American Systems Corporation

14151 Park Meadow Drive, Suite 500
Chantilly, VA 20151-2272
703-968-6300
www.AmericanSystems.com

Professional Engineering Services

Authorized Federal Supply Schedule Price List

General Services Administration

Federal Supply Service

FSC Group 87

FSC Class: 871

Contract Number: GS-23F-0129J

Period Covered by Contract: 9/30/14– 9/29/19

Special Item Nos.: 871-1 through 871-6

Pricelist Current Through Modification: **PS-0019** Dated: **9/28/2014**

Business Size: Large

Strategic Planning for Technology Programs/Activities
Concept Development and Requirements Analysis
System Design, Engineering and Integration
Test and Evaluation
Integrated Logistics Support
Acquisition and Life Cycle Management

Products and ordering information in this Authorized Professional Engineering Services Schedule Price List are also available on the GSA Advantage!™ System. Agencies can browse GSA Advantage!™ by accessing GSA's Home Page via Internet at http://www.fss.gsa.gov/

Table of Contents

This page intentionally left blank.

1. Table of Awarded Special Item Numbers

2. Maximum Order

The maximum dollar value of each order will be negotiated individually for each order placed under this contract. There is no ceiling dollar amount that cannot be exceeded by an order placed under this schedule. However, in accordance with FAR 8.404 there may be circumstances where an ordering activity finds it advantageous to request a price reduction such as where a quantity of an individual order clearly indicates the potential for obtaining a reduced price.

To assist the customer agencies to determine when they should seek a price decrease, a level called a maximum order has been established under the contract. That maximum order amount is $1,000,000.

When an agency order exceeds this amount, it is recommended that the ordering activity contact the contractor for a reduced price or additional concessions. Contractor may:

(1) Offer a new lower price for this requirement (the Price Reduction clause is not applicable to orders placed over the Maximum Order in FAR 52.216-19); or

(2) Offer the lowest price available under the contract; or

(3) Offer a no-cost concession; or

(4) Decline the order; orders must be returned in accordance with FAR 52.216-19.

A delivery order for quantities that exceed the maximum order may be placed with the contractor selected in accordance with Far 8.404. The order will be placed under the current contract.

3. Minimum Order

The minimum order that may be placed under this contract is $100.

4. Geographic Coverage

The geographic scope of this contract is for ASC to provide engineering and technical support services and support for delivery within the 48 contiguous states, Washington, D.C., Alaska, Hawaii, Puerto Rico and, on a worldwide basis, in any foreign country in which trade is not prohibited by the United States Government.

5. Point(s) of Production (City, County, and State or Foreign Country)

Not applicable.

6. Discount From List Prices or Statement of Net Price

a. Quantity: 2% discount for orders/commitments exceeding $500,000.
3% discount for orders/commitments exceeding $1,000,000.

b. Dollar Volume: NONE. However, when an agency order exceeds the maximum order amount ($1,000,000) it is recommended that the ordering activity contact the contractor for a reduced price or additional concessions.

c. Government Educational Institutions: NONE

d. Discount for use of Government credit card: NONE

7. Other Discounts

The contractor will offer a discount for services that are provided at a customer facility on a full-time basis for periods exceeding six months in duration. The contractor will offer a discount for services that are performed in certain lower cost geographic areas.

8. Prompt Payment Terms

NONE.

9. Government Purchase Cards

a. Government Purchase Cards Below the Micropurchase Threshold.

The contractor will accept Government purchase cards below the micropurchase threshold.

b. Government Purchase Cards Above the Micropurchase Threshold.

The contractor will accept Government purchase cards above the micropurchase threshold up to $25,000. In addition, bank account information for wire transfer payments will be shown on the invoice.

10. Ordering Address

American Systems Corporation
14151 Park Meadow Drive, Suite 500
Chantilly, VA 20151-2272

Telephone numbers(s) that can be used by ordering agencies to obtain technical and/or ordering assistance are listed as follows:

Mr. Joseph Kopfman
Vice President, Contracts
(703) 968-5266
Joseph.Kopfman@2asc.com

Ms. Diane Stegner
Contracts Manager
(703) 968-5210
Diane.Stegner@2asc.com

11. Payment Address

American Systems Corporation
14151 Park Meadow Drive, Suite 500
Chantilly, VA 20151-2272

12. Export Packing Charges, If Applicable

Not applicable.

13. Terms and Conditions of Government Purchase Card Acceptance

The contractor will accept Government purchase cards for purchases up to $25,000 but offers no discounts.

14. Year 2000 (Y2K) Compliant

The Contractor is Y2K compliant with respect to information technology products as defined in clause I-FSS-550-B entitled Year 2000 Warranty – Commercial Supply Items (Jan 1999).

15. Environmental Attributes, e.g., Recycled Content, Energy Efficiency, and/or Reduced Pollutants

Not applicable.

16. Data Universal Number System (DUNS) Number

Contractor Establishment Code (DUNS): 07-779-9799.

17. Notification Regarding Registration in Central Contractor Registration (CCR) Database

The Contractor is registered in the CCR database; their registration number is their DUNS number: 07-779-9799.

18. Additional Information

a. Type of Contractor - Large Business

b. Woman-Owned Small Business - NO

c. Contractor's Taxpayer Identification Number (TIN) - 54-0962497

d. CAGE Code: 61443

e. FOB Destination

19. Security Requirements

In the event security requirements are necessary, the ordering activities may incorporate, in their delivery order(s), a security clause in accordance with current laws, regulations, and individual agency policy; however, the burden of administering the security requirements shall be with the ordering agency. If any costs are incurred as a result of the inclusion of security requirements, such costs will be negotiated with the Schedule Contractor on an open market basis, outside the scope of the contract.

20. Ordering Procedures for Services

Procedures for services priced on GSA schedules at hourly rates.

FAR 8.402 contemplates that GSA may occasionally find it necessary to establish special ordering procedures for individual Federal Supply Schedules or for some Special Item Numbers (SIN) within a Schedule. GSA has established special ordering procedures for services that are priced on Schedule at hourly rates. These special ordering procedures take precedence over the procedures in FAR 8.404.

The GSA has determined that the rates for services contained in the contractor's price list applicable to this schedule are fair and reasonable. However, the ordering office using this contract is responsible for considering the level of effort and mix of labor proposed to perform specific task being ordered and for making a determination that the total firm-fixed price or ceiling price is fair and reasonable.

When ordering services, ordering offices shall –

I. Prepare a Request for Quotes:

A. A performance-based statement of work that outlines, at a minimum, the work to be performed, location of work, period of performance, deliverable schedule, applicable standards, acceptance criteria, and any special requirements (i.e., security clearances, travel, special knowledge, etc.) should be prepared.

B. A request for quotes should be prepared which includes the performance-based statement of work and requests the contractors to submit either a firm-fixed price or a ceiling price to provide the services outlined in the statement of work. A firm-fixed price order shall be requested, unless the ordering office makes a determination that it is not possible at the time of placing the order to estimate accurately the extent or duration of the work or to anticipate cost with any reasonable degree of confidence. When such a determination is made, a labor hour or time-and-materials quote may be requested. The firm-fixed price shall be based on the hourly rates in the schedule contract and shall consider the mix of labor categories and level of effort required to perform the services described in the statement of work. The firm-fixed price of the order should also include any travel costs or other incidental costs related to performance of the services ordered, unless the order provides for reimbursement of travel costs at the rates provided in the Federal Travel or Joint Travel Regulations. A ceiling price must be established for labor-hour and time-and-materials orders.

C. The request for quotes may request the contractors, if necessary or appropriate, to submit a project plan for performing the task and information on the contractor's experience and/or past performance performing similar tasks.

D. The request for quotes shall notify the contractors what basis will be used for selecting the contractor to receive the order. The notice shall include the basis for determining whether the contractors are technically qualified and provide an explanation regarding the intended use of any experience and/or past performance information in determining technical acceptability of responses.

II. Transmit the Request for Quotes to Contractors:

A. Based upon an initial evaluation of catalogs and price lists, the ordering office should identify the contractors that appear to offer the best value (considering the scope of services offered, hourly rates and other factors such as contractors' locations, as appropriate).

B. The request for quotes should be provided to three (3) contractors if the proposed order is estimated to exceed the micro-purchase threshold, but not exceed the maximum order threshold. For proposed orders exceeding the maximum order threshold, the request for quotes should be provided to additional contractors that offer services that will meet the agency's needs. Ordering offices should strive to minimize the contractors' costs associated with responding to requests for quotes for specific orders. Requests should be tailored to the minimum level necessary for adequate evaluation and selection for order placement. Oral presentations should be considered, when possible.

III. Evaluate quotes and select the contractor to receive the order:

After responses have been evaluated against the factors identified in the request for quotes, the order should be placed with the schedule contractor that represents the best value and results in the lowest overall cost alternative (considering price, special qualifications, administrative costs, etc.) to meet the Government's needs.

The establishment of Federal Supply Schedule Blanket Purchase Agreements (BPA) for recurring services is permitted when the procedures outlined herein are followed. All BPAs for services must define the services that may be ordered under the BPA, along with delivery or performance time frames, billing procedures, etc. The potential volume of orders under BPAs,

regardless of the size of individual orders, may offer the ordering office the opportunity to secure volume discounts. When establishing BPAs ordering offices shall -

Inform contractors in the request for quotes (based on the agency's requirement) if a single BPA or multiple BPAs will be established, and indicate the basis that will be used for selecting the contractors to be awarded the BPAs.

A. SINGLE BPA: Generally, a single BPA should be established when the ordering office can define the tasks to be ordered under the BPA and establish a firm-fixed price or ceiling price for individual tasks or services to be ordered. When this occurs, authorized users may place the order directly under the established BPA when the need for service arises. The schedule contractor that represents the best value and results in the lowest overall cost alternative to meet the agency's needs should be awarded the BPA.

B. MULTIPLE BPAs: When the ordering office determines multiple BPAs are needed to meet its requirements, the ordering office should determine which contractors can meet any technical qualifications before establishing the BPAs. When multiple BPAs are established, the authorized users must follow the procedures in II.B above, and then place the order with the Schedule contractor that represents the best value and results in the lowest overall cost alternative to meet the agency's needs.

IV. Review BPAs periodically. Such reviews shall be conducted at least annually. The purpose of the review is to determine whether the BPA still represents the best value (considering price, special qualifications, etc.) and results in the lowest overall cost alternative to meet the agency's needs.

V. The ordering office should give preference to small business concerns when two or more contractors can provide the services at the same firm-fixed price or ceiling price.

VI. When the ordering office's requirement involves both products as well as professional services, the ordering office should total the prices for the products and the firm-fixed price for the services and select the contractor that represents the greatest value in terms of meeting the agency's total needs.

VII. The ordering office, at a minimum, should document orders by identifying the contractor the services were purchased from, the services purchased, and the amount paid. If other than a firm-fixed price order is placed, such documentation should include the basis for the determination to use a labor-hour or time-and-materials order. For agency requirements in excess of the micro-purchase threshold, the order file should document the evaluation of Schedule contractors' quotes that formed the basis for the selection of the contractor that received the order and the rationale for any trade-offs made in making the selection.

