

General Services Administration

Federal Supply Service
Authorized Federal Supply Schedule Price List

Professional Engineering Services

Lockheed Martin Services, Inc.

Contract No: GS-23F-0113N

For more information on ordering from Federal Supply Schedules, click on the
FSS Schedules button at <http://www.fss.gsa.gov>

Contract Period: January 15, 2003 January 14, 2018
Business Size: Large

FSC Group 541

Service Code 871

Special Item No. 871-1	Strategic Planning for Technology Programs/Activities
Special Item No. 871-2	Concept Development and Requirements Analysis
Special Item No. 871-3	System Design, Engineering and Integration
Special Item No. 871-4	Test and Evaluation
Special Item No. 871-5	Integrated Logistics Support
Special Item No. 871-6	Acquisition and Life Cycle Management

GSA PES Contract Administration Office

Lockheed Martin Services, Inc.
6404 Ivy Lane, Suite 800
Greenbelt, MD 20770
Attn: Deirdre T. Johnson
Phone: 301-313-3957
E-Mail: deirdre.t.johnson@lmco.com

LMSI PES Program Office

Lockheed Martin Space Operations
2625 Bay Area Blvd
Houston, TX 77058
Attn: Greg Wardlaw
Phone: 281-283-4471
E-Mail: greg.wardlaw@lmco.com

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through GSA *Advantage!*TM, a menu-driven database system. The internet address for GSA *Advantage!*TM is <http://www.GSAAdvantage.gov>. The schedule can also be viewed on the internet at <http://www.lockheedmartin.com/gsa>.

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Customer Information

1a. Awarded Special Item Numbers (SINs); please see [Contract Scope](#) on pages 5-7.

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 & Evaluation
871-5	Integrated Logistics Support
871-6	Acquisition and Life Cycle Management

1b. Hourly Rates. For job titles, experience, functional responsibility and education requirements please see pages 10-21. For awarded prices, please see [Labor Rates](#) on page 22.

2. Maximum Order

The maximum task order limitation on this contract is \$1,000,000.00. *Please note:* a value of \$750,000 per SIN on a task order has been established as the threshold where agencies should seek additional discounts. (See item 6 below)

3. Minimum Order: \$100.00

4. Geographic Coverage: Domestic only (The United States.) In particular, the business and metropolitan areas supporting the eight NASA locations noted on the rate schedules.

5. Points of Production: As specified in individual task orders.

6. Discounts. The prices shown in this price list reflect Most Favored Customer pricing (net prices). Additional reductions from these prices may be offered under the following circumstances:

- Task orders with a value over \$750,000.
- Blanket Purchase Agreements (BPAs)

7. No quantity discounts are available.

8. No prompt payment discounts are available.

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

9b. Government purchase cards are accepted for purchases above the micro-purchase threshold.

10. Foreign items. Not applicable.

11a. Time of delivery. TBD on individual task orders.

11b. Expedited delivery. Items available for expedited delivery are noted in this price list.

11c. Overnight and 2-day delivery. TBD on individual task orders.

11d. Urgent requirements. TBD on individual task orders.

12. F.O.B points. TBD on individual task orders.

13a. Ordering Address:

Lockheed Martin Services, Inc. Attn: Greg Wardlaw
GSA PES Program Office Phone: 281-283-4471
2625 Bay Area Blvd Fax: 281-283-4199
Houston, TX 77058 Email: greg.wardlaw@lmco.com

13b. Ordering Procedures: For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA s), and a sample BPA, can be found at the GSA/FSS Schedule homepage (www.fss.gsa.gov/schedules).

