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CAGE: 1FNV1



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## GENERAL SERVICES ADMINISTRATION

### Federal Supply Service

### Authorized Federal Supply Schedule Catalog/Price List

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

**Schedule Title:** Temporary Administrative and Professional Staffing (TAPS) Services

**Federal Supply Class:** 736

**Contract number:** GS-07F-0149U

**Contract period:** January 15, 2008 thru January 14, 2013

**Business size:** Small Veteran Owned business.

**Modification:** AO01

**Dated:** October 21, 2008

**SECTION I: Customer Information**

1a. Table of awarded special item numbers (SINs):

<b>SIN</b>	<b>Description</b>
736-1	<a href="#">Administrative Support and Clerical Occupations</a>
736-2	<a href="#">Automatic Data Processing Occupations</a>
736-3	<a href="#">Technical and Professional Occupations</a>

1b. Lowest Priced Model Number and Price for Each SIN: N/A

1c. Hourly Rates and Descriptions of All Corresponding Commercial Job Duties, Experience, Functional Responsibility and Education: All hourly rates shown are firm fixed price. Hourly rates by location and labor category are in [Section II](#). Job Descriptions are provided in [Section III](#).

2. Maximum order\*: Maximum task order value is \$100,000.00 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 AOCE for a better price. AOCE may

- (1) offer a new price for the requirement or,
- (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: \$100.00

4. Geographic coverage: Washington, DC and Norfolk, VA

5. Point(s) of production: N/A

6. Discount from list prices: N/A

7. Quantity discount(s): None

8. Prompt payment terms: Net 30

9a. Government purchase cards are accepted at or below the micro-purchase threshold.

9b. Government purchase cards ARE NOT accepted above the micro-purchase threshold.

10. Foreign items (list items by country of origin): 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 AOCE's representative to effect a faster delivery. Customers are encouraged to contact the AOCE for the purpose of requesting accelerated delivery.

12. F.O.B. point(s): N/A

13. Ordering address: Alpha-Omega Change Engineering  
6 Manhattan Sq, Ste 100  
Hampton, VA 23666-5846  
Phone: 757.224.3716  
Fax: 757.224.6191  
E-mail: contracts@aoce.com

14. Payment address: Alpha-Omega Change Engineering  
6 Manhattan Sq, Ste 100  
Hampton, VA 23666-5846

15. Warranty provision: Standard commercial warranty. Customer should contact the AOCE for a copy of the warranty.

16. Export packing charges: N/A

17. Terms and conditions of Government purchase card acceptance: N/A

18. Terms and conditions of rental, maintenance, and repair (if applicable): N/A

19. Terms and conditions of installation (if applicable): N/A

20. Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices (if available): N/A

20a. Terms and conditions for any other services (if applicable): N/A

21. List of service and distribution points (if applicable): N/A

22. List of participating dealers (if applicable): N/A

23. Preventive maintenance (if applicable): N/A

24a. Special attributes such as environmental attributes, e.g., recycled content, energy efficiency, and/or reduced pollutants: N/A

24b. Section 508 Compliance for EIT: N/A

25. Data Universal Number System (DUNS) number: 00-926-0337.

26. Notification regarding registration in Central Contractor Registration (CCR) database. AOCE has an active registration in the CCR. CAGE Code is: 1FNV1.

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**SECTION II: Price Lists/Hourly Rates**

**SIN 736-1 - Administrative Support and Clerical Occupations**

SIN 736-1: Washington, DC Locations

Occupation Code - Title	Hourly Rate
01020 - Administrative Assistant	\$43.04
01111 - General Clerk I	\$27.16
01112 - General Clerk II	\$29.73
01113 - General Clerk III	\$35.23
01280 - Receptionist	\$25.56
01311 - Secretary I	\$32.48
01312 - Secretary II	\$34.67
01313 - Secretary III	\$39.92
01420 - Survey Worker	\$34.72

SIN 736-1: Norfolk, VA Locations

Occupation Code - Title	Hourly Rate
01020 - Administrative Assistant	\$40.21
01111 - General Clerk I	\$21.99
01112 - General Clerk II	\$26.12
01113 - General Clerk III	\$28.61
01280 - Receptionist	\$23.13
01311 - Secretary I	\$28.07
01312 - Secretary II	\$31.30
01313 - Secretary III	\$35.03
01420 - Survey Worker	\$25.31

## SIN 736-2 - Automatic Data Processing Occupations

### SIN 736-2: Washington, DC Locations

Occupation Code - Title	Hourly Rate
14041 - Computer Operator I	\$32.00
14042 - Computer Operator II	\$35.18
14043 - Computer Operator III	\$38.64
14044 - Computer Operator IV	\$42.37
14045 - Computer Operator V	\$46.35
14101 - Computer Systems Analyst I (1)	\$49.52
14102 - Computer Systems Analyst II (1)	\$49.52
14103 - Computer Systems Analyst III (1)	\$49.52
14160 - Personal Computer Support Technician	\$42.37