21. OCONUS Terms and Conditions

The same terms and conditions shall apply to all orders for services within the geographic scope of this contract, except for the following modifications:

a. The U.S. Government must provide logistics support, as available, in accordance with all applicable U.S. Government regulations in overseas locations, to ASC personnel whose services are exclusively required for the fulfillment of the terms and conditions of this contract.

b. Work Performed OCONUS: The ASC rates shown on the Schedule will be utilized for all work performed OCONUS within an agency facility. Overseas allowances will be negotiated on an individual task order basis. Work performed in certain countries, as specified by the State Department at the time the order is placed, shall qualify all ASC rates shown on the schedule to be increased by 25% to account for hazard pay, hardship allowances, and danger pay.

c. For OCONUS tasks, the minimum amount is six (6) months, or temporary travel assignment, if less. The minimum amount of services that may be ordered is ninety (90) continuous days for any single category of labor performed within agency facilities.

d. All rates are exclusive of travel charges, overtime, and shift differential, which may apply for hours worked in excess of those specified below.

e. All services will be performed during the agency's normal prime shift working hours, if services are performed at the agency site. For services performed at an ASC facility, the normal working hours of the ASC facility will be observed. Labor rates are based on an eight-hour workday, Monday through Friday, excluding government holidays, and a forty-hour workweek.

f. All other direct costs required for the performance of services under FFUP or FFP orders will be reimbursed by the ordering agency at actual cost, plus ASC's applicable burdens. Copies of receipts and other documentation concerning such charges will be maintained by ASC for audit purposes.

g. All travel-related costs, including per diems in accordance with applicable JTR and Department of State rates, will be reimbursed by the ordering agency at actual cost plus applicable burdens. Fee/profit shall not be included. Copies of receipts and other documentation concerning such charges will be maintained and available for audit.

h. Local Travel: For assignments of any duration requiring periodic local travel to and from a work site, where the travel originates at the work site, a mileage charge will be reimbursed by the ordering agency at the current JTR prevailing rate in effect at the time the travel occurs.

i. For assignments lasting longer than one year, ASC and the ordering agency may agree to relocate ASC personnel to the work location to minimize travel costs. When relocation is offered by ASC and approved by the ordering agency, relocation costs will be paid at rates not to exceed those authorized by the FAR.

j. Security Clearances: If the ordering agency requires services to be performed by individuals with security clearances, that requirement must be specified in the order when issued. ASC will use its best efforts to provide persons with the requested clearances. If cleared personnel are not available, however, ASC will propose personnel for clearance and complete the appropriate forms to apply for the applicable clearances.

A. American Systems Corporation Overview

American Systems Corporation (ASC), a multifaceted professional engineering services organization, focuses on four primary areas of business within the scope of this schedule in our support of the DoD, other government agencies and commercial organizations.

First, we provide strategic planning, program management and systems acquisition support, systems engineering analysis and requirements definition, systems design and integration engineering, modeling and prototype development/production, test and evaluation services, integrated logistic support and life-cycle engineering assessments to program offices in the implementation of their electronic, electro-mechanical and mechanical systems development and acquisition projects.

Second, we provide specialized telecommunications related engineering and system production services including system requirements analysis and design, specification preparation, selection and procurement of hardware and software from vendors, fabrication and assembly, systems integration and certification, installation and field engineering services.

Third, we provide training services including training program planning and management, conduct of traditional standup training and curricula preparation, development of interactive courseware and multimedia applications, computer-based training, teletraining, distance learning and web-based training.

Fourth, we provide full service design/development, integration, test, delivery and installation of simulation devices and trainers for operations and maintenance training, including logistics support after acceptance. Our experience also includes design, specification, and installation of electronic classrooms, including distance learning systems.

B. Range of Experience

ASC is experienced in the provision of SIN 1 through 6 electronic and mechanical engineering services associated with command and control systems, combat and weapon systems, sensor systems, intelligence and surveillance systems, telecommunications systems, and electromechanical and mechanical platforms/systems. We perform engineering for facility based systems, national and international distributed systems, shipboard systems, laboratory systems, airborne systems, and overground systems.

Our government customers include the DoD – Navy, Marine Corps, Army and Air Force; the Intelligence Community; the DoT – FAA and Coast Guard; the Immigration and Naturalization Service; NASA; Department of State; as well as other agencies. We have been successful in applying electronic and mechanical engineering functional capabilities and experience, gained in the performance of high visibility defense projects, to other government agency and commercial applications.

Our commercial customers include AT&T and SPRINT, for whom we perform telecommunications electronic engineering, switching cabinet manufacturing and integration, and field installation and engineering services. For TRW, Hughes, and Raytheon

we have provided ship combat systems acquisition and engineering services and products. For Lockheed-Martin we provided optical systems maintenance services, for Litton we provide ILS services, for Newport News Shipbuilding we provide electronic systems design services, and for Bath Iron Works we have developed ship radar cross section measurement ranges.

We have provided worldwide engineering services in over 100 countries on six continents, with task teams serving in such diverse regions as Korea, Turkey, India, Bosnia, and Diego Garcia.

	871-1	871-2	871-3	871-4	871-5	871-6
	Strategic Planning	Concept Development/ Requirements Analysis	Design, Engineering, Integration	Test and Evaluation	Integrated Logistics Support	Acquisition and Life Cycle Support
Command and Control Systems	x	x	x	x	x	x
Combat Systems	x	x	x	x	x	x
Weapons Systems	x	x	x	x	x	x
Sensor Systems	x	x	x	x	x	x
Intelligence Systems	x	x	x	x	x	x
Surveillance Systems	x	x	x	x	x	x
Telecommunications Systems	x	x	x	x	x	x
Electromechanical Systems		x	x	x	x	x
Mechanical Systems/Platforms	x	x	x	x	x	x
Recognition Systems		x	x	x		
Training Systems	x	x	x	x	x	x
Simulation Systems		x	x	x	x	x
Optical Systems			x		x	x
Navigation Systems	x	x	x	x	x	x
Communication Systems	x	x	x	x	x	x
Monitoring Systems	x	x	x	x	x	x

A. Program Management Services (Across All SINs)

ASC provides a full range of program management functions and services to support and implement engineering, technology, and systems development programs during the phases of strategic planning, concept development and requirements analysis, design and integration, test and evaluation, integrated logistics support planning, and acquisition and life cycle management. The emphasis of our approach is process-oriented and supported by the tools to operate within a virtual project office environment.

Our range of professional support services includes:

Process Definition and Management. Our analysts will assist in process identification, including determination of requirements and standards, process owners, strategies involved in the domain, measures of success for those strategies, and expectations. We will identify the boundaries of process sub-groups, all internal and external customers, suppliers, et al. We will determine process metrics and control points, including establishing measurement criteria for all inputs and outputs, sub-groups, and end items and the means for collecting data to make the measurements. We will select the media for collecting process data and determining the scope of process data, and we will define the statistical tools to measure process efficiency and effectiveness.

Risk Assessment and Management. We provide expertise in risk assessment and management to evaluate programs for the risks associated with our clients' program management, systems engineering, process improvement, and configuration control capabilities and activities. In applying these services we promote a proactive risk environment that supports open and honest information sharing across and among all project levels and stakeholders. The risk management processes we employ are based on recognized industry standards that address important programmatic activities and issues and how those activities are integrated with the software and systems engineering disciplines in providing a complete product solution. We focus on identifying organizational risk and its underlying causes and provide our clients with viable solutions based on project assessment results, organizational culture, established processes, project staffing, and available resources.

Collaborative Web Site Development and Implementation. We develop interactive collaborative Internet Web sites that provide a web-based, electronic data exchange environment that is platform independent and geographically indifferent. Through a secure logon, collaborative Web sites provide multiple levels of access, allowing a single site to host many different levels of information exchange. A collaborative Web site can range from a basic site used to simply relay information, to an advanced site with features such as application sharing, e-mail, bi-directional database associativity, discussion threads, and full audio and video conferencing. The collaborative Web sites we develop use open architectures, comply with open standards, and are compatible with all popular Web browsers. Our collaborative Web sites are scalable and modular, and they can be tailored to meet specific individual requirements.

Database Development. Our analysts create and establish platforms for information collection, organization, and reporting, using a database system that enables quick identification and retrieval of management documentation as well as design and development, configuration item, logistics, training and other system and support documentation. We prepare user interfaces to the selected RDBMS for context-based data access, and develop ad hoc query capabilities, forms for viewing and modifying individual records, and report generators to support reporting needs.

Integrated Product and Process Development (IPPD)/Integrated Process Team (IPT) Implementation. We have experience in the establishment, planning, chartering, and implementation of IPPD approaches, which is a management technique to integrate all program activities from product/system concept through production and field support to disposal. IPPD is implemented through IPTs, which allow for the collaboration of various management and technical discipline experts, operating in a concurrent engineering environment, to accomplish program objectives. We develop charters, mission statements, processes, objectives, and performance measurement criteria. We offer training programs to equip IPT members to function successfully and prepare senior management to create an environment supporting successful team performance.

Integrated Product Design Environment (IPDE) Implementation. We have experience in analyzing, recommending, developing/tailoring, and implementing an integrated electronic design and management environment, which provides for capture, organization, analysis, management, and reporting of all information developed during program evolution. We perform analyses of requirements for distributed IPDE capabilities, which include formulating features such as "intra-nets," collaborative Web sites, and relational databases to support program requirements.

Quality Assurance and Quality Control. We have developed, refined, and proven a rigorous QA program and processes based on current industry standards and practices to ensure our clients receive uniform and reliable systems and services. For each project, our project manager inspects and approves daily all work performed, noting discrepancies and ensuring they are corrected immediately. Our independent QA inspectors also conduct a comprehensive final inspection of the project to ensure compliance with quality objectives. We can define and implement similar programs tailored specifically for customer needs.

Subcontract Services and Monitoring. When subcontractors are required to complete your project, we can identify and solicit qualified companies and perform contract/subcontract administration services to ensure the project is completed successfully and on time. We will monitor the performance of contractors and subcontractors and perform invoicing services so that the client has the convenience of dealing with only one point of contact throughout the duration of the project.

Administrative Services and Support. To support implementation of engineering and technology based programs, ASC provides the services of documentation specialists (technical writers, graphics designers, word processors), CAD operators, administrative assistants, and clerical staff. We have internal corporate networks, reproduction facilities, graphics workstations, printers, plotters, and other capabilities needed to support proposed engineering services.

B. Strategic Planning For Technology Programs/Activities (SIN 871-1)

Services under this SIN involve the definition and interpretation of high-level organizational engineering performance requirements such as projects, systems, missions, etc., and the objectives and approaches to their achievement.

Our range of services includes:

Strategic Program Goals and Objectives Planning. Our analysts work closely with the customer to assess, clarify, and document the customer's business mission, business vision, goals, and performance measures. We provide long-range planning, engineering, and program evaluation support on new systems and equipment. This capability includes proactive advance planning and critical issue resolution to ensure interoperability with legacy and joint systems, cost controls, integrated logistics support, and training and technical feasibility.

Organizational Assessment. Our analysts assist in definition and formulation of the roles and responsibilities of the program organizational elements and ensure compatibility with the overall program mission and its strategic plans. We define relationships with external and internal program organizations. We identify technical and funding management processes and make recommendations for specific changes to programmatic responsibilities, as required. We produce briefings and procedural documents and participate in training sessions to educate element managers in their responsibilities.

Planning Support. We provide skilled facilitators who work with planning groups to identify desired outcomes, support the collection of information and data needed in the decision making process, encourage alignment with organizational priorities, and create a shared vision of the desired end-state. We facilitate the planning process using both traditional methods and networked groupware. We assist groups in determining effective methods to present the results of planning efforts to their organization.

Requirements Analysis. Our engineers perform requirements analysis to clarify program/system missions and environments; to identify functional definitions and top level performance objectives for system implementation; and to define performance envelopes and design constraints. We provide technical support to customer program/systems requirements analyses activities.

Program Planning and Strategic Budgeting. Our analysts provide services to perform the strategic planning, budgeting, scheduling, analysis, reporting, and coordination required to implement technology programs. We have developed automated processes and tools that we use to support these strategic planning and implementation activities.

Transition Planning. We help customers define the options available to them to change from their current technical solutions to those necessary to fully support their projected future needs. Working with the customer, we assist in identifying the prospective future technical environment, the impact of converting their existing technology, required resources, and a realistic plan for implementing the desired conversion.

Strategic Planning Training. We provide and conduct train-the-trainer, management, and supervisor training in systemic thinking and the strategic planning process. After producing a design plan for client approval, we develop the course, provide suitably qualified instructors as well as instructor guides, student guides, and all other materials necessary for the conduct of the class.

ILS Program Strategic Planning. Our logistics analysts will analyze mission requirements and participate in the development of system concepts from a supportability standpoint. We will analyze the requirements for the full range of integrated logistics support functions and services required. We will perform system supportability analyses and planning and program implementation, and we will identify facilities requirements.