14. Payment Addresses:

CHECK REGULAR MAIL

Lockheed Martin
PO Box 13522
Newark, NJ 07188-3522

ELECTRONIC/ ACH PAYMENT

Citibank
ABA/Routing# 021000089
Account# 40678203

OVERNIGHT/COURIER

JPMorgan Chase –Lockbox Processing
Lockheed Martin - Lock Box 13522
4 Chase Metrotech Center, 7th floor East
Brooklyn, NY 11245

15. Warranty provision. For services only, the Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in the contract.

16. Export packing charges. Not applicable.

17. Terms and conditions of Government purchase card acceptance. None.

18. Terms and conditions of rental, maintenance, and repair. Not applicable.

19. Terms and conditions of installation. Not applicable.

20. Terms and conditions of repair parts indicating date of parts price lists and any discounts. Not applicable.

- 20a. Terms and conditions for any other services. Not applicable.
21. List of service and distribution points. Not applicable.
22. List of participating dealers. Not applicable.
23. Preventive maintenance. Not applicable.
- 24a. Special attributes such as environmental attributes (e.g., recycled content, energy efficiency, and/or reduced pollutants). Not applicable.
- 24b. Section 508 compliance information is not applicable.
25. Data Universal Number System (DUNS) number 80-525-8373.
26. Lockheed Martin Services, Inc. is registered in the System for Award Management (SAM) database.

Blanket Purchase Agreements

An ordering office with a broad scope of tasks to be performed, or with recurring requirements may consider a Blanket Purchasing Agreement (BPA). A BPA allows the ordering office to consolidate funding, reporting, and management of a series of Task Orders, and provides the foundation from which new Task Orders can more readily and rapidly be created. Also, price reductions from the published schedule rates are possible through a BPA. With no minimum or maximum ordering limit under BPAs, ordering agencies get the benefit of the BPA discounted price regardless of the size of the order. A progressive type of discounting may be offered where the discount would increase once sales reach certain prescribed levels.

Fixed Price Task Orders

Based on the nature of work to be performed, an ordering office may consider a Firm Fixed Price Task Order. A Task Order must be clearly identified as fixed price by the ordering office when requesting a proposal from Lockheed Martin.

Security Requirements

Lockheed Martin personnel who will perform under this contract may have clearances including SECRET, TOP SECRET, and certain special access clearances. In the event that security requirements are necessary, the ordering activity 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. The clearance level of Lockheed Martin personnel, as well as any costs necessary to comply with the security requirements will be included in the task order proposal.

Contract Scope (Special Item Numbers)

The Professional Engineering Services contract provides for engineering support to all phases of a project life cycle. The Special Item Numbers (SINs) for this contract define the areas of engineering support services available. Task Orders placed under the PES contract must identify the SINs applicable to the effort. Lockheed Martin Services, Inc. has been awarded contract

number **GS-23F-0113N** to provide support in the following six SINs as defined by the Government:

SIN 871-1 Strategic Planning for Technology Programs/Activities

Services required 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 an 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 required 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-off 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 required 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 system design, engineering and integration and its associated disciplines.

SIN 871-4 Test and Evaluation

Services required 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 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 required 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 required 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. 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.

Primary Engineering Disciplines (PED)

Lockheed Martin personnel in all engineering disciplines provide engineering support to all phases of a project life cycle. The matrix below summarizes the Primary Engineering Disciplines applicable to the Special Item Numbers (SINs) for this contract.

Special Item	No.	Primary Engineering Discipline (PED)	
		<i>Electrical Engineering</i>	<i>Mechanical Engineering</i>
<i>Strategic Planning for Technology Programs/Activities</i>	871-1	X	X
<i>Concept Development and Requirements Analysis</i>	871-2	X	X
<i>System Design, Engineering and Integration</i>	871-3	X	X
<i>Test and Evaluation</i>	871-4	X	X
<i>Integrated Logistics Support</i>	871-5	X	X
<i>Acquisition And Life Cycle Management</i>	871-6	X	X

Labor Categories

Note: The labor categories, personnel qualifications and rate sheets provided in this schedule, pages 9 thru 29, reflect the capabilities and labor rates of ***Lockheed Martin Space Operations***, a part of the LMSI business group. LMSO performs a wide spectrum of services supporting NASA and other government agencies. LMSO employs more than 4600 engineers, scientists, systems analysts, technicians and support personnel. Its core competencies include payload design, development, fabrication, integration, test and launch support; space operations, mission planning and scheduling; satellite command, control and monitoring; data analysis, archiving and warehousing; control center design, development and installation; high performance computing; database management; communications engineering; and simulation design and analysis.

