerk	24.77
Laborer	21.78

Houston continued	
Job/Role	GSA Rate
SIN 736-4	
Illustrator I	32.93
Illustrator II	40.86
Illustrator III	46.99
Librarian	42.02
Library Technician	25.98
Photographer I	27.07
Photographer II	32.93
Photographer III	40.86
Photographer IV	46.99
Photographer V	52.84
SIN 736-5	
Civil Engineering Technician	48.43
Drafter/CAD Operator I	35.46
Drafter/CAD Operator II	41.80
Drafter/CAD Operator III	46.04
Drafter/CAD Operator IV	51.90
Engineering Technician I	31.32
Engineering Technician II	37.42
Engineering Technician III	41.29
Engineering Technician IV	50.00
Engineering Technician V	62.57
Engineering Technician VI	71.68
Environmental Technician	48.34
Graphic Artist	41.74
Mathematical Technician	39.52
Laboratory Technician	50.62
Paralegal /Legal Assistant I	33.25
Paralegal /Legal Assistant II	38.97
Paralegal/Legal Assistant III	47.35
Paralegal/Legal Assistant IV	52.09
Photo-Optics Technician	50.62
Technical Writer I	35.01

Location: San Antonio, TX	
Job/Role	GSA Rate
Sin 736-1	
Accounting Clerk I	24.75
Accounting Clerk II	27.18
Accounting Clerk III	29.83
Court Reporter	28.99
Order Clerk I	22.34
Order Clerk II	25.15
Data Entry Operator I	21.96
Data Entry Operator II	23.54
General Clerk I	21.51
General Clerk II	23.03
General Clerk III	27.72
General Clerk IV	29.50
Switchboard Operator-Receptionist	20.29
Personal Assistant (Employment) I	28.20
Personal Assistant (Employment) II	30.98
Personal Assistant (Employment) III	33.99
Secretary I	25.97
Secretary II	28.47
Secretary III	31.19
Secretary IV	37.66
Word Processor I	24.46
Word Processor II	26.75
Word Processor III	28.79
SIN 736-2	
Computer Operator I	25.81
Computer Operator II	28.41
Computer Operator III	33.43
Computer Operator IV	36.54
Computer Operator V	40.00
Computer Programmer I	37.09
Computer Programmer II	44.82
Computer Programmer III	48.94
Computer Programmer IV	48.94
Computer Systems Analyst I	46.85
Computer Systems Analyst II	48.94
Computer Systems Analyst III	48.94
Peripheral Equipment Operator	25.81
Personal Computer Support Technician	36.54
SIN 736-3	
Fork Lift Operator	22.79
Shipping/Receiving Clerk	22.71
Laborer	19.33

San Antonio continued	
Job/Role	GSA Rate
SIN 736-4	
Audiovisual Librarian	35.23
Illustrator I	32.55
Illustrator II	36.74
Illustrator III	41.15
Librarian	41.64
Library Technician	23.57
Photographer I	23.68
Photographer II	27.90
Photographer III	29.80
Photographer IV	33.25
Photographer V	39.32
SIN 736-5	
Civil Engineering Technician	34.16
Drafter/CAD Operator I	28.15
Drafter/CAD Operator II	33.03
Drafter/CAD Operator III	34.32
Drafter/CAD Operator IV	40.35
Engineering Technician I	25.61
Engineering Technician II	29.66
Engineering Technician III	32.61
Engineering Technician IV	37.17
Engineering Technician V	44.37
Engineering Technician VI	51.39
Environmental Technician	31.19
Graphic Artist	37.44
Mathematical Technician	32.21
Laboratory Technician	37.61
Paralegal /Legal Assistant I	28.95
Paralegal /Legal Assistant II	36.51
Paralegal/Legal Assistant III	43.56
Paralegal/Legal Assistant IV	51.66
Photo-Optics Technician	37.61
Technical Writer I	35.31

JOB DESCRIPTIONS

01010 ACCOUNTING CLERK (Occupational Base)

The Accounting Clerk performs one or more accounting tasks such as; posting to registers and ledgers; balancing and reconciling accounts; verifying the internal consistency, completeness, and mathematical accuracy of accounting documents. In addition, tasks include; assigning prescribed accounting distribution codes; examining and verifying the clerical accuracy of various types of reports, lists, calculations, and postings.