Training Program Strategic Planning. Our training analysts will utilize the latest methodologies to analyze mission requirements and system concepts from a training perspective, determine the most appropriate delivery media alternatives, develop planning for courseware requirements, postulate custom decision models or specify a COTS solution, and evaluate the success of previous program training initiatives at both the individual and organizational level.

C. Concept Development and Requirements Analysis (SIN 871-2)

Services under this SIN involve abstract or concept studies and analysis, requirements definition, preliminary planning, the evaluation of alternative technical approaches and associated costs for the development or enhancement of high level general performance specifications of a system, project, mission, or activity.

Our range of services includes:

Concept Analysis. ASC engineers will perform concept studies and analyses including accomplishing the system engineering and processes that are necessary to evolve vague system objectives and abstracts into defined requirements and concept approaches that are critical for milestone decisions/tradeoffs before proceeding to detail design, development, and integration phases.

Feasibility Analysis. We will investigate the feasibility of accomplishing top level concept performance goals and objectives. Analysis includes identification of customer/user needs and objectives; requirements definition, including missions, measures of effectiveness, use environments, and constraints; evaluations of state-of-the-art and emerging commercial technology base; and identification of applicable military and commercial specifications and standards.

Logical Planning and Integration. Our engineers provide expert services to investigate, conceptualize, analyze and/or formulate Operational, Technical or Systems reference models, considering the context of the DoD Joint Technical Architecture (JTA) framework. We perform analyses associated with development of Operational Reference Models (ORM) that identify the set of process sub-tasks in an enterprise and their logical relationships. These process 'activity models' may be developed and documented using IDEF 0 modeling techniques. We perform analyses associated with the conceptualization of Subordinate Activity 'data models' that are developed to identify the structure, content, and logical relationships of data and information available within the enterprise activity. These 'data models' may be developed and documented using IDEF 1 modeling techniques. We perform analyses associated with development of Technical Reference Models (TRM) that identify technical migration road maps leading to incorporation of emerging information technology and protocol standards. We perform analyses associated with formulation of System Reference Models (SRM) that are developed to allocate functions and identify interfaces (physical and logical), which provide the basis for developing a performance specification.

Requirements Analysis. Our engineers perform requirements analysis for systems missions and environments to identify functional definitions and alternative top level performance designs for system hardware and software architecture. We define performance and design constraints; develop and/or review specifications, drawings, and product descriptive data; and provide technical support to customer systems requirements analyses activities.

Systems Engineering. We provide systems engineering associated with mission and requirements analysis, operations analysis, use environments and constraints, trade-off analysis, measures of effectiveness and technical performance measurement, evaluations of the state-of-the-art and emerging commercial technology base, program risk analysis, system standardization, system/cost estimates and life cycle cost analysis, and training and supportability requirements. Products include SEMPs and SEMS along with subordinate technical and planning documents.

Technical Evaluations. Our engineers will prepare technical evaluations of system program plans and system performance specifications that include technical recommendations in regard to the system's ability to meet the postulated performance objectives, including evaluation of the technical feasibility, adaptability, and supportability; and develop recommended commercial solutions to technical requirements.

Cost/Cost-Performance Trade-off Analysis. Our analysts will perform detailed analyses such as design-to-cost analysis, total ownership cost analysis, life cycle cost analysis, build/buy analysis, and commercial off-the-shelf hardware acquisition trade-offs. We will perform technical/cost/supportability trade-off analyses to support concept formulation and definition.

Performance Specifications. Our engineers will prepare top level performance specifications to capture results of requirements and feasibility analyses and logical planning and integration activities to identify functional definitions and performance designs for system hardware and software architecture.

Regulatory Compliance Support. ASC analysts will perform research and investigations of government regulations applicable to development, installation, and operation of proposed systems to determine system feasibility within regulatory requirements, cost or technical impacts to proposed designs, and life cycle implications.

Technology Conceptual Designs. Our engineers will provide programmatic and technical support by assisting in the development of technology insertion and integration planning solutions. We will consider the need for and awareness of joint requirements, changing acquisition strategies, turnkey concepts, and distributed system testing, optimized by total platform ownership cost.

Training Concept Analysis. Our training analysts have experience in utilizing the latest methodologies to analyze customer requirements, determine the most appropriate delivery media, develop courseware, create custom or specify COTS decision models, and evaluate success of training initiatives at both individual and organizational levels.

ILS Concept Analysis. Associated with development of system concepts, ASC analysts will analyze requirements for the full range of integrated logistics support functions and services required. We will perform system supportability analyses, planning and program implementation, and support facilities requirements.

Technical Studies and Assessments. As necessary, we conduct a Needs Assessment Study through interviews with end users and/or other client representatives to determine the current operating environment and to identify potential problem areas. We gather comprehensive information in regard to needs for facility security, software communications, existing/future equipment, equipment user locations, user functions, user connectivity, network traffic, transmission media, transmission facilities, and electromagnetic compatibility.

D. System Design, Engineering and Integration (SIN 871-3)

Services under this SIN involve translating a system (or subsystem, program, project, activity) concept into a preliminary and detailed design (engineering plans and specifications); performing risk identification/analysis/mitigation and traceability; and integrating the various components to produce a working prototype or model of the system.

ASC has the full capability and experience to either directly perform system design, engineering, and integration; or to verify/review the performance or products of other contractors performing these activities.

The range of services that we offer includes:

Design Studies and Analysis. Our engineers perform detailed requirements analysis for systems missions and environments to identify functional definitions and alternative designs for system hardware and software architecture to meet the concepts set forth in the top level performance specification. We define architecture and design constraints; develop and/or review specifications, drawings, and product descriptive data; and provide technical support to customer systems requirements analyses. We participate in customer technical and management reviews and develop content for contract technical packages (SOW, CDRL, Specifications).

Risk Identification, Analysis and Mitigation. As part of the design process, our engineers will perform detailed analysis and quantify risk elements in alternative design approaches to meet performance specification objectives. Based on this quantification of risk, we will examine risk mitigation scenarios and select the design alternative with the most favorable risk mitigation set. We will develop a detailed risk management plan to ensure visibility to continuous risk assessment actions as engineering, design, integration, and production evolves.

Systems Engineering. ASC provides progress measurement, assessment, and decision mechanisms required to evaluate design capabilities and document system design and decision data. These mechanisms include trade-off studies; effectiveness analyses; risk management, configuration management, data management; and performance-based progress management, including systems engineering master and detailed schedules, technical performance, design reviews, and audits. We provide other support in related acquisition and engineering elements, including reliability/maintainability modeling and evaluation, safety engineering, human factors engineering, quality assurance.

Independent Verification and Validation. Our engineers provide services to assess the effectiveness of system designs developed by other integrators/vendors by independently performing systems analyses against baseline requirements; by assisting in identification of deficiencies, redundancies, and discrepancies against an established set of user, contract,

program or functional requirements; and by conducting test activities and documenting the results.

Design and Development Tools. We develop/tailor and implement system design and development support tools. These services include creating and developing an Integrated Electronic Design and Management Environment (IED&ME) based on features such as "intra-nets," collaborative Web sites, and relational databases.

Site Surveys. We conduct comprehensive site surveys to assess the physical layout and condition of the proposed system installation location. We also assess facility (or shipboard) requirements such as physical structures, inter/intra-building (or compartment) distribution systems, equipment locations, civil engineering considerations such as electrical and mechanical services, and environmental and safety considerations. We also assess such implementation requirements as user points of contact, scheduling, installation restrictions, and site management factors.

System Design and Specification. Our engineers follow a process that defines and integrates functional architectures for which system products and processes can be designed. This process includes performing functional analysis to the lower level functions required to accomplish the system performance specification requirement. We define internal and external functional interfaces and determine and allocate time requirements that are prerequisites for system functions and/or sets of functions. We conduct interactive syntheses to define system elements for each logical set of functional and performance requirements, refine physical and communications interfaces, and define system alternatives. We define and design system products and process solutions in terms of design requirements that satisfy the functional architecture, and define and integrate the system and physical (hardware and software) architecture. We prepare requisite specifications to document the design process.

Hardware Design and Specification. Our hardware engineers will perform analysis based on the functional requirements of the system specification, and develop detailed hardware product and process solutions that enable design verification. We will prepare specifications, work breakdown structures, and progressive definitions of specification and configuration baselines.

Software Design and Specification. Our software engineers will perform analysis based on functional requirements of the system specification, and develop detailed software product and process solutions that enable design verification. We will prepare specifications, work breakdown structures, and progressive definitions of specification and configuration baselines.

Network Design and Specification. Our engineers base network designs on a wide range of experience in application of network topologies, network hardware components, and network standards as well as installation techniques. Our services include providing detailed technical documentation, specifications, and arrangement drawings. Our designs ensure quality, clarity, and adherence to current telecommunications standards and best industry practice, and we ensure that such factors as interoperability, security, reliability, maintainability, and future system expansion have been addressed.

System Prototype Production. We have an ISO 9002 based process with controlling metrics that define all steps required to procure components, fabricate, assemble, integrate, produce, and test the system. Each step has a clearly defined set of quality control requirements that must be met in real time during process execution before the next step can be started. The

process extends beyond the production sequence, providing for a completely documented RMA procedure.

Hardware Fabrication. Our engineers and technicians will design, specify, and fabricate (either internally or subcontract) interface hardware or mechanical enclosures as required. ASC has existing relationships with vendors and specialty machine shops to facilitate components ordering and fabrication of specialty items.

System Hardware Assembly and Production. We receive and inspect, inventory, stage, and assemble system and network hardware components in our integration facility in accordance with established and documented manufacturing processes. We also provide these services on site at government facilities.

Site Installation Preparation. We perform the full spectrum of site preparation services as required, including expanding or modifying real property to support system installation, ensuring proper environmental controls are in place and electrical requirements are in order, and performing special services such as installing or repairing duct systems, etc. Before initiating system installation, we conduct all required construction activities, including installation of support hardware such as cable racks, core drilling and installation of backboards and conduit, and rack installation and mounting of equipment and components.

Hardware Installation and Configuration. Our engineers and technicians will install and configure all system electronic hardware, network equipment, computers, and peripherals, including hubs, concentrators, bridges, routers, etc.; PCs/workstations and servers; scanners, printers, and plotters; uninterruptible power supplies; and tape backup units.

Off-The-Shelf Software Selection and Procurement. Our software engineers conduct market surveys and trade-off assessments and then select and procure Commercial Off-The-Shelf (COTS) and Government Off-The-Shelf (GOTS) software packages to meet system design and development requirements.

Applications Programming. Our software engineers and programmers modify off-the-shelf software and develop custom software for the user's Application Software Entity. This capability includes:

- Development of mission-area applications;
- Development of Technical Architecture Framework for Information Management (TAFIM) Technical Reference Model (TRM) support applications for multimedia, communications, business processing, environment management, database utilities, and engineering support; custom tailoring of common support applications (e.g., e-mail, word processing);
- Application Program Interface (API) coding and Human Computer Interface (HCI) applications development;
- Printed Circuit Board device drivers, data interchange services, and document interchange services, including SGML and HTML;
- Unique remote procedure calls, distributed object computing applications, and web-enabled applets;
- Translation and recompiling of various programming languages; and
- Internal documentation of applications programs, commenting, and implementation of coding standards.

Software Installation and Configuration. Our software engineers will install, groom, and configure all system, subsystem, equipment, and network applications and operating software.

System Integration. Our engineers perform all aspects of logically and physically integrating system/subsystem hardware and software, network components and software, and distribution system elements to meet specification and performance requirements. Required integration testing is performed to validate integration parameters and interfaces.

Test, Certification and Acceptance. We develop in-plant test planning and management documents and test procedures and scenarios, conduct test activities and document results against established user, contract, program, specification, and functional requirements. We identify and resolve deficiencies, redundancies, and discrepancies to meet requirements.

