GSA Advantage!®

# *Authorized Federal Supply Schedule PriceList*

## Professional Engineering Services (PES)
## FSC Class 871

**Special Item Numbers (SINs)**
871-1: Strategic Planning for Technology Programs/Activities
871-2: Concept Development and Requirements Analysis
871-3: System Design, Engineering and Integration
871-4: Test and Evaluation
871-5: Integrated Logistics Support
871-6: Acquisition and Life Cycle Management

Contract Number: GS-23F-0011K
Supplement Number: 000
Contract Period: October 19, 2009 – October 18, 2014

For On-line Access to Contract Ordering Information, Terms and Conditions and Up-to-Date Pricing, see our Website

http://www.jnt.com/pdfs/pes.pdf

**Business Size**
SIC 8711: Large Business
SIC 8731: Small Business

J&T is an SBA Certified Small Disadvantaged Business

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## CUSTOMER INFORMATION

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### 1b. Identification of the lowest priced model number and lowest unit price for that model for each special item number awarded in the contract

N/A

### 1c. Proposed Hourly Rates

J&T has established 21 labor category positions for the PES Schedule Contract. The position descriptions are provided as noted in the following table.

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**Engineer IX**

Greater than 20 years experience performing difficult and highly complex engineering tasks. Generally involved in areas with no developed guidelines and with very limited supervision. Responsible for development of policy, procedures and standards. Reviews the conformance of the product or service to regulatory and technical requirements. Is a recognized expert in a specialized field.

**Qualifications:**

Requires a Bachelor Degree in Engineering, Physics, or Mathematics, or equivalent work experience. Requires a minimum of 20 years of work experience with a minimum of 16 years of directly related experience. Requires a minimum of 10 years experience as a task lead.

**Primary Duties and Responsibilities May Include:**

♦ Functionally supervises entire engineering project teams.

♦ Is a recognized expert in a specialized field.

♦ Determine theoretical principles involved and approach to be taken using judgement in the independent evaluation, selection and adaptations of standard techniques, procedures and criteria in order to design equipment, systems and/or structures which will allow the company to meet program requirements.

♦ Make decisions independently on engineering problems and methods and represent the organization in conferences to resolve important questions and to plan and coordinate work. Write or directs others to write technical reports to document engineering analysis and findings.

♦ Plan, schedule, conduct, or coordinate detailed phases of the engineering work in a total program or project. Perform work that includes complex features, such as resolution or conflicting design requirements, unsuitability of standard materials and difficult coordination requirements.

♦ Conduct detailed feasibility studies for proposed equipment and systems. Review design and development plans; review cost estimates of completing the proposed projects, and evaluate engineering proposals and specifications.

♦ Act as a liaison with customer and vendor representatives to ensure adherence to design specifications and customer requirements.

♦ Conduct on-site technical visits. Monitor field installation and testing. Review and evaluate operational efficiency of equipment and systems at various facilities.

♦ Perform other duties as requested.

**Engineer VIII**
Greater than 15 years experience performing difficult and highly complex engineering tasks. Generally involved in areas with few developed guidelines and with limited supervision. Responsible for supporting the development of policy, procedures, and standards. Supports reviews of the conformance of the product or service to regulatory and technical requirements

**Qualifications:**
Requires a Bachelor Degree in Engineering, Physics, or Mathematics, or equivalent work experience. Requires a minimum of 15 years of work experience with a minimum of 12 years of directly related experience. Requires a minimum of 8 years experience as a task lead.

**Primary Duties and Responsibilities May Include:**

♦ Functionally supervise entire engineering project teams.

♦ Determine theoretical principles involved and approach to be taken using judgement in the independent selection and adaptations of standard techniques, procedures and criteria in order to design equipment, systems and/or structures which will allow the company to meet program requirements.

♦ Make decisions independently on engineering problems and methods and represent the organization in conferences and meetings to resolve important questions and to plan and coordinate work. Write or direct others to write technical reports to document engineering analysis and findings.

♦ Plan, schedule, conduct, or coordinate detailed phases of the engineering work in a total program or project. Perform work that includes complex features such as resolution or conflicting design requirements, unsuitability of standard materials and difficult coordination requirements.

♦ Conduct detailed feasibility studies for proposed equipment and systems. Review design and development plans, review cost estimates of completing the proposed projects, and evaluate engineering proposals and specifications.

♦ Act as a liaison with customer and vendor representatives to ensure adherence to design specifications and customer requirements.

♦ Conduct on-site technical visits. Monitor field installation and testing. Review and evaluate operational efficiency of equipment and systems at various facilities.

♦ Perform other duties as requested.

**Engineer VII**
Greater than 12 years experience performing difficult and highly complex engineering tasks. Generally involved in areas with some developed guidelines and with limited supervision. Able to apply intensive and diversified knowledge of engineering principles and practices in broad areas of assignments and related fields in order to design and oversee complex installations, alterations and repairs of equipment, systems and/or structures.

**Qualifications:**
Requires a Bachelor Degree in Engineering, Physics, or Mathematics, or equivalent work experience. Requires a minimum of 12 years of work experience with a minimum of 10 years of directly related experience. Requires a minimum of 6 years experience as a task lead.

**Primary Duties and Responsibilities May Include:**

♦ Functionally supervise four or more engineers, designers or technicians.

♦ Determine theoretical principles involved and approach to be taken using judgement in the independent evaluation, selection and substantial adaptations and modification of standard techniques, procedures and criteria in order to design equipment, systems and/or structures which will meet requirements.

♦ Make decisions independently on engineering problems and methods and represents the organization in meetings to resolve important questions and to plan and coordinate work. Write or direct others to write technical reports to document engineering analysis and findings.

♦ Plan, schedule, conduct, or coordinate detailed phases of the engineering work in a part of a major product or in a total project of moderate scope. Perform work that may include a variety of complex features such as resolution or conflicting design requirements, unsuitability of standard materials and difficult coordination requirements.

♦ Conduct detailed feasibility studies for proposed equipment and systems. Review design and development plans, review cost estimates of completing the proposed projects, and evaluate engineering proposals and specifications.

♦ Act as a liaison with customer and vendor representatives to ensure adherence to design specifications and customer requirements.

♦ Conduct on-site technical visits. Monitor field installation and testing. Review and evaluate operational efficiency of equipment and systems at various facilities.

♦ Highly complex/specialized Product Assurance efforts.

♦ Perform other duties as requested.

**Engineer VI**
Greater than 10 years experience performing difficult engineering tasks. Generally involved in areas with some developed guidelines and with limited supervision. Able to apply intensive and diversified knowledge of engineering principles and practices in all areas of assignments

**Qualifications:**
Requires a Bachelor Degree in Engineering, Physics, or Mathematics, or equivalent work experience. Requires a minimum of 10 years of work experience with a minimum of 8 years of directly related experience. Requires a minimum of 4 years experience as a task lead.

**Primary Duties and Responsibilities May Include:**

♦ Functionally supervise four or more engineers, designers or technicians.

♦ Determine principles involved and approach to be taken using engineering judgement in order to design equipment, systems, and/or structures, which will meet requirements.

♦ Make decisions independently on engineering problems and methods and represent the organization in meetings to resolve important questions and to plan and coordinate work. Write or direct others to write technical reports to document engineering analysis and findings.

♦ Plan, schedule, conduct, or coordinate detailed phases of the engineering work in a part of a major product or in a total project of moderate scope. Perform work that may include a variety of complex features such as resolution or conflicting design requirements, unsuitability of standard materials and difficult coordination requirements.

♦ Conduct detailed feasibility studies for proposed equipment and systems. Review design and development plans, review cost estimates of completing the proposed projects and evaluate engineering proposals and specifications.

♦ Act as a liaison with customer and vendor representatives to ensure adherence to design specification and customer requirements.

♦ Conduct on-site technical visits. Monitor field installation and testing. Review and evaluate operational efficiency of equipment and systems at various facilities.

♦ Complex/specialized Product Assurance efforts.

♦ Perform other duties as required.

**Engineer V**
Greater than 8 years experience performing difficult engineering tasks. Generally involved in areas with some developed guidelines and with some supervision. Able to apply intensive and diversified knowledge of engineering principles and practices in broad areas of assignments to design and oversee complex installations, alterations and repairs of equipment or systems.

