ATTACHMENT J-3A

EXEMPT POSITION DESCRIPTIONS
With Minimum Acceptable Experience

Program Manager	MA/MS Degree/ 12 Years Experience
Serves as the contractor's single contract manager, and shall be the contractor's authorized interface with the Government Contracting Officer (CO), the contract level Contracting Officer's Technical Representative (COTR), Government management personnel and customer agency representatives. Serves as senior corporate representative responsible for overall contract performance.	
Senior Manager	BA/BS Degree/10 Years Experience
Serves as the manager for a large, complex functional work effort (or a group of functional work efforts) and shall assist the program manager in working with the Government CO and COTR, Government management personnel, and customer agency representatives. Under the guidance of the program manager, the manager shall be responsible for overall management of assigned task orders and for ensuring that the technical solutions and schedules in the task are accomplished within schedule and budget.	
Technical Area Manager	BA/BS Degree/ 10 Years Experience or 15 Years Relevant Experience
Serves as the manager or lead over a technical product, customer relationship, major service/project, or administrative functions. Recognized as subject matter expert with in depth knowledge of industry issues and trends. Utilizes functional area expertise gained through direct industry experience to assess the operational and functional baseline of a system and/or service and its technical components.	
Human Resources/Labor Relations Manager	BA/BS Degree/7 Years Experience or 15 Years Relevant Experience
Serves as the senior human resources and labor relations person, providing senior-level management support, advice, counseling, and program development for human resources activities. Evaluates human relations and work related problems and meets with supervisors and managers to determine effective remediation techniques. Experienced in the handling of grievances and disciplinary actions.	
Planner/Scheduler	BA/BS Degree/5 Years Experience or 7 Years Relevant Experience
Develops/directs schedules, program plans, and projects. Analyzes changes for scheduling impact. Provides risk assessments to determine the schedules viability.	
Contracts/Subcontracts/Purchasing Manager	BA/BS Degree/7 Years Experience or 10 Years Relevant Experience
Manage Contracts, Subcontracts, or Purchasing functions. Review incoming customer requests for proposals, identify proposal requirements, reviews terms and conditions for acceptability, coordinates proposal development in conjunction with legal counsel, drafts proposals including unique, complex special provisions and secures required management	

approval for submittal of proposals to customer. Develop, negotiate, and administer subcontracts of high complexity and risk to fulfill authorized requirements, ensuring compliance on supplier cost, schedule, legal and performance aspects. Negotiate moderate subcontracts, identify and coordinate sources and recommended supplier.	
Contract/Subcontracts/Purchasing Specialist	BA/BS Degree/5 Years Experience or 7 Years Relevant Experience
Receive and grant approval for purchases of all goods or services. Analyze changes or new issues in materials and supply to reduce costs and improve quality. Relies on experience and judgment to plan and accomplish goals. Manage a staff and reports to top management.	
Business Specialist	BA/BS Degree/5 Years Experience or 7 Years Relevant Experience
Responsible for manpower resource planning and allocation, analysis of buying trends, research, analysis and presentation of contract status and resource reports, and market analysis. Provide professional support to Contract and Technical Area Managers in meeting and maintaining manpower resource requirements. Evaluate internal manpower requirements for the execution of IT strategies and procedures and performs analysis of external market factors affecting compensation for IT professionals and supporting technical personnel. Develop compensation strategies for achieving and maintaining the optimum levels of technical capability with available financial resources.	

NON-EXEMPT POSITION DESCRIPTIONS

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.

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.

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.

14000 INFORMATION TECHNOLOGY OCCUPATIONS
This category includes occupations concerned with the utilization of the computer in the analysis and solution of business, scientific, engineering and other technical problems to include the following: operating electronic, optical, and electromechanical machines that record, store, process, and transcribe data from magnetic tape or other sources to solve mathematical, engineering, accounting, or technical problems, to keep records or to supply information; programming computer languages to perform mathematical, engineering and scientific computations or auditing, payroll, mailing list and text handling functions; and storing and retrieving computer files.

14040 COMPUTER OPERATOR (Occupational Base)
The Computer Operator monitors and operates the control console of either a mainframe digital computer or a group of minicomputers, in accordance with operating instructions, to process data. Work is characterized by the following:

- Studies operating instructions to determine equipment setup needed.

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

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