Configuration Management Planning and Implementation. Our analysts will develop and maintain a configuration management plan that identifies all hardware, software, media, firmware, and associated documentation of the system and the procedures used to manage and control the system's configuration through the life cycle. We will provide services to support implementation of the CM program and the change evaluation and control process in accordance with the plan.

Documentation Management. Our analysts will develop and maintain a technical documentation management plan and implement a technical library and/or database that contains all hardware, software, media, and firmware documentation of the system and the procedures used to manage and control the system's configuration through the life cycle. We will provide services to support implementation of the technical documentation program and the change control process in accordance with the plan.

Asset Management. We have an integrated bar code/inventory control system that provides the means of tracking all purchased material, its application within the hardware assembly process, and the documentation by model and serial number of how the finished product is shipped to the field. It provides for a complete identification down to four levels, including component locations, serial numbers, cards, and card connectors. The detail of this process, which can be used for evaluating depreciation of material, is the foundation for asset management of all fielded products.

Training Design Services. Our training analysts have experience in utilizing the latest methodologies to analyze the requirements for and develop interactive courseware (ICW), computer-based training (CBT) tools, on-line learning and WEB-based training tools, multimedia products, and simulation devices.

Outsourcing and Privatization. ASC will provide the requisite labor categories on site to government or government-identified facilities to perform outsourced effort under management control of government staff. We will also provide the planning and implementation support as required to accomplish the privatization of government activities.

E. Test and Evaluation (SIN 871-4)

ASC provides test and evaluation services associated with design/integration/ engineering services for various technology elements of customer products, independent systems, and integrated systems. These efforts support the test planning and performance and evaluation of total system life cycle, including definition, acquisition, design, development, integration,

stability, installation, alignment, transition, modernization, configuration management, integrated logistics support, program planning, and monitoring. We conduct engineering trade-off evaluations, develop position papers, propose technical program planning concepts, provide technical inputs to documentation, and revise and update program documentation. In specific support to customers' unique test and evaluation certification programs, ASC prepares and conducts independent engineering evaluations and technical impact assessment audits of proposed engineering changes, product development, test and installation plans, technical content and schedules.

Specific test and evaluation services offered include:

Audit Test Teams. We provide functional, module, and system level verification and validation audit testing of all systems revisions and products utilizing specific product experts assembled into Audit Test Teams. ASC provides development and update of charters defining the audit test philosophy, content, organization, and procedural changes criteria for the Audit Teams. We prepare and perform all Audit Team scheduling and pre/post-test meetings, recording and distributing customer-approved meeting minutes when necessary. ASC performs post-test analysis and prepares an independent Audit Test Report that summarizes test results and provides a recommendation for customer acceptance of the systems/products under test.

Test Plans and Procedures. Based on specific system/product performance specifications, ASC engineers develop detailed test plans and associated procedures. The test plans define the method of operational verification for each system/product performance requirement. The test procedures define all steps to be performed, the expected results, and pass/fail bounds and criteria. We then perform review and dry-run testing of test procedures. We provide detailed technical reviews of all test plans and procedures to ensure all allocated requirements are verified. We then perform Quality Audits of the final product documentation set for completeness and accuracy. We support formal product reviews, in accordance with customer requirements, such as Critical Design Reviews, Preliminary Design Reviews, and Test Readiness Reviews, ensuring product development is in accordance with customer-approved requirements and schedule.

Design Reviews. We perform product design reviews and technical reviews/audits of all product specifications, manuals, test plans, and test procedures, and provides independent audit/quality assurance testing in support of final customer acceptance. ASC reviews, provides technical comments to, and participates in resolution of comments on all revision and system technical position and design papers, engineering changes, and system verification test plans and procedures.

Engineering Change Assessment. Our engineers evaluate planned system revisions and improvement program changes, including their associated major milestones, dependencies, critical path items, and relationship to planned Engineering and Integration (E&I) or support system simulation/stimulation/modeling upgrades and modernization activities. We assess anomalies and workarounds for system applicability, technical impact, and schedule conformance; assessment results are compared with the latest product acquisition, development, and implementation plans and schedules for compliance, and associated impacts are assessed. We then identify, document, and report any discrepancies and inconsistencies, including any recommendations to correct deficiencies.

Acceptance Testing. Our engineers perform acceptance testing utilizing test software, programmed operational functional appraisals, and approved test procedures. We document all test results and problems in Quick-Look Reports. We perform associated problem

investigation and resolution, including validation and verification testing to ensure proper problem resolution followed by post-test analysis of all generated test data, which leads to product acceptance recommendation to the customer based on the number of identified software problems remaining unresolved and approved acceptance criteria.

Installation Testing. We perform on-site installations of the systems or interfaces. We provide management, planning, staging, and services required to accomplish installation and checkout of system or interface at the customer's site(s). We conduct and document pre-installation testing to verify hardware and software operability followed by post-installation testing to ensure the system was properly installed and functioning correctly.

Technology Evaluation. Our engineers provide candidate technical feasibility, design concept, and trade-off analysis studies for customer systems/products related topics. We will perform and provide the results of customer-selected studies. Areas for study consideration include product performance improvements; system software reliability methods evaluations; human factors/operator interface evaluations; system/subsystem verification testing efficiency, comprehensiveness and methodology improvements; and emerging technology applications. ASC evaluates the engineering applications of emerging technology, emphasizing the approach to applying such emerging technology to future systems designs. These evaluations consider improving the performance of or adding additional capability to existing systems, components, and equipment.

Test Program Management. ASC has considerable program management experience in support of formal product reviews, in accordance with individual customer criteria, such as Critical Design Reviews, Preliminary Design Reviews, and Test Readiness Reviews, ensuring product development is in accordance with customer-approved requirements and program schedules. We provide detailed technical reviews of all test plans and procedures to ensure all allocated requirements are verified and provide recommendations and technical inputs to support issue resolutions. ASC evaluates planned system revisions and improvement changes, including their associated major milestones, dependencies, critical path items, and relationship to planned E&I or support system simulation/stimulation/modeling upgrades and modernization activities. These are also assessed for system applicability, technical impact, and schedule conformance. ASC assesses the latest product acquisition, development, and implementation plans/schedules for compliance. We provide compliance reports detailing our assessment of associated impacts, including identification of any discrepancies and inconsistencies and recommendations to correct deficiencies.

Independent Audits. We also provide independent audits to evaluate the status of, generate, and provide technical inputs to other vendor-generated plans, schedules, and activities, supporting development, acquisition, test and evaluation, certification, integration, training, and delivery of customer systems, products, and services.

Outsourcing and Privatization. ASC will provide the requisite labor categories on site to government or government-identified facilities to perform outsourced effort under management control of government staff. We will also provide planning and implementation support as required to accomplish privatization of government activities.

F. Integrated Logistics Support (SIN 871-5)

Our corporation provides the full range of integrated logistics support functions and services, including spare parts analysis, provisioning and supply support, logistic support analysis (LSA), interactive technical manuals (IETM), ILS planning and program

implementation, training planning and program implementation, support and test equipment analysis, inventory control and property management, shipping and handling coordination, and support facilities requirements.

Maintenance Planning. Our logistics analysts and engineers gather and analyze relevant data from baseline maintenance concepts/plans, Operational Requirements Documents, Test and Evaluation Master Plans, Integrated Logistics Support Plans, contractual documents such as RFPs, SOWs, and CDRLs, and Maintenance Allocation Charts to ensure that all the elements of maintenance support necessary to perform an assigned mission are arranged in an orderly manner, with the goal of achieving required system readiness in the most cost-effective manner.

Support Equipment and TMDE. ASC engineers gather and analyze relevant data from such sources as requirements documents, regulatory guidance, and the LSA/LSAR process to identify all equipment (mobile and fixed) required to support the operation, supply, and maintenance of the system, with the goal of ensuring support equipment and TMDE is fully considered, cost-effective, and available for testing and fielding.

Supply Support. Our analysts gather relevant data from requirements documents, Logistics Support Analysis Records, lists of long lead-time items, the Provisioning Master Record, and test data, as appropriate, to ensure completion of all management actions, procedures, and techniques necessary to determine supply support requirements, including acquisition, cataloging, receipt, storage, transfer, issue, and disposal of secondary items. Supply support includes initial provisioning--which entails the management process of determining and acquiring the range and depth of support items necessary to operate and maintain the system for an initial period of service--as well as replenishment and acquisition of logistics support for support/test equipment.

Packaging, Handling, Storage, and Transportation/Transportability. ASC logistics analysts gather and analyze relevant data from requirements documents, regulatory guidance, military standards, the LSA process, and from tests results to identify the requirements, resources, processes, procedures, design considerations, and methods necessary to ensure the system/equipment/support items are preserved, packaged, handled, and transported properly, with the goal of providing adequate protection in a safe and cost-effective manner.

Technical Data. Our analysts and engineers gather and analyze relevant data from Integrated Logistics Support Plans, the LSA/LSAR process, contract deliverables, and various operational and maintenance technical manuals as well as supply and storage documentation, as appropriate, ensuring necessary data is complete, accurate, tested, and available for fielding.

Manpower and Personnel. Our analysts gather and analyze relevant data such as requirements documents, the LSA process, and manpower estimates to identify military or civilian personnel as appropriate with the skills/grades needed to operate and support the system/equipment over its lifetime at peacetime/wartime rates, with the goal of fully determining the effect of system/equipment introduction on manpower and personnel considerations and avoiding increases in manpower requirements.

Training and Training Devices. ASC training analysts gather and analyze relevant data from various sources that is necessary to define the processes, procedures, techniques, and equipment needed to train appropriate personnel in the operation and maintenance of the system/equipment throughout its life cycle, with the goal of ensuring that training and training devices are fully considered, cost-effective, and available for fielding and testing.

Facilities. Our facilities engineers gather and analyze relevant data from various sources, as appropriate, to identify all permanent, semi-permanent, or temporary real property assets required to support the system/equipment; and conduct studies to define facilities or facility improvements, locations, space needs, utilities, environmental requirements, real estate requirements, and equipment, with the goal of ensuring all facilities are cost-effective, in place for system fielding, and satisfy regulatory guidance.

Computer Resources Support. ASC engineers gather and analyze relevant data from various sources, as appropriate, to identify the facilities, hardware, system software, software development and support tools, documentation, and people needed to operate and support embedded computer programs, with the goal of ensuring this support is fully planned and cost-effective over the life of the system.

Design Influence. Our analysts and engineers gather and analyze relevant data as appropriate from system safety management and program plans, contractual documents, program documents, and test plans and test reports in order to identify the relationships of logistics-related design parameters to readiness and support resource requirements, with the goal of ensuring the system/equipment design adequately addresses logistics supportability.

Standardization and Interoperability. Our engineers research and analyze relevant data from requirements documents, specifications, and military standards, as appropriate, in order to optimize the degree of uniformity in materiel and process; minimize proliferation of redundant systems/equipment; and to enhance the ability of systems/equipment to provide services to or accept services from other systems/equipment and to use the services so exchanged to operate effectively together, with the goal of ensuring standardization and interoperability requirements are cost-effective and fully tested and satisfy regulatory guidance.

Materiel Fielding Planning. ASC logistics analysts research and analyze relevant data from requirements documents, specifications, and military standards, as appropriate, to ensure completion of planning and documentation associated with the system/equipment as a total package, including all logistic support, with the goal of ensuring the system/equipment is properly coordinated between the developer and the ultimate user and is fully supportable when fielded.

Reliability, Maintainability, and Availability. Our engineers research and analyze relevant data from requirements documents, scoring conferences, and test results, as appropriate, to ensure the impact of RAM on logistics supportability is fully understood and documented, with the goal of ensuring RAM requirements and achieved test results fully consider logistics support.

Support Management and Analysis. Our logistics and management analysts ensure that all program support management and analysis documentation is properly planned, prepared, reviewed, and completed in a timely manner. This documentation can include documents related to logistics program planning, requirements, test planning, solicitation, computer aided acquisition and logistics support, concept formulation, test evaluation, LSA/LSAR, safety assessments/certifications, and health hazard assessments.