**Qualifications:**
Requires a Bachelor Degree in Engineering, Physics, or Mathematics, or equivalent work experience. Requires a minimum of 8 years of work experience with a minimum of 6 years of directly related experience. Requires a minimum of two years experience as a task lead.

**Primary Duties and Responsibilities May Include:**

♦ Functionally supervise up to four employees.

♦ Review and analyze complex task statements, standards, specifications, engineering drawings and other documentation to determine engineering requirements. Plan and conduct work requiring judgement and the independent evaluation, selection and substantial adaptation and modification of standard techniques, procedures and criteria.

♦ Supervise and coordinate technicians in fabrication and installation of complex equipment and systems. May direct field operation and maintenance activities. Evaluate operational systems and designs modification to eliminate causes of malfunctions or changes in system requirements.

♦ Develop new applications requiring appreciable originality and ingenuity, and complex test procedures for equipment and systems, which are significantly different from existing designs. Plan, organize, and conduct the development of each assignment, coordinates manpower assigned to each activity and coordinate the activities of groups involved in various stages of overall program to ensure effective customer support.

♦ Analyze and report the effectiveness and feasibility of new systems or equipment. Verify and evaluate test results to ensure compliance with tolerance limits of required specifications.

♦ Review and correct drawings to ensure proper engineering techniques and required specification have been utilized.

♦ Develop, release, and maintain documentation in accordance with company and contractual requirements. Review, write and edit reports such as evaluation plans, test results, and technical manuals to provide recommendations, conclusions, and other data.

♦ Plan and monitor work associated with adaptation and modification of standard techniques for integration of spaceflight and engineering hardware.

♦ Develop comprehensive procedures relating to verification of interfaces and operations associated with hardware integration.

♦ Complex Product Assurance efforts.

♦ Perform other duties as requested.

**Engineer IV**
Greater than 6 years experience performing engineering tasks. Generally involved in areas with developed guidelines and with supervision. Able to apply diversified knowledge of engineering principles and practices in broad areas of assignments to design and oversee installations, alterations and repairs of equipment, systems.

**Qualifications:**
Requires a Bachelor Degree in Engineering, Physics, or Mathematics, or equivalent work experience. Requires a minimum of 6 years of work experience with a minimum of 4 years of directly related experience.

**Primary Duties and Responsibilities May Include:**

- Minimal supervisory responsibilities.
- Review and analyze task statements, standards, specifications, engineering drawings and other documentation to determine engineering requirements. Plan and conduct work requiring judgement and some independent evaluation, selection and some adaptation and modification of standard techniques, procedures and criteria.
- Evaluate operational systems and designs modification to eliminate causes of malfunctions or changes in system requirements.
- Recommend plans for the development of each assignment, suggest manpower assignments for each activity and support the activities of groups involved in various stages of overall program to ensure effective customer support.
- Analyze and report the effectiveness and feasibility of current systems or equipment. Verify and evaluate test results to ensure compliance with tolerance limits of required specifications.
- Review and correct drawings to ensure proper engineering techniques and required specifications have been utilized.
- Develop, release, and maintain documentation in accordance with company and contractual requirements. Review, write, and edit reports, such as evaluation plans, test results and technical manuals to provide recommendations, conclusions, and other data.
- Develop procedures relating to verification of interfaces and operations associated with hardware integration.
- High-level Product Assurance efforts.
- Perform other duties as requested.

**Engineer III**
Responsible for providing engineering guidance and expertise in designing moderately complex equipment and systems, and to investigate, evaluate and develop new applications for existing equipment and systems.

**Qualifications:**
Requires a Bachelor Degree in Engineering, Physics, or Mathematics, or equivalent work experience. Requires a minimum of 4 years of related experience.

**Primary Duties and Responsibilities May Include:**

♦ No supervisory responsibilities.

♦ Review and analyze moderately complex task statements, standards, specifications, engineering drawings and other documentation to determine engineering requirements. Independently evaluate, select, and apply standard engineering techniques, procedures and criteria using judgement in making adaptations and modifications.

♦ Design moderately complex assemblies and systems using typical components to achieve the specified engineering requirements.

♦ Develop new applications, modifications, and/or test procedures for products or systems in order to provide the customer with effective solutions to established requirements. May analyze the effectiveness and feasibility of new systems or equipment.

♦ Develop or modify procedures for testing of assemblies and systems. Perform and/or support the performance of testing involving the integration of complex assemblies.

♦ Analyze test data comparing specified and computed values, making changes and improvements where needed. Perform troubleshooting of problems noted during systems level testing.

♦ Prepare reports and documentation delineating task, analysis and design, test results, and recommendations for further effort, if needed. Present reports and presentations to customer.

♦ Provide technical support and technical guidance to junior engineers and personnel.

♦ Mid to high-level Product Assurance efforts.

♦ Guide technicians in the fabrication of components and/or systems.

♦ Perform other duties as requested.

**Engineer II**
Responsible for providing engineering expertise to design minimally complex equipment and systems, and to investigate, evaluate and develop new applications for existing equipment and systems.

**Qualifications:**
Requires a Bachelor Degree in Engineering, Physics, or Mathematics, or equivalent work experience. Requires a minimum of 2 years professional experience.

**Primary Duties and Responsibilities May Include:**

♦ No supervisory responsibilities.

♦ Review and analyze moderately simple task statements, standards, specifications, engineering drawings and other documentation to determine engineering requirements. With guidance, evaluate, select, and apply standard engineering techniques, procedures and criteria.

♦ Design moderately simple assemblies and systems using typical components to achieve the specified engineering requirements.

♦ Develop new applications, modifications, and/or test procedures for products or systems in order to provide the customer with effective solutions to established requirements. May analyze the effectiveness and feasibility of new systems or equipment.

♦ Develop or modify procedures for testing of electronic assemblies and systems. Perform and/or support the performance of testing involving the integration of complex assemblies.

♦ Analyze test data comparing specified and computed values, making changes and improvements where needed. Perform troubleshooting of problems noted during systems level testing.

♦ Prepare reports and documentation delineating task, analysis and design, test results, and recommendations for further effort, if needed. Present reports and presentations to customer.

♦ Provide technical support and technical guidance to junior engineers and personnel.

♦ Mid-level Product Assurance efforts.

♦ Guide technicians in the fabrication of components and/or systems.

♦ Perform other duties as requested.

**Engineer I**
Responsible for performing routine component and/or system designs, analysis, testing, interface development, and hardware fabrication.

**Qualifications:**
Requires a Bachelor Degree in Engineering, Physics, or Mathematics, or equivalent work experience.

**Primary Duties and Responsibilities May Include:**

- No supervisory responsibilities.
- Use established procedures and review standards, specifications, task statements, engineering drawings and other documentation to determine engineering requirements.
- Under general guidance, design assemblies and systems using typical components.
- Review and approve routine technical documentation including engineering plans, test procedures, installation plans and related technical reports in accordance with established standards to ensure compliance with system and subsystem performance requirements. Prepare reports and documentation delineating task analysis, design, and test results.
- Establish simple test plans and guide technicians in the collection of test data in a form suitable for analysis. Analyze data, comparing data against specified and computed values, and suggest changes and improvements where needed.
- Investigate failures of simple equipment or systems. Document findings and recommend solutions to problems and/or procedures to prevent reoccurrence.
- Low to mid-level Product Assurance efforts.
- Guide and assist technicians in fabrication and installation of simple equipment and routine systems. May direct field operations and maintenance activities.
- Perform other duties as requested.

**Management II**
Responsible for planning, directing, managing, and controlling all facets of a small Program, to include all aspects of scheduling, resource management, and reporting.

**Qualifications:**
Requires a bachelor degree in Engineering, Engineering Management, Computer Science, Mathematics or the Physical Sciences or equivalent work experience. Requires a minimum of 12 years professional experience, with a minimum of 6 years in the aerospace industry, and 5 years of management or supervisory experience.

**Primary Duties and Responsibilities May Include:**

♦ Develop and establish policies, procedures and guidelines to ensure the daily operation of assigned program. Execute and implement program directives and develop systems and controls to carry out program tasks. Supervise and provide technical direction to assigned staff. Determine work schedules, priorities and procedures for performing work activities. Direct and monitor work results to ensure results meet customer requirements and specifications. Evaluate performance of assigned program tasks in terms of work quality, cost control and program schedule.

♦ Maintain existing customer relationships. Coordinate work tasks with appropriate customer representatives. Inform customer on status and progress of assigned tasks. Coordinate program reviews and direct the preparation of status/progress reports.