This position is responsible for preparing journal vouchers; making entries of adjustments to accounts; and working with spreadsheets. Level I requires a basic knowledge of routine clerical methods, office practices and procedures as they relate to the clerical processing and recording of transactions. Levels II and III require a knowledge and understanding of the established and standardized bookkeeping and accounting procedures and techniques used in an accounting system, or a segment of an accounting system where there are few variations in the types of transactions handled. In addition, most jobs at each level will require a basic knowledge and understanding of the terminology, codes, and processes used in an automated accounting system.

01011 ACCOUNTING CLERK I

This position is responsible for performing one or more routine accounting clerical operations such as: examining, verifying, and correcting various accounting documents to ensure completeness and accuracy of data in accordance to accounting procedures. Specific tasks/duties are assigned under adequate supervision. Entry-level reconciliation and posting will be assigned under detailed guidance. In most instances, an employee in this position will rely on the supervisors' instructions. Completed work will be reviewed for accuracy and compliance with procedures.

01012 ACCOUNTING CLERK II

This position uses knowledge of double entry bookkeeping in performing one or more of the following: posting actions to journals, identifying subsidiary accounts affected, making debit and credit entries, and assigning proper codes. The Accounting Clerk II may review computer printouts against manually maintained journals, detect and correct erroneous postings, and prepare documents to adjust accounting classifications and other data, or review lists of transactions rejected by an automated system. In this instance, the Accounting Clerk II will determine reasons for rejections, and prepare necessary correcting material. On routine assignments, an employee will select and apply established procedures and techniques. Detailed instructions are provided for difficult or unusual assignments. Completed work and methods used, are reviewed for technical accuracy.

01013 ACCOUNTING CLERK III

The Accounting Clerk III maintains journals or subsidiary ledgers of an accounting system and balances and reconciles accounts. Typical duties include one or both of the following: 1.) reviewing invoices and statements verifying information, ensuring sufficient funds have been obligated, and if questionable, resolving with the submitting unit determining accounts involved. The review will include coding transactions, and processing material through data processing for application in the accounting system; 2.) analysis and reconciliation of computer printouts with operating unit reports (contacting units, researching causes of discrepancies, and taking action to ensure that accounts balance). Supervisor provides suggestions for handling unusual or non-recurring transactions. Conformance with requirements and technical soundness of completed work are reviewed by the supervisor, or are controlled by mechanisms built into the accounting processes.

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.

01190 ORDER CLERK (Occupational Base)

The Order Clerk receives written or verbal purchase orders. Work typically involves some combination of the following duties: quoting prices, determining availability of ordered items and suggesting substitutes when necessary, advising expected delivery date and method of delivery, recording order and customer information on order sheets. The Order Clerk is responsible for checking order sheets for accuracy and adequacy of information; ascertaining credit rating of customer; furnishing customer with confirmation of receipt of order; order follow up, or informing customer of a delay in delivery. The Order Clerk maintains order files and verifies shipping invoices against original orders.

This position excludes workers paid on a commission basis or whose duties include any of the following: Receiving orders for services rather than for material or merchandise; providing customers with consultative advice using knowledge gained from engineering or extensive technical training; emphasizing selling skills; handling material or merchandise as an integral part of the job.

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.

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.

01152 DATA ENTRY OPERATOR II

This position requires the application of experience and judgment in selecting procedures to be followed, and searching for interpreting, selecting, or coding items to be entered from a variety of document sources. The Data Entry Operator II may occasionally perform routine work as described for Data Entry Operator I.