Cost Analysis and Funding. ASC analysts research and analyze source documentation as appropriate to identify and quantify costs associated with research and development, investment, and operation and support of the system/equipment, with the goal of ensuring sufficient funds have been programmed to accomplish logistics aspects of a program.

Inventory/Property Management and Control. We provide services for inventory and property management and control, including evaluating, monitoring, administering or coordinating, and implementing industrial management or inventory control programs.

Outsourcing and Privatization. ASC will provide the requisite labor categories on site to government or government-identified facilities to perform outsourced effort under management control of government staff. We will also provide the planning and implementation support as required to accomplish the privatization of government activities.

G. Acquisition and Life Cycle Management (SIN 871-6)

Services under this SIN involve all of the planning, budgetary, contract and systems/program management functions required to procure and/or produce, render operational and provide life cycle support (maintenance, repair, supplies, engineering specific logistics) to technology-based systems, activities, subsystems, projects, etc.

The range of services we offer includes:

Program Planning and Program Implementation Management. Our analysts provide services to perform the planning, budgeting, scheduling, monitoring, analysis, reporting, and coordination required to implement programs throughout their life cycle. We have developed processes and tools that we use to support these planning and implementation activities. The processes we use ensure consistency and uniformity in the various disciplines necessary to define, acquire, and support components, equipment, or systems throughout their life cycle. Using these structured processes, we work with clients to determine requirements and associated management planning and subsequent documentation necessary to baseline and control these requirements. We prepare management and implementation plans, develop life cycle cost models using Work Breakdown Structure techniques, lay out schedules using automated project management software, and prepare performance measurement criteria with which to monitor progress. We monitor program execution against approved plans, baselines, costs, and schedules to identify baseline deviations and the causes of performance discrepancies, and recommend effective solutions to recover to the program plan.

Financial Management Services. Our analysts participate in identifying, managing, and tracking government appropriations to ensure that fiscal year execution programs are well planned and executed according to plan. This support includes the maintenance of control audit trails to remain abreast of the latest controls, reflecting the progression of budgets throughout the PPBS. Using those controls, we assist in tracking the initiation, commitment, obligation and expenditure of allocated funds in order to respond to FMB execution requests and ensure timely processing and expenditure of those funds.

Automated Program Management Tools. We perform data collection and analysis in support of customers using automated program management tools and relational databases to assist program managers in executing their programs and responding to a variety of actions. These include such actions as: Change Review Boards, modernization conferences, POMs, Encumbrance & Obligation planning, impact papers, justification papers, reclamas, procurement listings, long and short term program planning, appropriation exhibits, and other activities.

Program Analysis. Linking POM and program execution functions, we provide services to assist customers in identifying, prioritizing, and defining technical requirements that should

be budgeted and executed to achieve program milestones. ASC emphasizes the understanding and coordination of technical initiatives in order to develop a balanced program that can be executed to best utilize available funding. This information not only enhances future planning, but becomes a cornerstone for reviewing prior decisions and responding to higher level inquiries.

Configuration Management Planning and Implementation. Our analysts will develop and maintain a configuration management plan that identifies all hardware, software, media, firmware, and associated documentation of the system and the procedures used to manage and control the system's configuration through the life cycle. We will provide services to support implementation of the CM program and the change evaluation and control process in accordance with the plan.

Configuration Management/Logistics Management Tool. We have designed the Configuration Management, Tracking, Ordering, and Logistics (ConTrOL) database specifically to meet the rigorous requirements of configuration management associated with the procurements and life cycle support of components, equipment, and systems. ConTrOL provides template tools that track configurations and automate the logistics support ordering process. This tool facilitates the organization and tracking of the diverse information required to produce and manage a system configuration, including build-to and as-built specifications and drawings, test documentation, technical data and technical manual files, vendor and manufacturer information, material purchasing, receiving reports, equipment inventory, and program correspondence files.

Training Support. We provide and conduct train-the-trainer, management/supervisor, and user training in the theory, operation, maintenance, or administration and management of systems. After producing a training and lesson plan for client approval, we provide technical instructors, trainee guides, and all other training materials, such as textbooks, workbooks, manuals, test materials, and other documentation, as necessary.

Maintenance Planning, Field Support and Depot Operations. Our engineers and technicians have experience providing maintenance planning and maintenance support services for systems, networks, and electronic as well as electromechanical hardware. Our field engineers and technicians can provide system and hardware maintenance on site or on call to meet customer needs and requirements. Our services also include use of our depot maintenance capability and logistics support from our fully stocked and professionally managed warehouse and distribution network.

Software Maintenance. Our software engineers provide total support, ensuring that software installed for operational use continues to perform as designed and fulfills its intended role in system operation. DOD software development and maintenance is provided in accordance with MIL-STD-498, DOD-STD-2167/2167A, DOD-STD-7935/7935A, MIL-STD-1679/1679A, Configuration Management per MIL-STD-973, and Configuration Audits per MIL-STD-1521B. Commercial software activities are conducted per ISO 12207 or ISO 9001. Specific activities include:

- Maintain "as built" software design information; document compilation/build procedures;
- Modify or document software modification procedures;
- Develop documentation of measured utilization for computer hardware resources;
- Perform software version control, source code escrow, and software configuration management;

- Develop Software Version Descriptions (SVD) to release, track and control software versions;
- Prepare executable software and source files for delivery and develop Software Product Specifications (SPS), including software support information;
- Manage documentation, cataloging, classification and reporting for software problems and process help desk requests;
- Conduct software upgrade planning and process software change reports;
- Establish, control, and maintain a Software Development Library (SDL) and Software Development Files (SDF);
- Prepare Software User Manuals (SUM) and Firmware Support Manuals (FSM);
- Develop self-diagnostic routines and on-line help functions;
- Develop Software Installation Plan (SIP), perform installation and checkout of executable software, and conduct user training;
- Perform housekeeping and data backup and reprogram firmware devices;
- Develop Software Transition Plans (STrP);
- Provide change update notices and benefits/compatibility reports for proposed upgrades;
- Provide and install maintenance upgrades for discontinued vendor software;
- Provide support for new or additional hardware;
- Provide software problem corrections;
- Provide software feature enhancements.

Technology Transfer/Insertion. Our engineers will analyze market technology and define the options available to change from current technical solutions to those necessary to fully support projected future needs. Working with the customer, we assist in identifying the prospective future technical environment, the impact of converting their existing technology, required resources, and a realistic schedule for implementing the desired conversion.

Outsourcing and Privatization. ASC will provide the requisite labor categories on site to government or government-identified facilities to perform outsourced effort under management control of government staff. We will provide planning and implementation support as required to accomplish the privatization of government activities.

The following paragraphs define the qualifications for the corresponding labor categories listed below. We have not proposed a project manager or task leader category; that function will be filled by one of the categories assigned to a particular task order. Registration as a professional in a management or engineering discipline in a particular specialty is considered to be equivalent to a bachelor's degree. All degrees shall be from an accredited university or college.

Awarded Labor Categories:

1. Principal Systems Architect
2. Senior Systems Engineer/Analyst
3. Systems Engineer
4. Subject Matter Expert/Consultant IV
5. Subject Matter Expert/Consultant III
6. Subject Matter Expert/Consultant II
7. Principal Test/Certification Engineer
8. Sr. Test/Certification Engineer
9. Test/Certification Engineer
10. Sr. Telecommunications Engineer
11. Telecommunications Engineer
12. Sr. Quality Assurance Engineer
13. Quality Assurance Engineer
14. Sr. Technician
15. Principal Program Analyst
16. Sr. Program/Project Analyst
17. Program/Project Analyst
18. Sr. Logistics Analyst
19. Logistics Analyst
20. Purchasing Specialist
21. Sr. Training Specialist/Analyst
22. Training Specialist/Analyst
23. Principal Network Engineer
24. Senior Network Engineer
25. Principal System Software Architect
26. Senior Software Engineer
27. Software Engineer
28. Project Control Analyst
29. Senior Documentation Specialist
30. Documentation Specialist
31. Senior AutoCAD Specialist/Operator
32. AutoCAD Specialist/Operator
33. Administrative Specialist

1. Principal Systems Architect (Offered for SINs: 1-6)

Minimum/General Experience: Eight years of experience in principal/lead engineering positions with training, work experience, and industry/government credentials demonstrating the ability to perform scientific or high order engineering requirements. Experience involving any combination of the following areas: program strategic planning, systems concept development and requirements analysis, system/platform interoperability, system architecture trade off analysis, design to ownership, system design and integration, production, life cycle supportability and life cycle cost analysis. Experience associated with logical planning and integration and/or independent verification and validation (IV&V) of platform and system technical project activities. Experience in system architecture analyses and studies will have considered the structure of components, their relationships, and the principles and processes governing their design, integration, production and operations/maintenance over time including emerging technology insertion.

Functional Responsibility: Responsible for working independently and performing direct interface with customer senior technical and management personnel for investigating system concepts, architecture alternatives, design and integration processes, and life cycle support disciplines. Performs high order engineering analyses and provides specialized expertise involving the logical planning and integration of technology into platform and system concept alternatives; and/or formulating operational, technical, and system reference models and architectures as required in initiating the systems engineering process.

Minimum Education: Bachelors degree in an engineering discipline.

2. Senior Systems Engineer/Analyst (Offered for SINs: 1-4, 6)

Minimum/General Experience: Two to four years of experience in training, work experience, and industry/government credentials demonstrating the ability to perform scientific or high order engineering requirements. Demonstrated leadership skills for planning, organizing, leading, and controlling the cost/technical/schedule activities of a project. Experience in providing technical support in or performing any combination of the following areas: system requirements analysis, system/platform interoperability, feasibility analysis, technology/conceptual design alternatives analysis, design to ownership, system architectures, system/equipment design, system integration, reverse engineering, risk analysis/mitigation, specification preparation/review, independent verification and validation, and development of System Engineering Management Planning documents. Experience in evaluating and/or developing technical input to the systems engineering process and associated documentation. Experience also includes identification of customer/user needs and objectives; requirements definition, including missions, measures of effectiveness, use environments, and constraints; evaluations of state of the art and emerging commercial technology base; and identification of applicable military and commercial specifications and standards.

Functional Responsibility: Supervises engineering and technical personnel in the development of system/subsystem level engineering products and for providing support services. Performs requirements analysis for systems missions and environments to identify functional definitions and designs for system hardware and software architecture. Defines

performance and design constraints. Develops and/or reviews specifications, drawings and product descriptive data; and provides technical support to customer systems requirements analyses and participates in technical and management reviews; develops content for contract technical packages (SOW, CDRL, Specifications). Performs life cycle support engineering assessments.

Minimum Education: Bachelor's degree in an engineering discipline.

3. Systems Engineer (Offered for SINs: 1-4, 6)

Minimum/General Experience: Four years of experience in providing technical support in or performing any of the following areas: system/subsystem requirements analysis, system/platform interoperability, feasibility analysis, technology/conceptual design alternatives analysis, design to ownership, system architectures, system/equipment design, system integration, reverse engineering, risk analysis/mitigation, specification preparation/review, independent verification and validation, and development of System Engineering Management Planning documents. Experience in evaluating and/or developing technical input to the systems engineering process and associated documentation. Experience also includes identification of customer/user needs and objectives; requirements definition, including missions, measures of effectiveness, use environments, and constraints; evaluations of state-of-the-art and emerging commercial technology base; and identification of applicable military and commercial specifications and standards. Demonstrated specialized expertise in systems engineering as applied to analysis of engineering requirements.

Functional Responsibility: Performs system/subsystem level requirements analysis; identifies functional definitions and designs for system hardware and software architecture; defines performance and design constraints; develops and/or reviews specifications, drawings and product descriptive data; provides technical support to customer requirements and participates in technical and management reviews; and develops content for contract technical packages (SOW, CDRL, Specifications). Performs life cycle engineering assessments.

Minimum Education: Bachelor's degree in an engineering discipline.