### SIN 736-2: Norfolk, VA Locations

Occupation Code - Title	Hourly Rate
14041 - Computer Operator I	\$26.96
14042 - Computer Operator II	\$29.57
14043 - Computer Operator III	\$32.61
14044 - Computer Operator IV	\$36.80
14045 - Computer Operator V	\$39.01
14101 - Computer Systems Analyst I (1)	\$48.64
14102 - Computer Systems Analyst II (1)	\$48.64
14103 - Computer Systems Analyst III (1)	\$48.64
14160 - Personal Computer Support Technician	\$36.80

## SIN 736-5 - Automatic Data Processing Occupations

### SIN 736-5: Washington, DC Locations

Occupation Code - Title	Hourly Rate
15050 - Computer Based Training Spec/Instructor	\$55.37
15080 - Graphic Artist	\$45.21
30461 - Technical Writer I	\$38.36
30462 - Technical Writer II	\$45.79
30463 - Technical Writer III	\$54.32

### SIN 736-5: Norfolk, VA Locations

Occupation Code - Title	Hourly Rate
15050 - Computer Based Training Spec/Instructor	\$51.61
15080 - Graphic Artist	\$36.70
30461 - Technical Writer I	\$32.42
30462 - Technical Writer II	\$38.55
30463 - Technical Writer III	\$45.56

## **SECTION III: TAPS Skill Descriptions**

### **SIN 736-1 - Administrative Support and Clerical Occupations**

This category includes occupations concerned with preparing, transcribing, transferring, systematizing, and preserving both written and computerized communications and records; gathering and distributing information. The duties in this category also include: operating office machines; storing, distributing, accounting for stores of materials; distributing mail and delivering messages. Performing other administrative support and clerical duties may be required.

#### **(N) 01020 ADMINISTRATIVE ASSISTANT**

Job Description: In addition to secretarial duties (filing, taking phone calls, scheduling appointments, making travel arrangements), this position will provide administrative support to executive staff with office management responsibilities to include budgeting, personnel records and payroll. The Administrative Assistant may be required to work independently on projects requiring research and preparation of briefing charts and other presentation materials.

Minimum Education: High school diploma or equivalent

Experience: At least five years experience in the field or related area

#### **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).

#### **(N) 01111 GENERAL CLERK I**

Job Description: 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.

Minimum Education: High school diploma or equivalent

Experience: 0-3 years experience in the field or related area

#### **(N) 01112 GENERAL CLERK II**

Job Description: 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.

Minimum Education: High school diploma or equivalent

Experience: 1-3 years experience in the field or related area

#### **(N) 01113 GENERAL CLERK III**

Job Description: 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.

The General Clerk III may also direct lower level clerks. 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.

Minimum Education: High school diploma or equivalent

Experience: At least 3 years experience in the field or related area

#### (N) 01280 RECEPTIONIST

Job Description: 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.

Minimum Education: High school diploma or equivalent

Experience: 0-3 years experience in the field or related area

#### SECRETARY (Occupational Base)

Job Description: 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

	LR-1	LR-2	LR-3
LS-1	Secretary I	Secretary II	Secretary III
LS-2	Secretary I	Secretary III	See Note
LS-3	Secretary I	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.

(N) 01311 Secretary I

Minimum Education: High school diploma or equivalent

Experience: 0-3 years experience in the field or related area

(N) 01312 Secretary II

Minimum Education: High school diploma or equivalent

Experience: 1-3 years experience in the field or related area

(N) 01313 Secretary III

Minimum Education: High school diploma or equivalent

Experience: 2-5 years experience in the field or related area

(N) 01420 SURVEY WORKER (Interviewer)

Job Description: This position interviews people to obtain information on topics such as public issues or consumer buying habits, contacts people at home business or by telephone following specified sampling procedures, or approaches them at random on street. The Survey Worker asks questions relative to items on a form or questionnaire, records answers, assists persons in filling out

forms, and may review, sort, classify and file forms according to specified procedures and criteria.  
This worker may participate in federal, state or local census surveys.  
Minimum Education: High school diploma or equivalent  
Experience: 0-3 years experience in the field or related area

## **SIN 736-2 - Automatic Data Processing Occupations**

### **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.

#### **(N) 14041 COMPUTER OPERATOR I**

Job Description: 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.

Minimum Education: Associate degree. Two years of experience is equivalent to one year of education (i.e. four years of experience is equivalent to an Associate degree)

Experience: 0-1 years experience in the field or related area

#### **(N) 14042 COMPUTER OPERATOR II**

Job Description: 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.

Minimum Education: Associate degree. Two years of experience is equivalent to one year of education (i.e. four years of experience is equivalent to an Associate degree)

Experience: 1-2 years experience in the field or related area

#### **(N) 14043 COMPUTER OPERATOR III**

Job Description: 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.