♦ Participate in developing new business opportunities. May develop marketing plans including promotion and qualification brochures. Direct the development and preparation of similar proposals in response to requests. Define task statements and staffing requirements.

♦ Monitor and establish financial controls to adhere to program budgets. Maintain program cost estimates and accounting records. Monitor budget expenditures and prepare budget justifications.

♦ Represent company at various customer/sponsor meetings. Resolve any technical and/or administrative problems associated with program.

♦ Review the performance and advancement potential of all persons under supervision. Ensure, whenever possible, each individual receives the experience, exposure and personnel development necessary to reach career objectives.

♦ Conduct performance appraisals, schedule vacations and approve sick leave requests. Resolve minor grievances and take disciplinary action when necessary. Review and endorse or modify merit increases.

♦ Perform other duties as required.

**Management I**
Responsible for directing and coordinating all personnel and tasks on an assigned project, to include tracking project deliverables and technical and financial progress. Ensure that all elements of the contractual requirements pertinent to the project are satisfied.

**Qualifications:**
Requires a bachelor degree in Engineering, Engineering Management, Computer Science, Mathematics, or the Physical Sciences or equivalent work experience. Requires a minimum of 8 years professional experience with a minimum of 6 years in the aerospace industry and 3 years of management or supervisory experience.

**Primary Duties and Responsibilities May Include:**

♦ Plan and formulate engineering projects and organize project staff according to requirements. Direct the daily operational activities for assigned work to ensure compliance with contractual requirements and to complete work within budget and time schedule. Determine the work schedules, priorities, and assignments of subordinates.

♦ Coordinate with other work units to accomplish assigned work. Advise other managers on status of work. Interface and act as a liaison with customers, contractors and suppliers. Review and recommend changes and/or resolve technical problems.

♦ Assist in developing new business opportunities. Participate in the preparation of new business proposals and attend proposal conferences. Provide project cost estimates and manpower requirements.

♦ Develop, implement, and monitor management and technical systems to control and evaluate unit performances. Execute programs and procedures to meet management and technical project requirements.

♦ Provide technical and operation support and/or services to ensure quality assurance standards are met in providing support to various project tasks. Develop reports and papers on the progress and status of assigned projects. Develop corrective actions to support task problems and failures.

♦ Perform various administrative activities for assigned unit, including approving time sheets and vacation requests, preparing performance appraisals and planning new work systems and methods.

♦ Perform other duties as requested.

**Technician V**

Exempt Position. Provide technical support to an engineering discipline (e.g. electrical, mechanical, quality assurance, design, fabrication, and LAN support). Responsibilities may include coordinating the activities involved in the development and production of electronics or mechanical equipment. Instructs or leads lower level technicians in tasks. Organizes, directs and controls efforts of technicians in accomplishing preventative and corrective maintenance and quality assurance. Organizes and prioritizes work requirements to ensure systems meet optimum design capabilities. Is very capable of managing significant technical efforts and typically works with subordinates in a supervisory capacity.

**Qualifications:**

Requires high school or trade school education, 2 years of college, and a minimum of 12 years experience in aerospace flight and ground support equipment or an equivalent combination of education and experience.

**Primary Duties and Responsibilities May Include:**

♦ Determine the most appropriate cable techniques, wiring procedures and routings in cooperation with Mechanical and Electrical Engineers.

♦ Review and evaluate the feasibility and capability of the system/product and equipment to meet customer requirements.

♦ Prepare and/or analyze plans, procedures, inspection criteria, and the performance evaluation of in-house and subcontractor quality system elements.

♦ Obtain and organize technical data required for audits, reviews and changes. Record and coordinate changes with affected organizations and monitor change schedules.

♦ Audit inspection or technical document preparation procedures to verify compliance with contract requirements.

♦ Instruct and lead lower level technicians in tasks. Organize, direct and control efforts of technicians in accomplishing preventative and corrective maintenance. Organize and prioritize work requirements to ensure systems meet optimum design capabilities. Direct technicians in analyzing, testing, troubleshooting, evaluating and repairing systems, equipment modules and components.

♦ Oversee the re-design, modification, and/or repair of complex equipment.

♦ Maintain and evaluate existing subsystems for operational reliability and/or circuitry continuity. This may require the utilization of electronic test equipment or the set up of standard test equipment and conduct of functional, operational, environmental, and life tests to evaluate performance and reliability of prototype or production models. Analyze and interpret test data.

♦ Install equipment field changes. Assemble and/or modify highly complex components and systems and/or wires, insulation, and electrical components. Install and test assemblies and hardware into housing using hand tools and soldering equipment.

♦ Inspect, test, adjust, and certify complex electronic or mechanical assemblies, subassemblies, parts and systems for compliance with specifications following blueprints, schematic drawings, inspection manuals, using hand tools and precision testing equipment.

♦ Provide on-the-job training of systems operations, maintenance and repair of system. Train customer personnel on proper system parameters and procedures.

♦ Participate in the design and fabrication of test hardware and prepare hardware for testing. Use simple machine shop tools to fabricate fittings and jigs. Operate vacuum pumps, leak detectors and temperature sensors.

♦ Write and revise technical reports or manuals and develop or revise charts, graphs and schematics to describe and illustrate system operation characteristics, malfunctions, deviation from design, specifications, and functional limitations for consideration by professional engineering personnel in broader determinations affecting system design and laboratory procedures.

**Technician IV**
Exempt Position. Provide technical support to an engineering discipline (e.g. electrical, mechanical, quality assurance, design, fabrication, and LAN support). Responsibilities may include: mechanical fabrication and assembly, layout, building, installation, maintenance, troubleshooting, repairing, and modification of complex developmental and production electronics equipment, such as control instrumentation, digital computers, communications systems and other electronics equipment. Is capable of managing moderately difficult technical efforts and often works with subordinates in a supervisory capacity.

**Qualifications:**
Requires high school or trade school education, 2 years of college, and a minimum of 8 years experience in aerospace flight and ground support equipment, or an equivalent combination of education and experience.

**Primary Duties and Responsibilities May Include:**

♦
Determine the most appropriate cable techniques, wiring procedures and routings in cooperation with Mechanical and Electrical Engineers.

♦
Prepare and/or analyze plans, procedures, inspection criteria, and the performance evaluation of in-house and subcontractor quality system elements.

♦
Review and evaluate the feasibility and capability of the system/product and equipment to meet customer requirements.

♦
Obtain and organize technical data required for audits, reviews and changes. Record and coordinate changes with affected organizations and monitor change schedules.

♦
Audit inspection or technical document preparation procedures to verify compliance with contract requirements.

♦
Instruct and lead lower level technicians in tasks. Organize, direct and control efforts of technicians in accomplishing preventative and corrective maintenance. Organize and prioritize work requirements to ensure systems meet optimum design capabilities. Direct technicians in analyzing, testing, troubleshooting, evaluating and repairing systems, equipment modules and components.

♦
Oversee the re-design, modification, and/or repair of complex equipment.

♦
Maintain and evaluate existing subsystems for operational reliability and/or circuitry continuity. This may require the utilization of electronic test equipment or the set up of standard test equipment and conduct of functional, operational, environmental, and life tests to evaluate performance and reliability of prototype or production models. Analyze and interpret test data.

♦
Install equipment field changes. Assemble and/or modify highly complex components and systems and/or wires, insulation, and electrical components. Install assemblies and hardware into housing using hand tools and soldering equipment. Check out newly installed equipment to evaluate system performance under actual and projected operating conditions.

♦
Inspect, test, adjust, and certify complex electronic or mechanical assemblies, subassemblies, parts and systems for compliance with specifications following blueprints, schematic drawings, and inspection manuals and using hand tools on precision testing equipment.

♦
Participate in the design and fabrication of test hardware and prepare hardware for testing. Use simple machine shop tools to fabricate fittings and jigs. Operate vacuum pumps, leak detectors and temperature sensors.

♦
Provide on-the-job training of systems operations, maintenance, and repair of system. Train customer personnel on proper system parameters and procedures.

♦
Write and revise technical reports or manuals and develop or revise charts, graphs and schematics to describe and illustrate system operation characteristics, malfunctions, deviations from design, specifications, and functional limitations for consideration by professional engineering personnel in broader determinations affecting system design and laboratory procedures.