LMSO has defined 27 labor categories for the professional and engineering services covered by this contract. Six additional support categories have been defined for required support functions. All labor categories are applicable to all SINS.

PES Labor Category

1. Project Management 4
2. Project Management 5
3. Hardware/General Engineer 1
4. Hardware/General Engineer 2
5. Hardware/General Engineer 3
6. Hardware/General Engineer 4
7. Hardware/General Engineer 5
8. Engineering Software Developer/Analyst 1
9. Engineering Software Developer/Analyst 2
10. Engineering Software Developer/Analyst 3
11. Engineering Software Developer/Analyst 4
12. Engineering Software Developer/Analyst 5
13. Scientist 1
14. Scientist 2
15. Scientist 3
16. Scientist 4
17. Scientist 5

18. Project Support 1
19. Project Support 2
20. Project Support 3
21. Project Support 4
22. Project Support 5
23. Field Service Engineer 2
24. Field Service Engineer 3
25. Professional Administration 1
26. Professional Administration 2
27. Professional Administration 3

PES Support Function

1. Engineering Technician 1
2. Engineering Technician 2
3. Engineering Technician 3
4. Engineering Technician 4
5. Administrative Support 1
6. Administrative Support 2

Professional Engineering Services- Qualifications & Descriptions

The personnel qualifications, including functional responsibilities, education, and experience for each labor category are included in the following section:

PROJECT MANAGEMENT

May manage research and/or product development activities encompassing multiple engineering disciplines, such as electronics, electrical, mechanical, and/or chemical. May manage the planning and conducting of operating systems programming activities for new and existing systems. May manage the writing and/or modifying of operating system modules. May oversee the development of firmware that is incorporated into hardware systems. May manage scientific experiments, investigations, observations and related research studies into the nature and operation of natural phenomena. May oversee the development of theories for understanding and organizing natural phenomena into a systematic and meaningful pattern for the benefit of project advancement and emerging technologies. Assignments are received in task, and sometimes, objective oriented terms. Work is reviewed for soundness of judgment and overall quality and efficiency.

Project Management 4

Minimum Experience: Experience and specialized training commensurate with assignment.

Education: Bachelor's degree in applicable field. Experience may be substituted at the rate of two years of directly related experience for each year of education.

Functional Responsibility: Provides direction to primarily non-exempt and entry level exempt subordinates using established policies and precedents. Administers and executes policies and procedures that typically affect individual subordinate employees. Accomplishes tasks mainly through direct supervision of non-exempt and entry level exempt employees or through subordinate supervisors. Develops work assignments and assesses performance. Ensures that projects are completed on schedule. Majority of liaison is on internal basis with subordinates and supervisors at equivalent level or one/two higher levels. External contacts are infrequent and involve routine matters.

Project Management 5

Minimum Experience: Experience and specialized training commensurate with assignment.

Education: Bachelor's degree in applicable field. Experience may be substituted at the rate of two years of directly related experience for each year of education.

Functional Responsibility: Provides direction to subordinates based on general policies and management guidance. Work is reviewed upon completion for adequacy in meeting objectives. Interprets and executes policies and procedures that typically affect subordinate organizational units. Recommends modifications to operating policies. Accomplishes results through lower level subordinate supervisors, associate managers, or exempt professional staff who exercise significant latitude and independence in assignments. Functions as an advisor to a unit regarding tasks, projects, and operations. Ensures that projects are completed on schedule and within budget. Frequent contacts with internal personnel and outside customers and industry. Conducts briefings and participates in technical meetings for internal and external representatives concerning specific operations.