Minimum Education: Associate degree. Two years of experience is equivalent to one year of education (i.e. four years of experience is equivalent to an Associate degree)

Experience: 2-3 years experience in the field or related area

(N) 14044 COMPUTER OPERATOR IV

Job Description: 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.

Minimum Education: Associate degree. Two years of experience is equivalent to one year of education (i.e. four years of experience is equivalent to an Associate degree)

Experience: 3-4 years experience in the field or related area

(N) 14045 COMPUTER OPERATOR V

Job Description: 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.

Minimum Education: Associate degree. Two years of experience is equivalent to one year of education (i.e. four years of experience is equivalent to an Associate degree)

Experience: at least five years experience in the field or related area

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:

(N) 14101 COMPUTER SYSTEMS ANALYST I

Job Description: 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.

Minimum Education: A degree in a related field or area. Two years of experience is equivalent to one year of education (i.e. eight years of experience is equivalent to a Bachelor degree)

Experience: 0-2 years experience in the field or related area

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.

#### (N) 14102 COMPUTER SYSTEMS ANALYST II

Job Description: 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.

Minimum Education: Bachelor degree in a related field or area. Two years of experience is equivalent to one year of education (i.e. eight years of experience is equivalent to a Bachelor degree)

Experience: 2-4 years experience in the field or related area

#### (N) 14103 COMPUTER SYSTEMS ANALYST III

Job Description: 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.

Minimum Education: Bachelor degree in a related field or area. Two years of experience is equivalent to one year of education (i.e. eight years of experience is equivalent to a Bachelor degree)

Experience: at least four years experience in the field or related area

#### (N) 14160 PERSONAL COMPUTER SUPPORT TECHNICIAN

Job Description: 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.

Minimum Education: Associate degree. Two years of experience is equivalent to one year of education (i.e. four years of experience is equivalent to an Associate degree)  
Experience: 2-3 years experience in the field or related area

## **SIN 736-5 - Technical and Professional Occupations**

### **INSTRUCTIONAL OCCUPATIONS**

This category includes occupations concerned with the direct delivery and development of instruction. The instruction is primarily of a technical nature where the requirements of the work are a combination of practical knowledge of the methods and techniques of instruction and practical knowledge and experience in the subject taught. With the exception of educational technologist and instructional developer positions, the occupational titles in this category do not have a requirement of professional training in the field of education.

#### **(N) 15050 COMPUTER BASED TRAINING SPECIALIST**

**Job Description:** The Computer Based Training Specialist works with courseware production team to design, develop, revise and validate interactive computer based courseware. This specialist uses specialized computer software and/or hardware to develop, integrate and edit instructional text, audio, graphics, animation and video for interactive presentations. This person also uses appropriate programming/branching logic and screen layout and remediation/feedback techniques. The Worker also implements quality control and review and revision procedures throughout the courseware development process.

**Minimum Education:** Bachelor degree in a related field or area. Two years of experience is equivalent to one year of education (i.e. eight years of experience is equivalent to a Bachelor degree)

**Experience:** 1-3 years experience in the field or related area

#### **(N) 15080 GRAPHIC ARTIST**

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

**Minimum Education:** High school diploma or equivalent

**Experience:** 1-3 years experience in the field or related area

#### **(N) 30461 TECHNICAL WRITER I**

**Job Description:** 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.

Minimum Education: Associate degree. Two years of experience is equivalent to one year of education (i.e. four years of experience is equivalent to an Associate degree)

Experience: 0-2 years experience in the field or related area

#### (N) 30462 TECHNICAL WRITER II

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

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

Minimum Education: Associate degree. Two years of experience is equivalent to one year of education (i.e. four years of experience is equivalent to an Associate degree)

Experience: 2-4 years experience in the field or related area

#### (N) 30463 TECHNICAL WRITER III

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

The Technical Writer III studies blueprints, sketches, drawings, parts lists, specifications, mockups, and product samples to integrate and delineate technology, operating procedure, and production sequence and detail, organizes material and completes writing assignment according to set standards regarding order, clarity, conciseness, style, and terminology; and reviews published materials and recommends revisions or changes in scope, format, content, and methods of reproduction and binding. This worker may perform the following tasks: maintain records and files of work and revisions, select photographs, drawings, sketches, diagrams, and charts to illustrate material; assist

in laying out material for publication, arrange for typing, duplication and distribution of material, write speeches, articles, and public or employee relations releases, edit, standardize, or make changes to material prepared by other writers or plant personnel. This incumbent may specialize in writing material regarding work methods and procedures.

Minimum Education: Associate degree. Two years of experience is equivalent to one year of education (i.e. four years of experience is equivalent to an Associate degree)

Experience: at least four years experience in the field or related area