**Technician III**

Non-Exempt Position. Provide technical support to an engineering discipline (e.g. electrical, mechanical, quality assurance, design, fabrication, and LAN support). Responsible for performing requisite engineering tasks under the direction of more senior technical staff. Responsibilities may include: mechanical fabrication and assembly, layout, building, installation, maintenance, troubleshooting, repairing, and modification of complex developmental and production electronics equipment, such as control instrumentation, digital computers, communications systems and other electronics equipment. May be responsible for the management of lesser technical efforts.

**Qualifications:**

Requires high school or trade school education, 2 years of college, and a minimum of 4 years experience in aerospace flight and ground support equipment, or an equivalent combination of education and experience.

**Primary Duties and Responsibilities May Include:**

♦ Minimal supervisory responsibilities.

♦ Prepare and/or analyze plans, procedures, inspection criteria, and the performance evaluation of in-house and subcontractor quality system elements.

♦ Confer with engineers and other professionals to obtain additional information or to interpret policies and procedures for reporting changes in design.

♦ Maintain and evaluate existing subsystems for operational reliability and/or circuit continuity. This may require the utilization of electronic test equipment or the set up of standard test equipment and conduct of functional, operational, environmental, and life tests to evaluate performance and reliability of prototype or production models. Analyze and interpret test data.

♦ Set up standard test apparatus or contrive test equipment and circuitry and conduct functional, operational, environmental and life tests to evaluate performance and reliability of prototype or production model. Analyze and interpret test data.

♦ Troubleshoot system malfunctions of complex equipment by providing field service assistance via phone, message or personal visit to site. Repair malfunctions through fabrication, breadboarding and test bench procedures, or by adjusting, calibrating, aligning, and/or modifying circuitry and components using soldering, de-soldering, wire-wrapping equipment, and other similar tools.

♦ Install equipment field changes. Assemble and/or modify complex components and systems. Install mechanical assemblies and hardware. Check out newly installed equipment to evaluate system performance under actual and projected operating conditions.

♦ Inspect, test, adjust, and certify complex electronic assemblies, subassemblies, parts and systems for compliance with specifications following blueprints, schematic drawings, inspection manuals, using hand tools and precision testing equipment.

♦ Participate in the design and fabrication of test hardware and prepare hardware for testing. Use simple machine shop tools to fabricate fittings and jigs. Operate vacuum pumps, leak detectors and temperature sensors.

♦ Assist with the writing and revision of technical reports or manuals and develop or revise charts, graphs and schematics to describe and illustrate system operation characteristics, malfunctions, deviations from design, specifications, and functional limitations for consideration by professional engineering personnel in broader determinations affecting system design and laboratory procedures.

♦ Provide on-the-job training of systems operations, maintenance and repair of system. Train customer personnel on proper system parameter and procedures.

♦ Perform other duties as requested such as higher-level Stockroom technician duties.

**Technician II**
Non-Exempt Position. Provide technical support to an engineering discipline (e.g. electrical, mechanical, quality assurance, design, fabrication, and LAN support). Responsible for performing requisite engineering tasks under the direction of more senior technical staff. Responsibilities may include: mechanical fabrication and assembly, layout, building, installation, maintenance, troubleshooting, repairing, and modification of complex developmental and production electronics equipment, such as control instrumentation, digital computers, communications systems and other electronics equipment.

**Qualifications:**
Requires high school or trade school education and 2 years of college or equivalent work experience.

**Primary Duties and Responsibilities May Include:**

♦ No supervisory responsibilities.

♦ Prepare and/or analyze plans, procedures, inspection criteria, and the performance evaluation of in-house and subcontractor quality system elements.

♦ Assist with various administrative activities such as developing tasks, time schedules, preparing status/progress reports and researching assigned data requests.

♦ Assist in planning, testing, assembling, installing and documentation of equipment and systems.

♦ Maintain and evaluate existing subsystems for operational reliability and/or circuitry continuity. This may require the utilization of electronic test equipment or the set up of standard test equipment and conduct of functional, operational, environmental, and life tests to evaluate performance and reliability of prototype or production models. Analyze and interpret test data.

♦ Set up standard test apparatus or contrive test equipment and circuitry and conduct functional, operational, environmental and life tests to evaluate performance and reliability of prototype or production model. Analyze and interpret test data.

♦ Install equipment field changes. Assemble and/or modify components and systems. Install assemblies and check out newly installed equipment to evaluate system performance under actual operation conditions.

♦ Inspect, test, adjust, and certify complex assemblies, subassemblies, parts and systems for compliance with specifications following blueprints, schematic drawings, and inspection manuals and using hand tools and precision testing equipment.

♦ Perform stockroom technician duties.

♦ Participate in the design and fabrication of test hardware and prepare hardware for testing. Use simple machine shop tools to fabricate fittings and jigs. Operate vacuum pumps, leak detectors and temperature sensors.

♦ Provide on-the-job training of systems operations, maintenance and repair of system. Train customer personnel on proper system parameters and procedures.

♦ Perform other duties as requested.

**Technician I**
Non-Exempt Position. Provide entry-level technical support to an engineering discipline (e.g. electrical, mechanical, quality assurance, design, fabrication, and LAN support).

**Qualifications:**
Requires high school or trade school education.

**Primary Duties and Responsibilities May Include:**

- No supervisory responsibilities.
- Receive on-the-job training to repair, test, and perform preventive maintenance on electrical/mechanical equipment.
- Assist in repairing, calibrating and troubleshooting malfunctions in various electrical/mechanical equipment (i.e., telecommunications and/or computer equipment).
- Assist in the testing and debugging of new network and/or circuitry designs and electrical/mechanical components or systems.
- Perform stockroom technician duties.
- May be assigned to replace absent employees or augment personnel in production stations.
- Support quality assurance (QA) under the supervision of an Engineer.
- Perform other duties as requested.

**Technical Support III**
Exempt position. Provide senior-level, area-specific technical/administrative support at the program or division level (i.e., project coordination, configuration management, procurement, finance, contracts, and technical writing). Typically performs in a supervisory capacity for administration of department level activities.

**Qualifications:**
Requires a bachelor degree or equivalent experience. Requires a minimum of 10 years of relevant experience. Requires superior interpersonal and technical/administrative skills and a high level of competency in the use of common office software products including presentation packages.

**Primary Duties and Responsibilities May Include:**

- Function as a facilities manager.
- Develop/utilize configuration management plans.
- Perform all levels of financial reporting.
- Provide all levels of contract support.
- Perform all levels of procurement functions.
- Provide senior-level technical writing capabilities.
- Perform high-level (complex) Engineering Design (CAD, etc.) support.
- Provide project coordination of very complex projects.
- Assign and coordinate other office administrative, clerical staff, and technical support personnel.
- Serve as liaison between project line managers and administrative department.
- Recommend new policies or procedures as necessary.
- Administer personnel functions, including recruiting, review and approval of job descriptions and salary classifications, and selection and placement of personnel.
- Supervise other employees.
- Perform other duties as requested.

**Technical Support II**
Exempt position. Provide area-specific technical/administrative support at the program or division level (i.e., project coordination, configuration management, procurement, finance, contracts, and technical writing). Often performs in a supervisory capacity for administration of department level activities.

**Qualifications:**
Requires a bachelor degree or equivalent experience. Requires a minimum of 6 years of relevant experience. Requires strong interpersonal and technical/administrative skills and a high level of competency in the use of common office software products including presentation packages.

**Primary Duties and Responsibilities May Include:**

- Function as a facilities manager.
- Assist in the development/utilization of a configuration management plan.
- Provide project coordination on routine or complex projects.
- Perform mid level financial reporting.
- Provide mid level contract support.
- Perform procurement functions as a buyer.
- Assist with technical writing responsibilities.
- Perform mid-level Engineering Design (CAD, etc.) support.
- Manage physical property, both company and GFE.
- Assign and coordinate other office administrative, clerical staff, and technical support personnel.
- Serve as liaison between project line managers and administrative department.
- Prepare reports and schedules to communicate project status.
- Perform tasks such as recording, tabulating, and reporting expenses in order to monitor status against budget.
- Recommend new policies or procedures as necessary.
- Administer personnel functions, including recruiting, review and approval of job descriptions and salary classifications, and selection and placement of personnel.
- Plan and establish engineering schedules and evaluate performance against estimates.
- Supervise other employees.
- Perform other duties as requested.