Excluded are operators above Level II using the key entry controls to access, read, and evaluate the substance of specific records to take substantive actions, or to make entices requiring a similar level of knowledge.

01110 GENERAL CLERK (Occupational Base)

The General Clerk follows clearly detailed procedures in performing simple repetitive tasks in the same sequence. Responsibilities would include filing pre-coded documents in a chronological file, or operating office equipment, (e.g., mimeograph, photocopy, addressograph or mailing machine).

01111 GENERAL CLERK I

This position follows clearly detailed specific procedures in completing several repetitive clerical steps performed in a prescribed or slightly varied sequence, such as coding and filing documents in an extensive alphabetical file; could involve simple posting to individual accounts, opening mail, calculating and posting charges to departmental accounts, operating basic office equipment, e.g., photocopier, facsimile, multi-line phone/voicemail systems, mailing machines, and minimal computer programs. Little or no subject-matter knowledge is required, but the clerk uses his or her own judgment in choosing the proper procedure for each task.

01112 GENERAL CLERK II

This position requires familiarity with the terminology of the office unit. The General Clerk selects appropriate methods from a wide variety of procedures or makes simple adaptations and interpretations of a limited number of substantive guides and manuals. The clerical steps often vary in type or sequence, depending on the task. Recognized problems are referred to others.

01113 GENERAL CLERK III

This position uses some subject-matter knowledge and judgment to complete assignments consisting of numerous steps varying in nature and sequence. The General Clerk III selects from alternative methods and refers problems not solvable by adapting or interpreting substantive guides, manuals, or procedures. Typical duties include: assisting in a variety of administrative matters; maintaining a wide variety of financial or other records (stored both manually and electronically); verifying statistical reports for accuracy and completeness; compiling information; and handling and adjusting complaints.

General Clerk IV

Positions above level IV are excluded. Such positions (which may include supervisory responsibility over lower level clerks) require workers to use a thorough knowledge of an office's work and routine to: 1) choose among widely varying methods and procedures to process complex transactions; and 2) select or devise steps necessary to complete assignments. Typical jobs covered by this exclusion include administrative assistants, clerical supervisors, and office managers.

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.

01260 PERSONNEL ASSISTANT (Occupational Base)

This position performs a variety of general personnel clerical tasks in such areas as employee records, benefits, education, training, employment/staffing, compensation, employee labor relations, and equal employment opportunity/affirmative action. The Personnel Assistant may conduct surveys and update manual and automated personnel records. At the higher levels, assistants perform limited aspects of personnel professionals' work such as interviewing candidates, recommending placements, performing compensation or benefit support activities involving contacts throughout the company, and preparing communications to various third party benefit vendors. Excluded are workers who primarily compute and process payrolls.

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.

01310 SECRETARY* (Occupational Base)

This position provides principal secretarial support in an office, usually to one individual, and, in some cases, to the subordinate staff of that individual. The Secretary maintains a close and highly responsive relationship to the day-to-day activities of the supervisor and staff, works fairly independently receiving a minimum of detailed supervision and guidance, and performs various clerical and secretarial duties requiring knowledge of office routine and an understanding of the organization, programs, and procedures related to the work of the office. Computers may exist in the environment, requiring working knowledge of certain office software programs.

Classification by Level

Secretary jobs that meet the required characteristics are matched at one of three levels according to two factors: (a) level of the secretary's supervisor within the overall organizational structure, and (b) level of the secretary's responsibility. The table following the explanations of these factors indicates the level of the secretary for each combination of factors.

Level of Secretary's Supervisor (LS)

Secretaries should be matched with one of the three LS levels below that best describes the organization of the secretary's supervisor.

LS-1 Organizational structure is not complex and internal procedures and administrative controls are simple and informal; supervisor directs staff through face-to-face meetings.