HARDWARE/GENERAL ENGINEER

May perform research and/or product development tasks encompassing multiple engineering disciplines, such as electronics, electrical, mechanical, and/or chemical. May plan, conduct, and coordinate operating systems programming activities for both new and existing systems. May write and/or modify operating system modules that contain logical and mathematical solutions to operating systems problems or questions. May develop firmware that is incorporated into hardware systems.

Hardware/General Engineer 1

Minimum Experience: Entry level 0 years of experience

Education: Bachelor's degree (or equivalent) in mathematics, computer science, engineering, scientific, or related field. Minimum experience and Bachelor's degree may be substituted with a Master's degree.

Functional Responsibility: Limited use and/or application of technical principles, theories, and concepts. Develops solutions to routine technical problems of limited scope. Work is closely supervised. Follows specific, detailed instructions. Contributes to the completion of routine technical tasks. Contacts are primarily with immediate supervisor, project leaders, and other personnel in the section or group.

Hardware/General Engineer 2

Minimum Experience: 2 years of professional experience or 0 years of experience with related Masters degree. Considered experienced, but still a learner.

Education: Bachelor's degree (or equivalent) in mathematics, computer science, engineering, scientific, or related field. Minimum experience and Bachelor's degree may be substituted with a Master's degree.

Functional Responsibility: Frequent use and application of technical standards, principles, theories, concepts, and techniques. Provides solutions to a variety of technical problems of moderate scope and complexity. Works under general supervision. Follows established procedures. Work is reviewed for soundness of technical judgment and overall adequacy. Contributes to the completion of milestones associated with specific projects. Primarily internal company contacts. Infrequent inter-organizational and outside customer contacts on routine matters.

Hardware/General Engineer 3

Minimum Experience: 5 years of professional experience or 3 years of related experience with Masters degree: Considered career, or journey, level.

Education: Bachelor's degree (or equivalent) in mathematics, computer science, engineering, scientific, or related field. Minimum experience and Bachelor's degree may be substituted with a Master's degree.

Functional Responsibility: Complete understanding and wide application of technical principles, theories and concepts, in the field. General knowledge of other related disciplines. Provides technical solutions to a wide range of difficult problems. Solutions are imaginative, thorough, and practicable, and consistent with organization objectives. Works under only general direction. Independently determines and develops approach to solutions. Work is reviewed upon completion for adequacy in meeting objectives. Contributes to the completion of specific programs and projects. Frequent inter-organizational and outside customer contacts. Represents the organization in providing solutions to difficult technical issues associated with specific projects.

Hardware/General Engineer 4

Minimum Experience: 9 years of professional experience or 7 years of related experience with Masters degree. Considered an emerging authority in discipline.

Education: Bachelor's degree (or equivalent) in mathematics, computer science, engineering, scientific, or related field. Minimum experience and Bachelor's degree may be substituted with a Master's degree.

Functional Responsibility: Applies extensive technical expertise, and has full knowledge of other related disciplines. Develops technical solutions to complex problems, which require the regular use of ingenuity and creativity. Work is performed without appreciable direction. Exercises considerable latitude in determining technical objectives and approaches to assignments. Completed work is reviewed from a relatively long-term perspective for desired results. Guides the successful completion of major programs and may function in a project leadership role. Represents the organization as the prime technical contact on contracts and projects. Interacts with senior external personnel on significant technical matters often requiring coordination between organizations.

Hardware/General Engineer 5

Minimum Experience: 14 years or more of professional experience or 12 years of related experience with Masters degree. Considered an expert, authority in discipline.

Education: Bachelor's degree (or equivalent) in mathematics, computer science, engineering, scientific, or related field. Minimum experience and Bachelor's degree may be substituted with a Master's degree.