**Technical Support I**
Exempt position. Provide a lower level of area-specific technical support at the program or division level (i.e., project coordination, configuration management, procurement, finance, contracts, and technical writing).

**Qualifications:**
Requires a bachelor degree or equivalent experience. Requires a minimum of 2 years of relevant experience. Requires strong word processing, database, spreadsheet and administrative skills.

**Primary Duties and Responsibilities May Include:**

- Perform general secretarial and clerical support functions as required.
- Function as a facilities manager.
- Assist in the utilization of a configuration management plan.
- Provide project coordination on routine projects.
- Perform low level financial reporting.
- Provide low level contract support.
- Perform procurement functions as a junior-level buyer.
- Manage physical property, both company and GFE.
- Assist in the assignment and coordination of other office administrative, clerical staff, and technical support personnel.
- Serve as liaison between project line managers and administrative department.
- Prepare reports and schedules to communicate project status.
- Perform tasks such as recording, tabulating, and reporting expenses in order to monitor status against budget.
- Recommend new policies or procedures as necessary.
- Administer personnel functions, including recruiting, review and approval of job descriptions and salary classifications, and selection and placement of personnel.
- Plan and establish engineering schedules and evaluate performance against estimates.
- Supervise a small number of employees.
- Perform low-level Engineering Design (e.g., CAD) support.
- Perform other duties as requested.

**Admin II**

Non-exempt position. Supports project management in the administration and monitoring of tasks to ensure the adherence to schedule and budget of each task. Aids in staff capacity by supporting office services, such as personnel, budget preparation and control, housekeeping, records control, and special management studies.

**Qualifications:**

Requires a high school diploma. Requires a minimum of 5 years in the ADMIN I position or 5 years office experience. Requires strong computer-based word processing and spreadsheet experience.

**Primary Duties and Responsibilities May Include:**

- Perform general secretarial and clerical support functions as required.
- Type/produce letters, reports, and other materials from rough drafts, making adjustments for grammar, punctuation, or spelling as necessary.
- Generate spreadsheets for budgeting and reporting purposes.
- Assist in the establishment and/or execution of a configuration management plan.
- Screen and route project calls, take messages, and forward calls to appropriate personnel.
- Perform work of a confidential nature for project management.
- Perform or coordinate administrative detail such as assembling reports and taking, transcribing, and distributing meeting minutes.
- Establish and maintain files for correspondence, contracts, classified material, and technical documents.
- Handle routing and dispatching of project mail, and answer routine inquiries.
- Assist in assigning and coordinating the work of other office administrative and clerical staff.
- No supervisory responsibilities.
- Perform stockroom support functions.
- Perform other duties as requested.

**Admin I**
Non-exempt position. Performs a variety of secretarial and clerical tasks in support of a unit. Aids in staff capacity through various office services.

**Qualifications:**
Requires a high school diploma. Requires a minimum of 2 years of office experience, or recent business school attendance. Requires strong computer-based word processing experience.

**Primary Duties and Responsibilities May Include:**

- Perform general secretarial and clerical support functions as required.
- Format and type letters, reports and other materials from rough drafts, making adjustments for grammar, punctuation or spelling as necessary.
- Screen and route project calls, take messages, and forward calls to appropriate personnel.
- Establish and maintain logs of correspondence and various files, such as contracts, blue prints, budget reports, and technical documents.
- Handle routing and dispatching of unit mail.
- Perform non-complex Stockroom support functions.
- Schedule appointments, conference rooms, and interviews for supervisor.
- Coordinate meeting schedules, arrange for necessary equipment and supplies, copy and prepare packets of information for distribution, and order or prepare light refreshments for meeting attendees.
- Perform other duties as requested.
- No supervisory responsibilities.

**2. Maximum Order**

There is no maximum task order size for the contract. However, a maximum threshold value of $750,000 has been established for each task order under the contract. When a task order exceeds this threshold, agencies can seek additional discounts. Task orders exceeding $750,000 will be placed under this contract in accordance with PES-I-FSS-125. See Note 1 following on page 25.

**3. Minimum Order**

$100. When the government requires supplies or services covered by this contract in an amount less than $100, the government is not obligated to purchase, nor is J&T obligated to furnish, those supplies or services under this contract.

**4. Geographic Coverage (delivery area)**

This contract was established to be used as sources for Professional Engineering Services for domestic and/or overseas usage.

**5. Point(s) of Production (city, county, and state or foreign country)**

Determined by individual task order.

**6. Discount From List Prices or Statement of Net Price**

Prices Shown Herein are Net (discount deducted).

**7. Quantity Discounts**

None.

**8. Prompt Payment Terms**

None.

**9a. Notification that Government Purchase Cards are Accepted at or Below the Micro-purchase Threshold**

Government purchase cards are accepted below the micro-purchase threshold of $2,500.

**9b. Notification Whether Government Purchase Cards are Accepted or not Accepted Above the Micro-purchase Threshold**

Not accepted.

**10. Foreign Items**

N/A

**11a. Time of Delivery**

N/A

**11b. Expedited Delivery**

N/A

**11c. Overnight and 2-day Delivery**

N/A

**11d. Urgent Requirements**

N/A

**12. F.O.B. Point(s)**

Destination.

**13a. Ordering Address(es)**

Jackson and Tull, 7375 Executive Place, Seabrook, MD 20706; Attn: Ms. Allyson Buker, Contracts Manager (abuker@jnt.com)

**13b. Ordering Procedures**

For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA's), and a sample BP can be found at the GSA/FSS Schedule homepage (fss.gsa.gov/schedules).

**14. Payment Address(es)**

Jackson and Tull, 2705 Bladensburg Road, N.E., Washington, DC 20018

**15. Warranty Provision**

N/A

**16. Export Packing Charges (if applicable)**

N/A

**17. Terms and Conditions of Government Purchase Card Acceptance (any thresholds above the micro-purchase level)**

None.

**18. Terms and Conditions of Rental, Maintenance, and Repair (if applicable)**

N/A

**19. Terms and Conditions of Installation (if applicable)**

N/A

**20. Terms and Conditions of Repair Parts Indicating Date of Parts Price Lists and Any Discounts from List Prices (if applicable)**

N/A

**20a. Terms and Conditions for Any Other Services (if applicable)**

N/A

**21. List of Service and Distribution Points (if applicable)**

N/A

**22. List of Participating Dealers (if applicable)**

N/A

**23. Preventive Maintenance (if applicable)**

N/A

**24a. Special Attributes such as Environmental Attributes**

N/A

**24b. Is Section 508 Compliance Information Available on Electronic and Information Technology (EIT) Supplies and Services (if applicable)**

N/A

**25. Data Universal Number System (DUNS) Number**

07-091-2100.

**26. Notification Regarding Registration in Central Contractor Registration (CCR) Database**

Jackson and Tull is registered in the Central Contractor Registration (CCR) database.

**NOTE 1: PES-I-FSS-125 REQUIREMENTS EXCEEDING THE MAXIMUM ORDER (OCT 1997)**

(a) In accordance with FAR 8.404, before placing an order that exceeds the maximum order threshold, ordering offices shall –

(1) Based upon the initial evaluation, generally seek price reductions from the schedule contractor(s) appearing to provide the best value (considering price and other factors);

(2) After price reductions have been sought, place the order with the schedule contractor that provides the best value and results in the lowest overall cost alternative (see FAR 8.404(a)). If further price reductions are not offered, an order may still be placed, if the ordering office determines that it is appropriate.

(b) Vendors 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 PES-52.216-19, Order Limitations).

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

(3) Decline the order (orders must be returned in accordance with PES-52.216-19).

(c) A delivery order that exceeds the maximum order may be placed with the Contractor selected in accordance with FAR 8.404. The order will be placed under the contract.

(d) Sales for orders that exceed the Maximum Order shall be reported in accordance with GSAR 552.238-72.

## ABOUT JACKSON AND TULL

### 1. CORPORATE BACKGROUND

With headquarters in Washington, D. C., Jackson and Tull (J&T) was established in 1974 to offer civil engineering services to the public and private sectors. The firm has major offices in: Seabrook and Beltsville, MD; Albuquerque, NM; and Chicago, IL. J&T, wholly owned by co-founder Mr. Knox W. Tull, Jr., graduated from SBA's 8(a) program in December 1995.

During the past four years, J&T's revenues have averaged $27 million/year, and the number of employees has averaged 302. J&T is certified as a Small Disadvantaged Business (SDB).