4. Subject Matter Expert/Consultant IV (Offered for SINs: 1-6)

Minimum/General Experience: At least ten years of senior level expertise, and at least 20 years of general industry experience, or may have expert credentials or be recognized as an authority in providing technical support that includes the ability to integrate, refine, assess and provide high-level organizational engineering and scientific support with performance requirements, projects, systems and the objectives and approaches to their achievement. Must have demonstrated experience, but not limited to, an analysis of mission, program goals and objectives, requirements analysis, organizational performance assessment, special studies and analysis, training, privatization and outsourcing. The breadth and depth of experience may relate to a variety of development, operational or support functions that require the special expertise, because of the degree of complexity, impact on mission, or novelty of approach.

Functional Responsibility: Primary responsibility for advising and development of implementation plans on the proper approach to unique functional and complex problem

areas for a client. Identify courses of action, pros and cons of each, and mitigation options for the selected approach. Applies knowledge of client's mission area to develop and refine concepts of operations and operational plans that make optimum use of existing and planned systems to meet mission needs. As required, participates in the development of system concepts, system requirements, concepts of operations, cost performance tradeoffs, feasibility analysis, regulatory compliance support, and training requirements in every phase of the system development process.

Minimum Education: Bachelor's degree is required and experience in a field appropriate to the specialized subject matter area. May have expert credentials or is a recognized authority.

5. Subject Matter Expert/Consultant III (Offered for SINs: 1-6)

Experience Requirement: At least five years of senior level expertise in providing technical support that includes the ability to integrate, refine, assess and provide high-level organizational engineering and scientific support with performance requirements, projects, systems and the objectives and approaches to their achievement. Must have at least 15 years of general industry experience, and have demonstrated experience, but not limited to, an analysis of mission, program goals and objectives, requirements analysis, organizational performance assessment, special studies and analysis, training, privatization and outsourcing. The breadth and depth of experience may relate to a variety of development, operational or support functions that require the special expertise, because of the degree of complexity, impact on mission, or novelty of approach.

Functional Responsibility: Primary responsibility for advising on the proper approach to the solution of a highly complex functional problem for a client. Identify courses of action, pros and cons of each, and mitigation options for the selected approach. Applies knowledge of client's mission area to develop and refine concepts of operations and operational plans that make optimum use of existing and planned systems to meet mission needs. As required, participates in the development of system concepts, system requirements, concepts of operations, cost performance tradeoffs, feasibility analysis, regulatory compliance support, and training requirements in every phase of the system development process.

Minimum Education: A minimum of a Bachelor's degree is required and experience in a field appropriate to the specialized subject matter area. Advanced degrees are desirable.

6. Subject Matter Expert/Consultant II (Offered for SINs: 1-6)

Minimum/General Experience: Ten to twelve years of experience in a related field. Senior level work experience, training, and industry/government credentials demonstrating the ability to perform scientific or high order engineering requirements. Senior level engineering experience associated with a specific subject matter incidental to platform/system or engineering activities to be performed under a task order. Extensive experience with defining and resolving high-level technical issues for systems engineering programs. Performed as a senior engineering consultant to solve major problems or participated in high-level project relevant assessment teams.

Functional Responsibility: Provides senior level subject matter expertise required to ensure platform/system or mission/activity success. Defines and supports the implementation of software acquisition best practices, systems design, system engineering best practices, system architecture, feasibility studies, risk assessment/management, configuration management, quality assurance, measurements/metrics, cost estimation, earned value, project planning

and monitoring, implementation planning, system specifications, CASE/I-CASE tool assessments, technology assessments, market surveys, and training.

Minimum Education: Bachelor's degree in the appropriate discipline;

7. Principal Test/Certification Engineer (Offered for SINs: 1, 2, 4, 6)

Minimum/General Experience: Ten years of experience in a related field. Training, work experience, and industry/government credentials demonstrating the ability to perform scientific or high order engineering requirements. Demonstrated leadership skills for planning, organizing, leading, and controlling the cost/technical/schedule activities of a project. Recent experience in principal or lead test/certification position involving conceptualization, planning and implementation of test/certification programs; development of test planning documents; development of system hardware/software unit level, integration and acceptance test/certification procedures; development and conduct of test scenarios; and conduct of test activities and associated analysis, documentation and reporting. Experience also includes geographically distributed system testing approaches over networks.

Functional Responsibility: Responsible for working independently and performing direct interface with customer senior technical, and management personnel. Provides high order expertise for a range of support including development of overall test and evaluation program strategies and planning documentation; evaluating test procedures and test reports on system-level and subsystem hardware/software behavior and recommending whether design, maintenance or supportability improvements are required to increase system performance or accuracy; analyzing test/certification programs and evaluating the conduct and effectiveness of system testing including compliance with test procedures, and the accurate conduct and recording of test results.

Minimum Education: Bachelor's degree in appropriate engineering discipline

8. Senior Test/Certification Engineer (Offered for SINs: 1, 2, 4, 6)

Minimum/General Experience: Eight years of progressive experience in the planning and implementation of test/certification programs; the development of test planning documents; the development of system hardware/software unit level, integration and acceptance test/certification procedures; the development and conduct of test scenarios; the use of test instrumentation; and the conduct of test activities and the associated analysis, documentation and reporting of results. Experience also includes geographically distributed system testing approaches over networks. Demonstrated ability to supervise the work of other engineers and lead task efforts.

Functional Responsibility: Supervises engineering and technical personnel in the development of test/certification products and for providing test/certification support services. Prepares/reviews overall program planning documentation; develops system test criteria required to demonstrate system design or operational capability; develops system evaluation procedures, techniques, and tolerances, including the preparation of test procedures; evaluates test reports on equipment behavior to determine whether design, maintenance or supportability improvements are required to increase system/ subsystem/equipment performance; witnesses and evaluates the conduct of system testing and provides technical comments on efficacy of and compliance with procedures/processes; and provides identification of problem areas along with recommendations for required changes to system or test support hardware/software and procedures, as required.

Minimum Education: Bachelor's degree in appropriate engineering discipline

9. Test/Certification Engineer (Offered for SINs: 1, 2, 4, 6)

Minimum/General Experience: Six years of experience (three with an advanced degree) in the planning and implementation of test/certification programs; the development of test planning documents; the development of system hardware/software unit level, integration and acceptance test/certification procedures; the use of test instrumentation; the development and conduct of test scenarios; and the conduct of test activities and the associated analysis, documentation and reporting of results. Demonstrated ability to independently complete engineering assignments.

Functional Responsibility: As part of a task team, prepares inputs to overall program planning documentation; develops system test criteria required to demonstrate system design or operational capability; identifies test instrumentation to support test objectives; develops system evaluation procedures, techniques, and tolerances, including the preparation of test procedures; evaluates test reports on equipment behavior to determine whether design, maintenance or supportability improvements are required to increase system/ subsystem/equipment performance; witnesses and evaluates the conduct of system testing and provides technical comments on efficacy of and compliance with procedures/processes; and provides identification of problem areas along with recommendations for required changes to system or test support hardware/software and procedures, as required.

Minimum Education: Bachelor's degree in appropriate engineering discipline

10. Senior Telecommunications Engineer (Offered for SINs: 1-6)

Minimum/General Experience: Five years of experience in a related field. Training, work experience, and industry/government credentials demonstrating the ability to perform scientific or high order engineering requirements. Demonstrated leadership skills for planning, organizing, leading, and controlling the cost/technical/schedule activities of a project. Experience in the design, integration and installation of integrated data communications and data transfer systems, including LAN/WAN systems, and applications such as integration with command, control, combat, intelligence, and surveillance systems, videoconferencing systems, distance learning systems, and laboratory information management systems, as well as experience in electronic messaging/electronic data interchange and multimedia applications.

Functional Responsibility: Supervises engineering and technical personnel in the development of telecommunications/network engineering products incidental to overall system/platform design and development. Performs Functions independently or as part of a task team to perform the design, installation and integration, upgrade/modification, configuration, specification/documentation, and/or troubleshooting of the data communication/ transfer subsystems associated with overall system architecture.

Minimum Education: Bachelors degree in an engineering or computer science discipline.

11. Telecommunications Engineer (Offered for SINs: 1-6)

Minimum/General Experience: Three years of experience in a related field. Demonstrated specialized expertise in telecommunications/network engineering as applied to analysis of engineering requirements. Experience in the integration and installation of integrated data communications and data transfer systems, including LAN/WAN systems, and applications such as integration with command, control, combat, intelligence, and surveillance systems, videoconferencing systems, distance learning systems, and laboratory information management systems, as well as experience in electronic messaging/electronic data interchange and multimedia applications.

Functional Responsibility: As part of a task team, develops design inputs, prepares specifications and documentation; and performs the installation and integration, upgrade/modification and troubleshooting of the data communication/transfer subsystems associated with overall system architecture.

Minimum Education: Bachelors degree in an engineering or computer science discipline.

12. Senior Quality Assurance Engineer (Offered for SINs: 1-6)

Minimum/General Experience: Ten years of progressive experience in the planning, implementation and execution of quality assurance programs; the preparation of quality assurance program plans; the development and/or review of quality assurance processes and procedures as well as associated documentation; the development of quality assurance metrics, measurement parameters, assessment criteria and reporting mechanisms; the analysis of performance data and the preparation of recommendations for improvement; and the conduct of quality assurance inspections in accordance with documented processes/procedures. Demonstrated ability to supervise work of other engineers/technicians and lead task efforts.

Functional Responsibility: Supervises quality assurance staff in, or independently prepares/reviews overall quality program planning and management documentation; postulates quality program strategies; develops/reviews processes and procedures; analyzes requirements and develops metrics, performance measurement methodologies, and reporting mechanisms; analyzes performance data and prepares recommendations for improvement; and provides technical support to customer requirements, participates in technical and management reviews; and develops content for contract technical packages (SOW, CDRL, Specifications).

Minimum Education: Bachelor's degree in appropriate engineering discipline

13. Quality Assurance Engineer (Offered for SINs: 1-6)

Minimum/General Experience: Five years of progressive experience (three with an advanced degree) in the planning, implementation and execution of quality assurance programs; the preparation of quality assurance program plans; the development and/or review of quality assurance processes and procedures as well as associated documentation; the development of quality assurance metrics, measurement parameters, assessment criteria and reporting mechanisms; the analysis of performance data and the preparation of recommendations for improvement; and the conduct of quality assurance inspections in accordance with documented processes/procedures.

Functional Responsibility: As part of a task team, prepares/reviews overall quality program planning and management documentation; provides input to the postulation of quality program strategies; develops/reviews processes and procedures; analyzes

requirements and develops metrics, performance measurement methodologies, and reporting mechanisms; analyzes performance data and prepares recommendations for improvement; and provides technical support to customer requirements, participates in technical and management reviews; and develops content for contract technical packages (SOW, CDRL, Specifications).

Minimum Education: Bachelor's degree in appropriate engineering discipline

14. Senior Technician (Offered for SINs: 3-5)

Minimum/General Experience: Ten years of experience in assembling/manufacturing, installing, operating and/or maintaining electronic, electro-mechanical, and/or mechanical systems, subsystems and components along with associated software and data/communication networks. Demonstrated ability to work independently, supervise other technicians, and manage a contract or major task effort.

Functional Responsibility: Works independently to assemble/manufacture, install, operate, maintain or repair highly complex mechanical, electronic or integrated systems. Applies working technical knowledge to perform routine or complex tasks in maintaining and repairing equipment. Supervises lower level technicians in performing such activities as manufacturing and assembling components, wiring circuits, and taking test measurements. Performs test/calibration procedures, observes results, and records information for evaluation. Applies advanced technical knowledge to solve unusually complex problems (i.e., those that typically cannot be solved solely by interpreting manufacturers' manuals or similar documents).

Minimum Education: High school (or GED equivalent) with military training or technical trade school certification.

15. Principal Program Analyst (Offered for SINs: 1-6)

Minimum/General Experience: Training, work experience, and industry/government credentials demonstrating the ability to perform high level analysis, manage major contract efforts, or lead specialized project initiatives. Recent experience in principal/lead analyst position with over ten years of progressive experience in any of the following areas, as appropriate: program/project strategic planning, acquisition program policies/procedures and documentation, program/project planning and management, program execution and coordination, program budget/POM analysis and development, and life cycle planning. Experience also may include analysis of contractor performance, development of top-level program processes, e-commerce/e-business initiatives, life cycle costing and design to ownership objectives, economic business case analysis, and privatization studies. Experience will also include Computer-Aided Management applications.