Functional Responsibility: Applies advanced technical principles, techniques, theories and concepts. Contributes to the development of new principles and theories. Works on unusually complex technical problems and provides solutions which are highly innovative and ingenious. Works under consultative direction towards predetermined long-range goals and objectives. Assignments are often self-initiated. Determines and pursues courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior. Develops advanced technological ideas and guides their development into a final product. Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications.

ENGINEERING SOFTWARE DEVELOPER/ANALYST

May conduct or participate in multidisciplinary research and collaborate with equipment designers and/or hardware engineers in the planning, design, development, and utilization of electronic data processing systems software. May determine computer user needs; advise hardware designers on machine characteristics that affect software systems. May perform technical planning, system integration, verification and validation, cost and risk, and supportability and effectiveness analyses for total systems. Analyses are performed at all levels of total system product to include: concept, design, fabrication, test, installation, operation, maintenance and disposal. May ensure the logical and systematic conversion of customer or product requirements into total systems solutions that acknowledge technical, schedule, and cost constraints.

Engineering Software Developer/Analyst 1

Minimum Experience: Entry level 0 years of experience.

Education: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or related scientific or technical discipline. Experience may be substituted at the rate of two years of directly related experience for each year of education.

Functional Responsibility: Limited use and/or application of technical principles, theories, and concepts. Develops solutions to routine technical problems of limited scope. Work is closely supervised. Follows specific, detailed instructions. Contributes to the completion of routine technical tasks. Contacts are primarily with immediate supervisor, project leaders, and other personnel in the section or group.

Engineering Software Developer/Analyst 2

Minimum Experience: 2 years of professional experience or 0 years of experience with related Masters degree. Considered experienced, but still a learner.

Education: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or related scientific or technical discipline. Experience may be substituted at the rate of two years of directly related experience for each year of education.

Functional Responsibility: Frequent use and application of technical standards, principles, theories, concepts, and techniques. Provides solutions to a variety of technical problems of moderate scope and complexity. Works under general supervision. Follows established procedures. Work is reviewed for soundness of technical judgment and overall adequacy. Contributes to the completion of milestones associated with specific projects. Primarily internal company contacts. Infrequent inter-organizational and outside customer contacts on routine matters.

Engineering Software Developer/Analyst 3

Minimum Experience: 5 years of professional experience or 3 years of related experience with Masters degree. Considered career, or journey, level.

Education: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or related scientific or technical discipline. Experience may be substituted at the rate of two years of directly related experience for each year of education.

Functional Responsibility: Complete understanding and wide application of technical principles, theories and concepts, in the field. General knowledge of other related disciplines. Provides technical solutions to a wide range of difficult problems. Solutions are imaginative, thorough, and practicable, and consistent with organization objectives. Works under only general direction. Independently determines and develops approach to solutions. Work is reviewed upon completion for adequacy in meeting objectives. Contributes to the completion of specific programs and projects. Frequent inter-organizational and outside customer contacts. Represents the organization in providing solutions to difficult technical issues associated with specific projects.

Engineering Software Developer/Analyst 4

Minimum Experience: 9 years of professional experience or 7 years of related experience with Masters degree. Considered an emerging authority in discipline.

Education: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or related scientific or technical discipline. Experience may be substituted at the rate of two years of directly related experience for each year of education.

Functional Responsibility: Applies extensive technical expertise, and has full knowledge of other related disciplines. Develops technical solutions to complex problems, which require the regular use of ingenuity and creativity. Work is performed without appreciable direction. Exercises considerable latitude in determining technical objectives and approaches to assignments. Completed work is reviewed from a relatively long-term perspective for desired results. Guides the successful completion of major programs and may function in a project leadership role. Represents the organization as the prime technical contact on contracts and projects. Interacts with senior external personnel on significant technical matters often requiring coordination between organizations.

Engineering Software Developer/Analyst 5

Minimum Experience: 14 years or more of professional experience or 12 years of related experience with Masters degree. Considered an expert, authority in discipline.