### 2. NASA EXPERIENCE

J&T has provided electrical and mechanical engineering services to NASA and the Goddard Space Flight Center (GSFC) since 1987. Today GSFC is J&T's largest client. Our major GSFC customers include the Applied Engineering and Technology Directorate (AETD), the former Engineering Directorate, and the Hubble Space Telescope (HST) flight project. Since 1987 J&T had three prime contracts, culminating in one of the largest services contracts ever awarded under SBA's 8(a) program. J&T also provides engineering support services to the HST program under a major subcontract to Lockheed Martin. Some of the hardware designed and built by J&T for HST, include the Advanced Computer, the Solid State Recorder, and the Voltage Improvement Kit.

### 3. UNITED STATES AIR FORCE RESEARCH LABORATORY EXPERIENCE

Since June 1996, J&T has provided engineering services under a prime contract at Kirtland AFB in New Mexico. J&T services include: operations and maintenance of the Government Owned/Contractor Operated (GOCO) integration and test facility; engineering support; performance and mission analysis; design, fabrication, and assembly services; integration and test support; mission support; and program management. Systems supported include: sounding rockets; Low-Earth-Orbit (LEO) satellites and their launch vehicles; and balloons and their payloads.

### 4. COMMERCIAL AND ACADEMIC CLIENT EXPERIENCE

J&T has provided electrical and mechanical support to major aerospace clients including: Lockheed Martin; Swales Aerospace; Ball Aerospace; and APL. J&T also supports major academic institutions including MIT, and the Universities of Maryland, Arizona, Colorado and California at Berkley.

### 5. MANUFACTURING CAPABILITY

J&T established a small machine shop in 1991 to produce ground support equipment and prototype components for the space program. This capability was expanded in 1993 when the present 18,000 square foot fabrication facility was opened to support J&T's electrical and mechanical engineering assignments. The facility includes: a modern precision machine shop; a space flight certified electrical assembly area with a separate soldering lab; a state-of-the-art polymeric coatings lab; a cable and harness layout and fabrication area; flight certified integration and test areas; a quality assurance inspection area complemented by a dedicated mechanical inspection area; and separate flight and non-flight bonded parts storage areas.

### 6. QUALITY SYSTEMS EXPERIENCE

J&T has formulated a quality management plan in conformance with AS 9100.

### 7. APPROVED SYSTEMS

As a major engineering services prime contractor, J&T has attained approval from cognizant Government agencies and passed subsequent audits of several critical management systems. These include purchasing, property management, accounting, and security.

## 8. AWARDS AND PERFORMANCE RECOGNITION

J&T's personnel have received numerous awards for engineering excellence from our clients. Additionally, J&T's clients have recognized J&T's performance with major awards including the GSFC Contractor Excellence Award, NASA's Minority Contractor of the Year Award, and the George M. Low award. J&T participates in the Voluntary Protection Program sponsored by Maryland's OSHA, which has approved our manufacturing facility's health and safety program.

## CONTRACT OVERVIEW

Professional Engineering Services (PES) Schedule contracts provide a vehicle for all government agencies to obtain the services of qualified/experienced contractor(s) under a Multiple Awards Federal Supply Schedule (FAR Part 8—as well as Part 38). The services will be provided in an efficient, streamlined, and cost effective manner in accordance with applicable statutes and regulations. Agencies will issue task orders in accordance with the Ordering Procedures for Services to obtain the services required. A task order may contain any service or combination of services described herein. The scope of services available under the contracts are described under the Special Item Numbers (SINs) and Primary Engineering Disciplines (PEDs)

## 1. CONTRACT USE

J&T has been awarded a GSA Federal Supply Schedule contract for Professional Engineering Services (PES), Contract Number GS-23F-0011K. The contract period is from October 19, 2009 through October 18, 2014. An additional five-year option period may be exercised by GSA at the end of this base period. There is no dollar value and material assignments ceiling for the contract.

This contract is available for use by all federal government agencies as a source for Professional Engineering Services for domestic and/or overseas use. This contract may be used by Executive agencies, other Federal agencies, mixed-ownership government corporations, and the District of Columbia; government contractors authorized in writing by a Federal agency pursuant to 48 CFR 51.1; and other activities and organizations authorized by statue or regulation to use GSA as a source of supply. Additionally, contractors are encouraged to accept orders received from activities within the Executive Branch of the Federal Government.

J&T shall provide all resources, including personnel, management, supplies, services, materials, equipment, facilities and transportation, necessary to provide a wide range of professional engineering services as specified in each task order.

Services specified in a task order may be performed at J&T's facilities or the ordering agencies' facilities. The government will specify J&T's compensation at the task order level either firm-fixed price for services or a time-and-materials basis.

Jackson and Tull has recently been authorized to provide mechanical engineering and electrical engineering to support disaster recovery purchasing.

## 2. SPECIAL ITEM NUMBERS (SINS)

The Special Item Numbers (SINs) available under this contract provide for services across the full life cycle of an engineering project. When task orders are placed, they must identify the SIN or SINs under which the task is being executed. J&T has been awarded a contract by GSA to provide services under all six SINs, as defined below:

- SIN 871-1 Strategic Planning for Technology Programs/Activities
- SIN 871-2 Concept Development and Requirements Analysis
- SIN 871-3 System Design, Engineering and Integration
- SIN 871-4 Test and Evaluation
- SIN 871-5 Integrated Logistics Support
- SIN 871-6 Acquisition and Life Cycle Management

Task orders for outsourcing of engineering services may be placed for any of the SINs, provided the work being outsourced is

covered under the SIN definition.

A full description of each SIN definition and examples of the types of work covered by the SIN are provided below.

**SIN 871-1 STRATEGIC PLANNING FOR TECHNOLOGY PROGRAMS/ACTIVITIES**

Services provided 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. Typical associated tasks include, but are not limited to, analysis of mission, program goals and objectives, requirements analysis, organizational performance assessment, special studies and analysis, training, privatization and outsourcing.

**Example**: The evaluation and preliminary definition of new and/or improved performance goals for navigation satellites – such as launch procedures and costs, multi-user capability, useful service life, accuracy and resistance to natural and man made electronic interference.

Inappropriate use of this SIN is providing professional engineering services not specifically related to strategic planning for technology programs/activities and its associated disciplines.

**SIN 871-2 CONCEPT DEVELOPMENT AND REQUIREMENTS ANALYSIS**

Services provided 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. Typical associated tasks include, but are not limited to, requirements analysis, cost/cost-performance trade-offs analysis, feasibility analysis, regulatory compliance support, technology conceptual designs, training, privatization and outsourcing.

**Example**: The development and analysis of the total mission profile and life cycle of the improved satellite including examination of performance and cost tradeoffs.

Inappropriate use of this SIN is providing professional engineering services not specifically related to concept development and requirements analysis and its associated disciplines.

**SIN 871-3 SYSTEM DESIGN, ENGINEERING AND INTEGRATION**

Services provided under this SIN involve the translation of a system (or subsystem, program, project, activity) concept into a preliminary and detailed design (engineering plans and specifications), performing risk identification/analysis/mitigation, traceability, and then integrating the various components to produce a working prototype or model of the system. Typical associated tasks include, but are not limited to, computer-aided design, design studies and analysis, high level detailed specification preparation, configuration management and document control, fabrication, assembly and simulation, modeling, training, privatization and outsourcing.

**Example**: The navigation satellite concept produced in the preceding stage will be converted to a detailed engineering design package, performance will be computer simulated and a working model will be built for testing and design verification.

Inappropriate use of this SIN is providing professional engineering services not specifically related to concept development and requirements analysis and its associated disciplines.

**SIN 871-4 TEST AND EVALUATION**

Services provided under this SIN involve the application of various techniques demonstrating that a prototype system (subsystem, program project or activity) performs in accordance with the objectives outlined in the original design. Typical associated tasks include, but are not limited to, testing of a prototype and first article(s) testing, environmental testing, independent verification and validation, reverse engineering, simulation and modeling (to test the feasibility of a concept), system safety, quality assurance, physical testing of the product or system, training, privatization and outsourcing.

**Example**: The navigation satellite working model will be subjected to a series of tests which may simulate and ultimately

duplicate its operational environment.

Inappropriate use of this SIN is providing professional engineering services not specifically related to testing and evaluating and its associated disciplines.