Functional Responsibility: Responsible for working independently and performing direct interface with customer senior technical, and management personnel for: high order program/project planning; analysis of acquisition strategies, assessment of turn-key development/production concepts, and buy-build cost trade-off analysis; management and analysis services to identify areas for program process improvements; and providing guidance in the development of program/project management and acquisition support products by task personnel. Performs analysis of program goals, mission objectives, and

schedule and cost performance. Identifies program/project problem areas and provides recommendations for resolution action.

Minimum Education: Bachelors degree in an appropriate management, business or engineering discipline.

16. Senior Program/Project Analyst (Offered for SINs: 1-6)

Minimum/General Experience: Demonstrated ability to work independently on assigned projects or manage a major task effort with a significant deliverable content. Eight years of progressive experience in analyst positions involving any of the following areas, as appropriate: program/project strategic planning, acquisition program policies/procedures and documentation, program/project planning and management, program execution and coordination, program budget/POM analysis and development, and life cycle planning. Experience also may include analysis of contractor performance, development of top-level program processes, e-commerce/e-business initiatives, life cycle costing and design to ownership objectives, economic business case analysis, and privatization studies. Experience will also include Computer-Aided Management applications.

Functional Responsibility: Supervises analyst and technical personnel in providing program/project planning, management/execution and analysis services, and the associated preparation of program/project management and acquisition support products. Performs analysis of program goals, mission objectives, and schedule and cost performance. Identifies program/project problem areas and provides recommendations for resolution action. Performs analysis and studies in such areas as life cycle costing, design to ownership, economic business case prerequisites, privatization, and e-commerce/e-business. Develops work breakdown structures, management plans, and content for acquisition packages.

Minimum Education: Bachelors degree in an appropriate management, business or engineering discipline.

17. Program/Project Analyst (Offered for SINs: 1-6)

Minimum/General Experience: Six years of experience (three with an advanced degree) in analyst positions involving any of the following areas, as appropriate: program/project strategic planning, acquisition program policies/procedures and documentation, program/project planning and management, program execution and coordination, program budget/POM analysis and development, and life cycle planning. Experience also may include analysis of contractor performance, development of top-level program processes, e-commerce/e-business initiatives, life cycle costing and design to ownership objectives, economic business case analysis, and privatization studies. Experience will also include Computer-Aided Management applications.

Functional Responsibility: As part of a task team provides program/project planning, management/execution and analysis services, and the associated preparation of program/project management and acquisition support products. Performs analysis of program goals, mission objectives, and schedule and cost performance. Identifies program/project problem areas and provides recommendations for resolution action. Performs analysis and studies in such areas as life cycle costing, design to ownership, economic business case prerequisites, privatization, and e-commerce/e-business. Develops work breakdown structures, management plans, and content for acquisition packages.

Minimum Education: Bachelors degree in an appropriate management, business or engineering discipline.

18. Senior Logistics Analyst (Offered for SINs: 1-3, 5, 6)

Minimum/General Experience: Demonstrated ability to lead a task team. Ten years of experience in the integrated logistics support field, including any of the areas of logistics program planning and concept development; logistics program management and execution; logistics requirements analyses, documentation development and reporting; provisioning, supply support, and inventory control; logistics automated information systems and analysis tools; maintenance concepts and requirements analyses; technical manual development and training.

Functional Responsibility: Supervises engineering and technical personnel in the development of logistics products and for providing requisite support services. Performs technical and management analyses for logistic strategic planning, investigation of logistic concepts and processes, and resolution of emergent logistic supportability problems. Performs analyses and develops ILS management plans to support acquisition and life cycle support requirements planning. Monitors program schedules and integrates/develops recommendations for corrective or remedial action; develops status reports reflecting support milestone progress and problems. Performs/reviews logistics support analyses and develops maintenance concepts. Prepares content for contract technical packages (SOW, CDRL, Specifications).

Minimum Education: Bachelors degree in engineering, business administration, logistics management or a related academic discipline

19. Logistics Analyst (Offered for SIN: 3-6)

Minimum/General Experience: Six years of experience (three with an advanced degree) in the integrated logistics support field, including any of the areas of logistics program planning and concept development; logistics program management and execution; logistics requirements analyses, documentation development and reporting; provisioning, supply support, and inventory control; logistics automated information systems and analysis tools; maintenance concepts and requirements analyses; technical manual development and training.

Functional Responsibility: Under supervision prepares logistics products and provides requisite support services. Performs technical and management analyses for logistic strategic planning, investigation of logistic concepts and processes, and resolution of emergent logistic supportability problems. Performs analyses and develops inputs to ILS management plans to support acquisition and life cycle support requirements planning. Monitors program schedules and integrates/develops recommendations for corrective or remedial action; develops status reports reflecting support milestone progress and problems. Performs/reviews logistics support analyses and develops maintenance concepts. Prepares content for contract technical packages (SOW, CDRL, Specifications).

Minimum Education: Bachelors degree in engineering, business administration, logistics management or a related academic discipline

20. Purchasing Specialist (Offered for SIN: 3-5)

Minimum/General Experience: Five years of experience in computer/network, electronic, electromechanical, or mechanical systems wholesale/retail supply or purchasing operations. May be required to be knowledgeable of NICP/NMP operations to include cataloging, requisitioning procedures, provisioning, depot operations, and stock accounting. Required to be knowledgeable of the Government Agency/DoD acquisition process, including the regulations and procedures pertaining to logistics functions/milestones in small purchase procedures and shipping regulations. May be required by DoD to be knowledgeable of the Logistics Intelligence Files (LIF) and capable of obtaining current status of requisitioned items.

Functional Responsibility: Responsible for support in wholesale/retail supply to include cataloging, requisitioning, provisioning, and stock accounting. Follows Government Agency/DoD acquisition processes, including regulations pertaining to logistics functions to include shipping and handling of material and equipment.

Minimum Education: High School Diploma or GED equivalent.

21. Senior Training Specialist/Analyst (Offered for SINs: 1-6)

Minimum/General Experience: Demonstrated ability to manage a functional staff or manage a major task effort. Ten years of experience in developing computer-based and/or multimedia training products or in the delivery of training curricula. Experience in the planning, implementation, management and execution of training programs. Experience in instructional design or course instruction with knowledge of digital video, CD-ROM and network delivery techniques. Experience may also include areas of expertise such as media selection, web-based training, interactive video-teletraining, computer-based training, instructional videos, instructor led courses, synchronous/asynchronous training, self-study materials, and training device fabrication/integration.

Functional Responsibility: Supervises training specialists in the development of training products and for providing training services, including training course/curricula design and definition, and/or the authoring, media digitization, and graphics implementation of training products. As an analyst, assesses training program requirements and performs resolution of emergent training problems. Performs analyses and develops training program management plans to support acquisition and life cycle support requirements planning. Monitors training program schedules and integrates/develops recommendations for corrective or remedial action. Provides technical input to customer technical and management reviews. Develops content for contract technical packages (SOW, CDRL, Specifications).

Minimum Education: Bachelors degree in engineering, computer science, instructional technology, or education

22. Training Specialist/Analyst (Offered for SINs: 1-6)

Minimum/General Experience: Six years of experience (three with an advanced degree) in developing computer-based and/or multimedia training products or in the delivery of training curricula. May also have experience in the planning, implementation, management and execution of training programs. Experience in instructional design or course instruction

with knowledge of digital video, CD-ROM and network delivery techniques. Experience may also include areas of expertise such as media selection, web-based training, interactive video-teletraining, computer-based training, instructional videos, instructor led courses, synchronous/asynchronous training, self-study materials, and training device fabrication/integration.

Functional Responsibility: As part of a task team develops training products and/or provides training services. Performs training course/curricula design and/or the authoring, media digitization, and graphics implementation of training products. Responsibilities may also include defining curricula and creating course content/materials such as teacher's guides, grading schemes, student handouts, laboratory exercise, tests, and audiovisual presentation materials. Responsible for setting up and conducting classes, soliciting student feedback, and reporting on student performance. As an analyst, performs assessments and develops input to training program management plans to support acquisition and life cycle support requirements planning. Monitors training program schedules and integrates/develops recommendations for corrective or remedial action. Develops content for contract technical packages (SOW, CDRL, Specifications).

Minimum Education: Bachelors degree in technical field, computer science, instructional technology, or education

23. Principal Network Engineer (Offered for SINs: 1-4, 6)

Minimum/General Experience: Eight years of experience in a related field. Training, work experience, and industry/government credentials demonstrating the ability to perform scientific or high order engineering requirements. Demonstrated leadership skills for planning, organizing, leading, and controlling the cost/technical/schedule activities of a project. Experience in network design, integration, and implementation incidental to engineering associated with design/development of electronic and electro-mechanical systems. Experience in representative networking technologies of ISDN, FDDI, SONET, ATM, Ethernet, Token Ring, and similar modern network topologies and protocols. Knowledge of installing, configuring, integrating, and testing hubs/concentrators, bridges, routers, servers, gateways, network switching devices, and/or multiplexed information systems. Thorough knowledge of network and computer security practices, processes, and procedures. Proficient in data communication protocols and standards including IEEE 802.3, Token Ring, TCP/IP, and/or DoD Standards.

Functional Responsibility: Supervises engineering and technical support personnel in the design, engineering, integration, installation, configuration, and certification of certifies network components and systems to meet complex integration requirements associated with data transfer between system and subsystem components.

Minimum Education: Bachelor's degree in an engineering or computer science discipline.

24. Senior Network Engineer (Offered for SINs: 2-4)

Minimum/General Experience: Six years of experience in a related field. Demonstrated specialized expertise in network engineering as applied to analysis of engineering requirements. Experience in network design, integration, and implementation incidental to engineering associated with design/development of electronic and electro-mechanical systems. Experience in representative networking technologies of ISDN, FDDI, SONET, ATM, Ethernet, Token Ring, and similar modern network topologies and protocols.

Knowledge of installing, configuring, integrating, and testing hubs/concentrators, bridges, routers, servers, gateways, network switching devices, and/or multiplexed information systems. Thorough knowledge of network and computer security practices, processes, and procedures. Proficient in data communication protocols and standards including IEEE 802.3, Token Ring, TCP/IP, and/or DoD Standards.

Functional Responsibility: As part of a task team, designs, engineers, integrates, installs, configures, and certifies network components and systems to meet complex integration requirements associated with data transfer between system and subsystem components.

Minimum Education: Bachelor's degree in an engineering or computer science discipline.

25. Principal System Software Architect (Offered for SINs: 1-6)

Minimum/General Experience: Training, work experience, and industry/government credentials demonstrating the ability to perform scientific or high order engineering requirements. Over ten years of progressive experience as a systems software designer, systems analyst and programmer associated with architecture analysis, design, development, documentation and implementation of software as required to support the integration, simulation and modeling, and production of system prototypes/first articles, including the support of test activities.

Functional Responsibility: Responsible for working independently and performing direct interface with customer senior technical, and management personnel for investigating system/software concepts, architecture alternatives, design and integration processes, and life cycle support issues. Performs high order software engineering analyses, problem resolution, and provides specialized expertise for requirements analysis, design, implementation, documentation and testing of software to support complex command, control, combat, computer, intelligence and surveillance systems.

Minimum Education: Bachelor's degree in computer science, mathematics or other technical discipline.

26. Senior Software Engineer (Offered for SINs: 2-5)

Minimum/General Experience: Eight years of experience in a related field. Specific/unique technical expertise and associated specialized experience as a computer systems analyst and programmer associated with the design, development, documentation and implementation of software as required for the design, integration, simulation and modeling, and production of system prototypes/first articles, including the support of test activities. Proven ability to work independently and lead subtask efforts. Knowledge of the appropriate software languages and conventions applicable to the system/task.