LS-2 Organizational structure is complex and is divided into subordinate groups that usually differ from each other as to subject matter, function, etc. Supervisor usually directs staff through intermediate supervisors. Internal procedures and administrative controls are formal. An entire organization (e.g., division, subsidiary, or parent organization) may contain a variety of subordinate groups that meet the LS-2 definition. Therefore, it is not unusual for one LS-2 supervisor to report to another LS-2 supervisor.

The presence of subordinate supervisors does not by itself, mean LS-2 applies. For example, a clerical processing organization divided into several units, each performing very similar work, is placed in LS-1.

In smaller organizations or industries such as retail trades, with relatively few organizational levels, the supervisor may have an impact on the policies and major programs of the entire organization, and may deal with important outside contacts as described in LS-3.

LS-3 Organizational structure is divided into two or more subordinate supervisory levels (of which at least one is a managerial level) with several subdivisions at each level. Executive's program(s) are usually interlocked on a direct and continuing basis with other major organizational segments, requiring constant attention to extensive formal coordination, clearances, and procedural controls. Executive typically has: financial decision-making authority for assigned program(s); considerable impact on the entire organization's financial position or image; and responsibility for, or has staff specialists in such areas as, personnel and administration for assigned organization. Executive plays an important role in determining the policies and major programs of the entire organization, and

spends considerable time dealing with outside parties actively interested in assigned program(s) and current or controversial issues.

Level of Secretary's Responsibility (LR)

This factor evaluates the nature of the work relationship between the secretary and the supervisor or staff, and the extent to which the secretary is expected to exercise initiative and judgment. Secretaries should be matched at the level best describing their level of responsibility. When a position's duties span more than one LR level, the introductory paragraph at the beginning of each LR level should be used to determine which of the levels best matches the position. (Typically, secretaries performing at the higher levels of responsibility also perform duties described at the lower levels.)

LR-1 Carries out recurring office procedures independently, and selects the guideline or reference that fits the specific case. The supervisor provides specific instructions on new assignments and checks completed work for accuracy. The LR-1 performs varied duties including or comparable to the following:

- a. Respond to routine telephone requests that have standard answers; refer calls and visitors to appropriate staff. Control mail and assure timely staff response, and send form letters;
- b. As instructed, maintain supervisor's calendar, make appointments, and arrange for meeting rooms;
- c. Review materials prepared for supervisor's approval for typographical accuracy and proper format;
- d. Maintain recurring internal reports, such as time and leave records, office equipment listings, correspondence controls, and training plans;
- e. Requisition supplies, printing, maintenance or other services, type, take and transcribe dictation, create and maintain office files.

LR-2 handles differing situations, problems, and deviations in the work of the office according to the supervisor's general instructions, priorities, duties, policies, and program goals. Supervisor may assist secretary with special assignments. Duties include or are comparable to the following:

- a. Screen telephone calls, visitors, and incoming correspondence; personally respond to requests for information concerning office procedures; determine which requests should be handled by the supervisor, appropriate staff member or other offices, prepare and sign routine non-technical correspondence in own or supervisor's name;
- b. Schedule tentative appointments without prior clearance. Make arrangements for conferences and meetings and assemble established background materials as directed. May attend meetings and record and report on the proceedings;

- c. Review outgoing materials and correspondence for internal consistency and conformance with supervisor's procedures; assure that proper clearances have been obtained, when needed;
- d. Collect information from the files or staff for routine inquiries on office program(s) or periodic reports, and refer non-routine requests to supervisor or staff;
- e. Explain to subordinate staff supervisor's requirements concerning office procedures, coordinate personnel and administrative forms for the office and forwards for processing.