**SIN 871-5 INTEGRATED LOGISTICS SUPPORT**

Services provided under this SIN involve the analysis, planning and detailed design of all engineering specific logistics support including material goods, personnel, and operational maintenance and repair of systems throughout their life cycles. Typical associated tasks include, but are not limited to, ergonomic/human performance analysis, feasibility analysis, logistics planning, requirements determination, policy standards/procedures development, long-term reliability and maintainability, training, privatization and outsourcing.

**Example**: The full range of life cycle logistics support for the navigation satellite will be identified and designed in this stage including training, operation and maintenance requirements, and replacement procedures.

Inappropriate use of this SIN is providing professional engineering services not specifically related to integrated logistics support and its associated disciplines.

**SIN 871-6 ACQUISITION AND LIFE CYCLE MANAGEMENT**

Services provided under this SIN involve all of the planning, budgetary, contract and systems/program management execution 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. Typical associated tasks include, but are not limited to, operation and maintenance, program/project management, technology transfer/insertion, training, privatization and outsourcing.

**Example**: During this stage the actual manufacturing, launch, and performance monitoring of the navigation satellite will be assisted through project management, configuration management, reliability analysis, engineering retrofit improvements and similar functions.

Inappropriate use of this SIN is professional engineering services not specifically related to acquisition and life cycle management and associated disciplines.

## 3. PRIMARY ENGINEERING DISCIPLINE (PEDS)

This contract defines two Primary Engineering Disciplines (PEDs) which may be used under each of the contract SINs. These disciplines are electrical engineering and mechanical engineering.

J&T may perform engineering services for Electrical and Mechanical Engineering under each of six contract SINs defined.

| **Primary Engineering Disciplines Approved by GSA** | | |
|---|---|---|
| | **Electrical Engineering** | **Mechanical Engineering** |
| SIN 871-1 | APPROVED | APPROVED |
| SIN 871-2 | APPROVED | APPROVED |
| SIN 871-3 | APPROVED | APPROVED |
| SIN 871-4 | APPROVED | APPROVED |
| SIN 871-5 | APPROVED | APPROVED |
| SIN 871-6 | APPROVED | APPROVED |

**A. Electrical Engineering**

Planning, design, development, evaluation and operation of electrical principles, models and processes.
It includes, but is not limited to, the design, fabrication, measurement and operation of electrical devices, equipment and systems (e.g., signal processing; telecommunication; sensors, microwave, and image processing; micro-fabrication; energy systems and control; micro- and nano-electronics; plasma processing; laser and phototonics; satellites, missiles and guidance systems, space vehicles, fiber optics, and robotics).

Within the electrical engineering discipline, there are several specialties within the scope of this work; a partial listing follows:

| | |
|---|---|
| Aerospace and Electronic Systems | Antennas and Propagation |
| Broadcast Technology | Circuits and Systems |
| Communications | Components Packaging and Manufacturing Technology |
| Computers * | |
| Control Systems | Consumer Electronics |
| Dielectrics and Electrical Insulation | Education |
| Engineering in Medicine and Biology | Electromagnetic Compatibility |
| Engineering Management | Geoscience and Remote Sensing |
| Industrial Electronics | Information Theory |
| Instrumentation and Measurement | Industry Applications |
| Lasers and Electro-Optics | Intelligent Transportation Systems |
| Microwave Theory and Techniques | Magnetics |
| Nuclear and Plasma Sciences | Neural Networks Council |
| Power Engineering | Power Electronics |
| Professional Communication | Oceanic Engineering |
| Robotics and Automation | Reliability |
| Signal Processing on Social Implications of Technology | Solid-State Circuits |
| | Systems, Man, and Cybernetics |
| Ultrasonics, Ferroelectrics, and Frequency Control | Vehicular Technology |
| | |
| Other Electrical Engineering Specialties not listed in the “Services not Included Paragraph” | |

**B. Mechanical Engineering**
Planning, development, evaluation and control of systems and components involving the production and transfer of energy and with the conversion of one form of energy to another.

It includes, but is not limited to, planning and evaluation of power plants, analysis of the economical combustion of fuels, conversion of heat energy into mechanical energy, use of mechanical energy to perform useful work, analysis of structures and motion in mechanical systems, and conversion of raw materials into a final product, etc. (e.g., thermodynamics, mechanics, fluid mechanics, jets, rocket engines, internal combustion engines, steam and gas turbines, continuum mechanics, dynamic systems, dynamics fluid mechanics, heat transfer, manufacturing, materials, solid mechanics, reactors, etc.).

| | |
|---|---|
| ASME Heat Transfer/K16 | Advanced Energy Systems |
| Aerospace Engineering | Applied Mechanics |
| Bioengineering | Design Engineering * |
| Dynamic Systems and Control | Electrical and Electronic Packaging |
| Environmental Engineering * | Fluids Engineering |

| | |
|---|---|
| Fluids Power Systems and Technology Systems | Fuels and Combustion Technologies |
| | Heat Transfer |
| Information Storage and Processing Systems | Internal Combustion Engine |
| International Gas Turbine | Management |
| Manufacturing Engineering * | Materials Handling Engineering * |
| Materials | Noise Control and Acoustics |
| Microchannel Flow and Heat Transfer | Nuclear Engineering |
| Non-Destructive Evaluation Engineering | Offshore Mechanics and Arctic Engineering |
| Ocean Engineering | Petroleum |
| Plant Engineering and Maintenance | Process Industries |
| Pressure Vessels and Piping | Power |
| Rail Transportation | Solar Energy |
| Safety Engineering and Risk Analysis | Solid Waste Processing |
| Technology and Society | Tribology |
| Textile Engineering | |
| Other Mechanical Engineering Specialties not listed in the "Services not Included Paragraph" | |

* For services not included, see page 35.

**C. Examples of Engineering Services Provided by J&T**

The following listing represents a sampling of the types of engineering services J&T will provide under this contract. Additional services may be added to this list as required to meet the need of our customers.

| Engineering Services | Electrical | Mechanical |
|---|---|---|
| Acquisition and life cycle management | X | X |
| Analysis of program goals, mission, objectives, performance | X | X |
| Assessment Support | X | X |
| Computer Aided Design (CAD) | X | X |
| Computer Aided Engineering (CAE) | X | X |
| Computer Aided Management (CAM) | X | X |
| Concept development | X | X |
| Decontamination and Decommissioning (D&D) | X | X |
| Demonstration and Validation | X | X |
| Design/Specifications | X | X |
| Documentation and Information Dissemination | X | X |
| Economic/Business case analysis | X | X |
| Economic impact evaluations | X | X |
| Education/training | X | X |
| Environmental control for electrical units (e.g., cooling units) | X | X |
| Forensic engineering | X | X |
| Independent Verification and Validation (IV&V) | X | X |
| Information services (studies, impact statements, program development, project documentation, data collection, data analysis/evaluation, etc.) | X | X |

| | | |
|---|---|---|
| Instrumentation | X | X |
| Integration | X | X |
| Investigative Engineering Service | X | X |
| Life Cycle Costing | X | X |
| Logistics | X | X |
| Long-term Reliability and Maintainability | X | X |
| Migration Strategy | X | X |
| National Academy of Sciences studies | X | X |
| Operation and Maintenance (O&M) | X | X |
| Operations Research (non R&D) | X | X |
| Permitting and Licensing | X | X |
| Plan, organize, establish, implement, manage, maintain, upgrade and control of technical systems | X | X |
| Privatization | X | X |
| Program and Project management | X | X |
| Prototype development and first article(s) production | X | X |
| Radar/Sonar | X | X |
| Regulatory compliance support | X | X |
| Reliability and Maintainability Analysis | X | X |
| Reverse engineering | X | X |
| Signal processing | X | X |
| Simulation and modeling | X | X |
| Site development | X | X |
| Source data development (forward engineering hardware and software systems) | X | X |
| Source data validation (existing hardware and software systems) | X | X |
| Special projects and studies | X | X |
| Statistical analysis | X | X |
| Support services | X | X |
| Systems engineering data base development, maintenance, and analysis | X | X |
| Technical analysis | X | X |
| Technical and management support | X | X |
| Technical writing/editorial support | X | X |
| Test and Evaluation (T&E) of products and systems | X | X |

**D. Services Not Included**
The following services were not solicited for this contract:

**i. Construction and Architecture-Engineering Services** as set forth in FAR Part 36 including construction, alteration or repair (including dredging, excavating and painting of buildings, structures, or other real property).