Functional Responsibility: Supervises software engineering personnel in the development of software products and for providing support services. Performs requirements analysis, design, development of code, documentation and testing of software to support complex command, control, combat, computer, intelligence and surveillance systems design, integration, modeling, simulation, prototype development and test activities.

Minimum Education: Bachelor's degree in computer science, mathematics or other technical discipline

27. Software Engineer (Offered for SINs: 1-6)

Minimum/General Experience: Five years of experience as a computer systems analyst and programmer associated with the design, development, documentation and implementation of software as required for the design, integration, simulation and modeling, and production of system prototypes/first articles, including the support of test activities. Proven ability to work as part of a task team. Knowledge of the appropriate software languages and conventions applicable to the system/task.

Functional Responsibility: Under the supervision of senior staff, responsible for performing requirements analysis, design, development of code, documentation and testing of software to support complex command, control, combat, computer, intelligence and surveillance systems design, integration, modeling, simulation, prototype development and test activities.

Minimum Education: Bachelor's degree in computer science, mathematics or other technical discipline

28. Project Control Analyst (Offered for SINs: 1-6)

Minimum/General Experience: Demonstrated ability to manage a specific task effort or to supervise other analysts. Five years of experience associated with Government Agency/DoD project management support/execution as well as systems acquisition policy and procedures. If required, experience is to include electronic commerce and Internet transactions/search. Provides services in the planning/monitoring of project budgets and schedules, the development of project control measures, the tracking of program deliverables, the development of procurement packages, the analysis of program strategies, and the preparation and review of program briefings. Must have knowledge of contract types, contract sections, funding types and sources, and contract processes.

Functional Responsibility: Responsible for the support of project management functions to include systems acquisition planning and electronic commerce. Position is required to assist project managers in developing program strategies, documents, and briefings; as well as in planning, controlling and monitoring program execution status.

Minimum Education: Bachelors degree in business discipline.

29. Senior Documentation Specialist (Offered for SINs: 1-6)

Minimum/General Experience: Five years of experience in technical writing and editing; documentation management and control; and/or review and preparation of specifications, drawings and manuals. Experience in database systems establishment and utilization.

Functional Responsibility: Responsible for technical writing and editing support to engineering staff for finalization of management and engineering documentation products including reports and studies. Prepares briefings and presentations. Reviews/edits specifications, drawings, and manuals.

Minimum Education: Bachelors degree in appropriate field.

30. Documentation Specialist (Offered for SINs: 1-6)

Minimum/General Experience: Two years of experience in technical writing and editing; documentation management and control; and/or review and preparation of specifications, drawings and manuals. Experience in database systems establishment and utilization.

Functional Responsibility: Responsible for technical writing and editing support to engineering staff for finalization of management and engineering documentation products including reports and studies. Prepares briefings and presentations. Reviews/edits specifications, drawings, and manuals.

Minimum Education: High School Diploma

31. Senior AutoCAD Specialist/Operator (Offered for SINs: 1-6)

Minimum/General Experience: Over five years of experience in preparing specifications and drawings using AutoCAD and related engineering design software. Experienced in proper use of printers, plotters, and other AutoCAD peripheral devices. Proficient in engineering design software quality assurance standards.

Functional Responsibility: Creates original AutoCAD drawings from sketches or red-lined design or arrangement drawings and/or specifications.

Minimum Education: Associates degree in an engineering discipline, systems design, or computer science

32. AutoCAD Specialist/Operator (Offered for SINs: 1-6)

Minimum/General Experience: Three years of experience in preparing specifications and drawings using AutoCAD and related engineering design software. Experienced in proper use of printers, plotters, and other AutoCAD peripheral devices. Proficient in engineering design software quality assurance standards.

Functional Responsibility: Creates original AutoCAD drawings from sketches or red-lined design or arrangement drawings and/or specifications.

Minimum Education: Associates degree in an engineering discipline, systems design, or computer science

33. Administrative Specialist (Offered for SINs: 1-6)

Minimum/General Experience: Four years of experience in project/program administration. Proven administrative skills associated with project office or operational support functions including the development of correspondence; the coordination and scheduling of meetings, training sessions and conferences; and the oversight of daily office operations. Demonstrated familiarity with engineering-related nomenclature and Government/DoD correspondence standards and procedures.

Functional Responsibility: Performs administrative duties required to support project management staff and ongoing office operations. Develops/implements office administrative procedures in accordance with organizational and project policies. Schedules/coordinates meetings and conferences. Composes correspondence that requires an understanding of engineering/technical nomenclature. Prepares required administrative reports.

Minimum Education: High school diploma

American Systems
Awarded GSA Pricing
Professional Engineering Services
GS-23F-0129J

Contractor Site Rates

Labor Categories	Year 16 9/30/2014 - 9/29/2015	Year 17 9/30/2015 - 9/29/2016	Year 18 9/30/2016 - 9/29/2017	Year 19 9/30/2017 - 9/29/2018	Year 20 9/30/2018 - 9/29/2019
Principal Systems Architect	$160.46	$163.51	$166.62	$169.78	$173.01
Senior Systems Engineer/Analyst	$126.75	$129.16	$131.62	$134.12	$136.66
Systems Engineer	$88.52	$90.20	$91.92	$93.66	$95.44
Subject Matter Expert/Consultant IV	$268.12	$273.21	$278.40	$283.69	$289.08
Subject Matter Expert/Consultant III	$180.66	$184.09	$187.59	$191.15	$194.78
Subject Matter Expert/Consultant II	$141.31	$144.00	$146.74	$149.52	$152.36
Principal Test/Certification Engineer	$143.84	$146.58	$149.36	$152.20	$155.09
Sr. Test/Certification Engineer	$104.61	$106.60	$108.62	$110.69	$112.79
Test/Certification Engineer	$71.41	$72.77	$74.15	$75.56	$77.00
Sr. Telecommunications Engineer	$137.00	$139.61	$142.26	$144.96	$147.72
Telecommunications Engineer	$82.49	$84.06	$85.65	$87.28	$88.94
Sr. Quality Assurance Engineer	$98.50	$100.37	$102.27	$104.22	$106.20
Quality Assurance Engineer	$65.37	$66.61	$67.88	$69.17	$70.48
Sr. Technician	$91.81	$93.56	$95.33	$97.15	$98.99
Principal Program Analyst	$136.39	$138.98	$141.63	$144.32	$147.06
Sr. Program/Project Analyst	$97.57	$99.42	$101.31	$103.24	$105.20
Program/Project Analyst	$56.86	$57.94	$59.04	$60.16	$61.31

Sr. Logistics Analyst	$93.55	$95.33	$97.14	$98.99	$100.87
Logistics Analyst	$65.37	$66.61	$67.88	$69.17	$70.48
Purchasing Specialist	$42.23	$43.03	$43.85	$44.68	$45.53
Sr. Training Specialist/Analyst	$103.67	$105.64	$107.65	$109.70	$111.78
Training Specialist/Analyst	$60.35	$61.49	$62.66	$63.85	$65.06
Principal Network Engineer	$165.97	$169.13	$172.34	$175.62	$178.95
Senior Network Engineer	$137.00	$139.61	$142.26	$144.96	$147.72
Principal System Software Architect	$171.91	$175.17	$178.50	$181.89	$185.35
Senior Software Engineer	$125.96	$128.35	$130.79	$133.28	$135.81
Software Engineer	$77.45	$78.93	$80.43	$81.95	$83.51
Project Control Analyst	$63.51	$64.72	$65.95	$67.20	$68.48
Sr. Documentation Specialist	$69.00	$70.31	$71.64	$73.00	$74.39
Documentation Specialist	$42.23	$43.03	$43.85	$44.68	$45.53
Sr. AutoCAD Specialist/Operator	$69.00	$70.31	$71.64	$73.00	$74.39
AutoCAD Specialist/Operator	$50.17	$51.12	$52.09	$53.08	$54.09
Administrative Specialist	$32.62	$33.24	$33.87	$34.51	$35.17

Government Site Rates

Labor Categories	Year 16 9/30/2014 - 9/29/2015	Year 17 9/30/2015 - 9/29/2016	Year 18 9/30/2016 - 9/29/2017	Year 19 9/30/2017 - 9/29/2018	Year 20 9/30/2018 - 9/29/2019
Principal Systems Architect	$123.11	$125.44	$127.83	$130.26	$132.73
Senior Systems Engineer/Analyst	$90.95	$92.67	$94.43	$96.23	$98.06
Systems Engineer	$70.46	$71.80	$73.17	$74.56	$75.97
Subject Matter Expert/Consultant IV	$172.55	$175.83	$179.17	$182.57	$186.04
Subject Matter Expert/Consultant III	$116.27	$118.48	$120.73	$123.02	$125.36
Subject Matter Expert/Consultant II	$90.95	$92.67	$94.43	$96.23	$98.06

Principal Test/Certification Engineer	$114.51	$116.68	$118.90	$121.16	$123.46
Sr. Test/Certification Engineer	$83.29	$84.88	$86.49	$88.13	$89.81
Test/Certification Engineer	$56.85	$57.93	$59.03	$60.15	$61.30
Sr. Telecommunications Engineer	$76.35	$77.80	$79.28	$80.79	$82.32
Telecommunications Engineer	$54.69	$55.73	$56.79	$57.87	$58.97
Sr. Quality Assurance Engineer	$74.24	$75.65	$77.09	$78.56	$80.05
Quality Assurance Engineer	$52.03	$53.02	$54.03	$55.05	$56.10
Sr. Technician	$79.27	$80.77	$82.31	$83.87	$85.47
Principal Program Analyst	$108.54	$110.61	$112.71	$114.85	$117.03
Sr. Program/Project Analyst	$77.67	$79.14	$80.65	$82.18	$83.74
Program/Project Analyst	$45.27	$46.13	$47.01	$47.90	$48.81
Sr. Logistics Analyst	$74.24	$75.65	$77.09	$78.56	$80.05
Logistics Analyst	$51.05	$52.02	$53.01	$54.02	$55.04
Purchasing Specialist	$33.61	$34.25	$34.90	$35.56	$36.23
Sr. Training Specialist/Analyst	$61.37	$62.54	$63.73	$64.94	$66.17
Training Specialist/Analyst	$48.04	$48.95	$49.88	$50.83	$51.79
Principal Network Engineer	$118.22	$120.47	$122.76	$125.09	$127.47
Senior Network Engineer	$102.44	$104.39	$106.37	$108.39	$110.45
Principal System Software Architect	$115.88	$118.08	$120.33	$122.61	$124.94
Senior Software Engineer	$90.95	$92.67	$94.43	$96.23	$98.06
Software Engineer	$61.66	$62.83	$64.03	$65.24	$66.48
Project Control Analyst	$50.57	$51.53	$52.51	$53.51	$54.53
Sr. Documentation Specialist	$54.92	$55.97	$57.03	$58.11	$59.22
Documentation Specialist	$33.51	$34.15	$34.80	$35.46	$36.14
Sr. AutoCAD Specialist/Operator	$51.05	$52.02	$53.01	$54.02	$55.04

AutoCAD Specialist/Operator	$33.70	$34.34	$34.99	$35.66	$36.33
Administrative Specialist	$25.96	$26.46	$26.96	$27.47	$27.99

SCA Notice

SCA Eligible Labor Category	SCA Equivalent Code Title	Wage Determination No
Purchasing Specialist	01192 - Order Clerk II	2005-2103
Sr. AutoCAD Specialist/Operator	30062 - Drafter/CAD Operator II	2005-2103
AutoCAD Specialist/Operator	30061 - Drafter/CAD Operator I	2005-2103
Administrative Specialist	01311 – Secretary 1	2005-2103

The Service Contract Act (SCA) is applicable to this contract and it includes SCA applicable labor categories. The prices for the cited SCA labor categories are based on the U.S. Department of Labor WD Number(s) identified in the SCA matrix. The prices offered are based on the preponderance of where work is performed and should the Contractor perform in an area with lower SCA rates, resulting in lower wages being paid, the task order prices will be discounted accordingly.