LR-3 uses greater judgment and initiative to determine the approach or action to take in non-routine situations, interprets and adapts guidelines, including unwritten policies, precedents, and practices, which are not always completely applicable to changing situations. Duties include or are comparable to the following:

- a. Based on knowledge of the supervisor's views, compose correspondence on own initiative about administrative matters and general office policies for supervisor's approval;
- b. Anticipate and prepare materials needed by the supervisor for conferences, correspondence, appointments, meetings, telephone calls, etc., and informs supervisor on matters to be considered;
- c. Read publications, regulations, and directives and take action or refer those that are important to the supervisor and staff;
- d. Prepare special or one-time reports, summaries, or replies to inquiries, selecting relevant information from a variety of sources such as reports, documents, correspondence, other offices, etc., under general directions;
- e. Advise secretaries in subordinate offices on new procedures; request information needed from the subordinate office(s) for periodic or special conferences, reports, inquiries, etc., and shifts clerical staff to accommodate workload needs.

Excludes secretaries performing any of the following duties:

Acting as office manager for the executive's organization, e.g., determines when new procedures are needed for changing situations and devises and implements alternatives; revising or clarifying procedures to eliminate conflict or duplication; identifying and resolving various problems that affect the orderly flow of work in transactions with parties outside the organization.

Preparing agenda for conferences; explain discussion topics to participants; drafts introductions and develops background information and prepares outlines for executive or staff member(s) to use in writing speeches.

The LR-3 advises individuals outside the organization on the executive's views on major policies or current issues facing the organization; contacts or responds to contact from high-ranking outside officials (e.g., city or state officials, members of congress, presidents of national unions or large national or international firms, etc.) in unique situations. These officials may be relatively inaccessible, and each contact typically must be handled differently, using judgment and discretion.

CRITERIA FOR MATCHING SECRETARIES BY LEVEL

Secretary I (01311), Secretary II (01312), Secretary III (01313),

Intentionally blank	LR-1	LR-2	LR-3	
LS-1	I 01311	II 01312	III 01313	
LS-2	I 01311	III 01313	See Note	
LS-3	I 01311	See Note	See Note	

NOTE: Employees whose duties meet this level of responsibility and supervision may be properly classified under the Administrative Assistant category or the class may need to be conformed.

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, may lead lower level word processors.

01613 WORD PROCESSOR III

Requires both a comprehensive knowledge of word processing software applications and office practices and a high degree of skill in applying software functions to prepare complex and detailed documents. For example, processes complex and lengthy technical reports which include tables, graphs, charts, or multiple columns. Uses either different word processing packages or many different style macros or special command functions; independently completes assignments and resolves problems.

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, trainees working to become fully qualified operators, and lead operators providing technical assistance to lower level positions.

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.

14074 COMPUTER PROGRAMMER IV

The Computer Programmer IV applies expertise in programming procedures to complex programs; recommends the redesign of programs, investigates and analyzes feasibility and

program requirements, and develops programming specifications. Assigned programs typically affect a broad multi-user computer system which meets the data processing needs of a broad area (e.g., manufacturing, logistics planning, finance management, human resources, or material management) or a computer system for a project in engineering, research, accounting, statistics, etc. This Programmer plans the full range of programming actions to produce several interrelated but different products from numerous and diverse data elements, which are usually from different sources; solves difficult programming problems, and uses knowledge of pertinent system software, computer equipment, work processes, regulations, and management practices.

This Programmer performs such duties as: developing, modifying, and maintains complex programs; designs and implements the interrelations of files and records within programs which will effectively fit into the overall design of the project; works with problems or concepts and develops programs for the solution to major scientific computational problems requiring the analysis and development of logical or mathematical descriptions of functions to be programmed; and develops occasional special programs, e.g. a critical path analysis program to assist in managing a special project. This Worker tests, documents, and writes operating instructions for all work, confers with other EDP personnel to secure information, investigate and resolve problems, and coordinates work efforts.

In addition, this incumbent performs such programming analyses as: investigating the feasibility of alternate program design approaches to determine the best balanced solution, e.g., one that will best satisfy immediate user needs, facilitate subsequent modification, and conserve resources. Duties include the following: assisting user personnel in defining problems or needs, determining work organization on typical maintenance projects and smaller scale, working on limited new projects, the necessary files and records, and their interrelation with the program or working on large or more complicated projects, and participating as a team member along with other EDP personnel and users, holding responsibility for a portion of the project.