**ii. Computer Engineering and Information Technology.** Ordering Offices interested in obtaining computer/software engineering and information technology services are directed to contact GSA's Group 70 Schedule for Information Technology for additional information. J&T's point of contact for our Schedule 70 FSS contract is Allyson Buker at 301-805-4545.

**iii. Environmental Advisory Services** as listed below are not currently being solicited:

♦
Environmental Planning Services and Documentation (i.e., environmental impact statements; endangered species, wetlands, watersheds and other natural resource management plans, studies and consultations; archeological, historic and other cultural resources management plans, studies, and consultations; economic, technical, and risk analyses in support of environmental needs);

♦
Environmental compliance services (i.e., environmental compliance audits; compliance management planning; pollution prevention surveys;

♦
Environmental/occupational training services specific to environmental planning and environmental compliance as discussed above (i.e., conventional course development and presentation; customized courses to meet specific needs; computer-based interactive course development);

♦
Waste management services (i.e., data collection, data development, analyses of comments, regulatory and economic analyses, feasibility analyses, hazard assessments, exposure assessments, and risk analyses. Examples include, but are not limited to development of waste characterization studies and recommendations for management strategy including identification of recycling options. Assessments might include studies relating to collection and transfer of waste, source reduction, and evaluation of energy/fuel options. Services could include data collection, data development, analyses of comments, regulatory and economic analyses, feasibility analyses, hazard assessments, exposure assessments and risk analyses;

♦
Hazardous materials management advisory services (i.e., furnishing of Material Safety Data Sheets (MSDS) by compact disc, on-line via Internet, mail or facsimile (FAX); reporting and compliance software, hazardous materials tracking software and other related software/services;

♦
Telephone advisory services (i.e., telephone assistance with hazardous material spills, poisons, MSDS, and other related services).

**iv. Foundations and Landscaping Engineering.** Ordering Offices interested in obtaining foundations and landscaping engineering are directed to contact GSA's PBS for additional information.

**v. Heating, Ventilation and Air-Conditioning (HVAC**) related to buildings, structures, or other real property set forth for Construction and Architect-Engineering services governed by FAR Part 36. Ordering Offices interested in obtaining these services are directed to contact GSA's PBS for additional information. Please note that HVAC related to the manufacture, production, furnishing, construction, alteration, repair, processing or assembling of vessels, aircraft, or other kinds of personal property **is** included and solicited within the scope of PES.

**vi. Research and Development** as set forth in FAR Part 35.

**vii. Products/materials already solicited under other Federal Supply Service (FSS) Schedule contracts -** e.g., information technology, paper, chemicals, pharmaceuticals, laboratory instruments.

## J&T'S PES SCHEDULE CONTRACT PRICE LIST

GSA has approved the labor categories and hourly rates for all six SINs and the Electrical and Mechanical Engineering PEDs. All rates include GSA's Industrial Funding Fee of .75% and all "prices shown herein are net (discount deducted)."

### 1. LABOR RATES, J&T SITE

The following GSA approved rates are for J&T work site for the year 2009 through 2010 for SINs 871-1 through 871-6 including Disaster Recovery.

| Labor Category | Rates 10/19/09-10/18/10 |
|---|---|
| Engineer IX | $190.89 |
| Engineer VIII | $159.61 |
| Engineer VII | $142.18 |
| Engineer VI | $127.99 |
| Engineer V | $114.28 |
| Engineer IV | $106.09 |
| Engineer III | $94.94 |
| Engineer II | $83.40 |
| Engineer I | $72.34 |
| Management II | $170.35 |
| Management I | $130.15 |
| Technician V | $88.23 |
| Technician IV | $69.11 |
| Technician III | $62.23 |
| Technician II | $52.51 |
| Technician I | $41.80 |
| Technical Support III | $120.47 |
| Technical Support II | $78.35 |
| Technical Support I | $63.09 |
| Admin II | $56.89 |
| Admin I | $45.36 |

## 2. LABOR RATES, J&T MANUFACTURING SITE

The following GSA approved rates are for J&T manufacturing work site for the year 2009 through 2010 for SINs 871-1 through 871-6 including Disaster Recovery.

| Labor Category | Rates 10/19/09-10/18/10 |
|---|---|
| Engineer III | $134.60 |
| Engineer II | $116.87 |
| Engineer I | $99.84 |
| Management I | $188.83 |
| Technician V | $124.34 |
| Technician IV | $94.90 |
| Technician III | $84.31 |
| Technician II | $69.36 |
| Technician I | $52.85 |
| Technical Support II | $109.09 |
| Technical Support I | $85.64 |
| Admin II | $76.09 |
| Admin I | $58.38 |

### 3. Labor Rates, Government Site

J&T has provided discounted rates for tasks performed at government sites. Such work must be performed on a sufficiently continuous basis such that the customer will provide office space, supplies, reproduction, telephone service, laboratory and/or ADPE facilities, as required, for the performance of the contract. A sufficiently continuous basis is further clarified as a customer location for a period of three consecutive months for each assigned employee with no onsite (J&T) facility costs.

The following GSA approved rates are for government work site for the year 2009 through 2010 for SINs 871-1 through 871-6 including Disaster Recovery.

| Labor Category | Rates 10/19/09-10/18/10 |
|---|---|
| Engineer IX | $152.15 |
| Engineer VIII | $126.21 |
| Engineer VII | $111.78 |
| Engineer VI | $99.97 |
| Engineer V | $88.61 |
| Engineer IV | $81.84 |
| Engineer III | $72.56 |
| Engineer II | $63.00 |
| Engineer I | $53.82 |
| Management II | $135.12 |
| Management I | $101.79 |
| Technician V | $67.02 |
| Technician IV | $51.13 |
| Technician III | $45.45 |
| Technician II | $37.39 |
| Technician I | $28.49 |
| Technical Support III | $93.74 |
| Technical Support II | $58.81 |
| Technical Support I | $46.15 |
| Admin II | $41.02 |
| Admin I | $31.45 |

## ORDERING PROCEDURES FOR SERVICES

**1. Services Priced on GSA Schedules at Hourly Rates:** GSA has established special ordering procedures for the services that are priced on Schedules 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 J&T'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 a specific task being ordered and for making a determination that the total firm-fixed price or ceiling price is fair and reasonable.

**2. Services Priced on GSA Schedule at Fixed Prices**: The ordering procedures set forth at FAR 8.404 should be used for those services based on fixed prices. J&T may use Clause 552.238-76, Price Reduction, to provide the ordering office a proposed fixed price that more accurately reflects the actual work required, as defined in the specific task.

**3. When Ordering Services, Ordering Offices Shall…**

**A. Prepare a Request for Quotes**

i. 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 (e.g., security clearances, travel, and special knowledge) should be prepared.

ii. 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.

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

iv. 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.

**B. Transmit the Request for Quotes to Contractors**

i. 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).

ii. 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.

**C. 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.

**4. When Ordering Services, Ordering Offices Should…**

A. Give preference to small business concerns when two or more contractors can provide the services at the same firm-fixed price or ceiling price.

B. When the ordering office's requirement involves both products as well as professional services: 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.

C. At a minimum, 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.

**5. Special Provisions for Task Orders**

Agencies may incorporate provisions in their task orders that are essential to their requirements (e.g., security clearances, hazardous substances, special handling, and key personnel). These provisions, when required, will be included in individual task orders. Any cost necessary for the contractor to comply with the provision(s) will be included in the task order proposal, unless otherwise prohibited by law.

Contractors are strongly encouraged to price all items in the contract, to the maximum extent practicable.

## BLANKET PURCHASE AGREEMENTS (BPAS)

Blanket Purchase Agreements (BPAs) can reduce costs and save time because individual purchase orders and invoices are not required for each procurement but can instead be documented on a consolidated basis. The Contractor agrees to enter into BPAs with ordering activities provided that:

- The period of time covered by such agreements shall not exceed the period of the contract including option year period(s);
- Orders placed under such agreements shall be issued in accordance with all applicable regulations and the terms and conditions of the contract;
- BPAs may be established to obtain the maximum discount (lowest net price) available in those schedule contracts containing volume or quantity discount arrangements.

**1. Use of BPAs**

The establishment of Federal Supply Schedule Blanket Purchase Agreements (BPAs) 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 BPAs:** 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 B(ii) (see page 17), 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.

**2. Periodic Reviews of BPAs**

BPA 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.