The Computer Programmer IV works independently under overall objectives and direction, apprising the supervisor about progress and unusual complications and modifying and adapting precedent solutions and proven approaches. Guidelines include constraints imposed by the related programs with which the incumbent's programs must be meshed. Completed work is reviewed for timeliness, compatibility with other work, and effectiveness in meeting requirements. This Worker may function as team leader or supervise a few lower level programmers or technicians on assigned work.

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. This worker may serve as lead analyst in a design subgroup, directing and integrating the work of one or two lower level analysts, each responsible for several programs. Supervision and nature of review are similar to level II; existing systems provide precedents for the operation of new subsystems.

14150 PERIPHERAL EQUIPMENT OPERATOR

The Peripheral Equipment Operator operates peripheral equipment that directly supports digital computer operations. Such equipment is uniquely and specifically designed for computer applications, but need not be physically or electronically connected to a computer. Printers, plotters, tape readers, tape units or drives, disk units or drives, and data display units are examples of such equipment.

The following duties characterize the work of a Peripheral Equipment Operator:

- ? Loads printers and plotters with correct paper; adjusting controls for forms, thickness, tension, printing density, and location; and unloading hard copy;
- Labels tape reels, or disks;
- Checks labels and mounting and dismounting designated tape reels or disks on specified units or drives;
- Sets controls which regulate operation of the equipment;
- Observes panel lights for warnings and error indications and taking appropriate action;
- Examines tapes, cards, or other material for creases, tears or other defects that could cause processing problems.

Excludes workers who monitor and operate a control console or a remote terminal, or whose duties are limited to operating decollators, busters, separators, or similar equipment.

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.

21020 FORKLIFT OPERATOR

The Forklift Operator operates a manually controlled gasoline, electric or liquid propane gas powered forklift to transport goods and materials of all kinds within a warehouse, manufacturing plant, or other establishment.

21130 SHIPPING/RECEIVING CLERK

The Shipping/Receiving Clerk performs clerical and physical tasks in connection with shipping goods of the establishment in which employed and receiving incoming shipments. In performing day-to-day, routine tasks, this worker follows established guidelines. In handling unusual non-routine problems, this worker receives specific guidance from supervisor or other officials. This incumbent may direct and coordinate the activities of other workers engaged in handling goods to be shipped or being received. Shipping duties typically involve the following: verifying that orders are accurately filled by comparing items and quantities of goods gathered for shipment against documents; insuring that shipments are properly packaged, identified with shipping information, and loaded into transporting vehicles, and preparing and keeping records of goods shipped, e.g., manifests, bills of lading. Receiving duties typically involve the following: verifying the correctness of incoming shipments by comparing items and quantities unloaded against bills of lading, invoices, manifests, storage receipts, or other records, checking for damaged goods, insuring that goods are appropriately identified for routing to departments within the establishment, and preparing and keeping records of goods received.

23470 LABORER

The Laborer performs tasks that require mainly physical abilities and effort involving little or no specialized skill or prior work experience. The following tasks are typical of this occupation: The Laborer loads and unloads trucks, and other conveyances, moves supplies and materials to proper location by wheelbarrow or hand truck; stacks materials for storage or binning, collects refuse and salvageable materials, and digs, fills, and tamps earth excavations, The Laborer levels ground using pick, shovel, tamper and rake, shovels concrete and snow; cleans culverts and ditches, cuts tree and brush; operates power lawnmowers, moves and arranges heavy pieces of office and household furniture, equipment, and appliance, moves heavy pieces of automotive, medical engineering, and other types of machinery and equipment, spreads sand and salt on icy roads and walkways, and picks up leaves and trash.

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.

13043 ILLUSTRATOR III

The projects to which the Illustrator III are assigned, usually involve several of the common art media (as in the case of Illustrator II), but the illustrations themselves typically require a higher degree of skill in the use of many of the media. This degree of skill is required for the following reasons: (a) the speed with which the illustration must be completed requires the ability to work quickly and competently in order to produce an acceptable finished product within the available time limit. (b) The illustration calls for the use of fine detail, special artistic effects, or an unusual use of the chosen medium or; (c) The method of reproduction, how the illustration will be used, or the information or artistic results desired, calls for exceptional care and skill in the use of the medium.

The themes illustrated may be either concrete in nature or they may represent ideas and abstract concepts. The illustrations differ from those typical of Illustrator II in that they are expected to interpret the publications, chart, poster, or exhibit in which they appear, while Illustrator II presents factual, rather than interpretative material. Illustrator III is required to have knowledge of a specialized subject matter field such as medicine, science, or technical equipment, and will prepare illustrations that are designed to reproduce the appearance of specific medical or scientific specimens or of pieces of technical equipment.

13047 LIBRARIAN

The Librarian maintains library collections of books, serial publications, and documents, audiovisual and other materials and assists groups and individuals in locating and obtaining materials, furnishes information on library activities, facilities, rules and services, explains and assists in use of reference sources, such as card or book catalog, or book and periodical indexes to locate information. This worker issues and receives materials for circulation or use in library, assembles and arranges displays of books and other library materials, maintains reference and circulation materials. The Librarian also answers correspondence on special reference subjects, may compile list of library materials according to subjects or interests, and may select, order, catalog and classify materials.

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, serve as a lead photographer to lower level workers, 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

30040 CIVIL ENGINEERING TECHNICIAN

This technician assists the Civil Engineer in application of principles, methods, and techniques of civil engineering technology, reviews project specifications and confers with the Civil Engineer concerning assistance required, such as plan preparation, acceptance testing, and evaluation of field conditions, design changes, and reports. This worker conducts materials testing and analysis, using tools and equipment and applying engineering knowledge necessary to conduct tests, prepares reports detailing tests conducted and their results. The Civil Engineering Technician surveys project sites to obtain and analyze topographical details of sites, using maps and surveying equipment, drafts detailed dimensional drawings such as those needed for highway plans, structural steel fabrication, and water control projects. This work involves performing duties as described under Drafter, and calculating dimensions, profile specifications, and quantities of materials such as steel, concrete, and asphalt, using calculator.

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.
- 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.

30064 DRAFTER/CAD OPERATOR IV

This operator works closely with design originators, preparing drawings or computer models of unusual, complex, or original designs that require a high degree of precision, performs unusually difficult assignments requiring considerable initiative, resourcefulness, and drafting expertise. This incumbent assures that anticipated problems in manufacture, assembly, installation, and operation are resolved by the drawing produced, exercises independent judgment in selecting and interpreting data based on knowledge of the design intent. Although working primarily as a drafter, this worker may occasionally interpret general designs prepared by others to complete minor details, may provide advice and guidance to lower level drafters or serve as coordinator and planner for large and complex drafting projects.

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.

29150 GRAPHIC ARTIST

Serves as a consulting member of an Interactive Courseware (ICW) development team. Determines requirements for computer graphics and integrates them in the ICW. Tests and performs quality control.

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.

29364 PARALEGAL/LEGAL ASSISTANT IV

At this level, assists in the evaluation, development and litigation of cases by performing the following duties:

Examines and evaluates information in case files, for case litigation worthiness and appropriate titles of law;

Determines the need for additional information, independent surveys, evidence, and witnesses, and plans a comprehensive approach to obtain this information;

Through on-site visits, interviews, and review of records on operations, looks for and evaluates the relevance and worth of evidence;

Selects, summarizes, and compiles comparative data to examine and evaluate respondent's deficiencies in order to provide evidence of illegal practices or patterns;

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;

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;

Interviews potential witnesses for information and prepares witnesses for court appearances;

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;

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;

May appear in court as a witness to testify concerning exhibits prepared supporting plaintiff's case.

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.

- 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.

The Spearhead Group, Inc.
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REVISION #1