Education: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or related scientific or technical discipline. Experience may be substituted at the rate of two years of directly related experience for each year of education.

Functional Responsibility: Applies advanced technical principles, techniques, theories and concepts. Contributes to the development of new principles and theories. Works on unusually complex technical problems and provides solutions which are highly innovative and ingenious. Works under consultative direction towards predetermined long-range goals and objectives. Assignments are often self-initiated. Determines and pursues courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior. Develops advanced technological ideas and guides their development into a final product. Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications.

SCIENTIST

May perform scientific experiments, investigations, observations, and related research studies into the nature and operation of natural phenomena in a particular field using scientific methods. May develop theories for understanding, characterizing and organizing natural phenomena into a systematic and meaningful pattern for the benefit of project advancement and emerging technologies.

Scientist 1

Minimum Experience: Entry level 0 years professional experience

Education: Bachelor's degree in a related scientific discipline. Experience may be substituted at

the rate of two years of directly related experience for each year of education

Functional Responsibility: Limited use and/or application of technical principles, theories, and concepts. Develops solutions to routine technical problems of limited scope. Work is closely supervised. Follows specific, detailed instructions. Contributes to the completion of routine technical tasks. Contacts are primarily with immediate supervisor, project leaders, and other personnel in the section or group.

Scientist 2

Minimum Experience: 2 years of professional experience or 0 years of experience with related Masters degree. Considered experience, but still a learner.

Education: Bachelor's degree in a related scientific discipline. Experience may be substituted at the rate of two years of directly related experience for each year of education

Functional Responsibility: Frequent use and application of technical standards, principles, theories, concepts, and techniques. Provides solutions to a variety of technical problems of moderate scope and complexity. Works under general supervision. Follows established procedures. Work is reviewed for soundness of technical judgment and overall adequacy. Contributes to the completion of milestones associated with specific projects. Primarily internal company contacts. Infrequent inter-organizational and outside customer contacts on routine matters.

Scientist 3

Minimum Experience: 5 years of professional experience or 3 years of related experience with Masters degree. Considered career, or journey, level.

Education: Bachelor's degree in a related scientific discipline. Experience may be substituted at the rate of two years of directly related experience for each year of education

Functional Responsibility: Complete understanding and wide application of technical principles, theories and concepts, in the field. General knowledge of other related disciplines. Provides technical solutions to a wide range of difficult problems. Solutions are imaginative, thorough, and practicable, and consistent with organization objectives. Works under only general direction. Independently determines and develops approach to solutions. Work is reviewed upon completion for adequacy in meeting objectives. Contributes to the completion of specific programs and projects. Frequent inter-organizational and outside customer contacts. Represents the organization in providing solutions to difficult technical issues associated with specific projects.

Scientist 4

Minimum Experience: 9 years of professional experience or 7 years of related experience with Masters degree. Considered an emerging authority.

Education: Bachelor's degree in a related scientific discipline. Experience may be substituted at the rate of two years of directly related experience for each year of education

Functional Responsibility: Applies extensive technical expertise, and has full knowledge of other related disciplines. Develops technical solutions to complex problems that require the regular use of ingenuity and creativity. Work is performed without appreciable direction. Exercises considerable latitude in determining technical objectives and approaches to assignments. Completed work is reviewed from a relatively long-term perspective for desired results. Guides the successful completion of major programs and may function in a project leadership role. Represents the organization as the prime technical contact on contracts and projects. Interacts with senior external personnel on significant technical matters often requiring coordination between organizations.

Scientist 5

Minimum Experience: 14 years or more of professional experience or 12 years of related experience with Masters degree. Considered an expert, authority in discipline.

Education: Bachelor's degree in a related scientific discipline. Experience may be substituted at the rate of two years of directly related experience for each year of education

Functional Responsibility: Applies advanced technical principles, techniques, theories and concepts. Contributes to the development of new principles and theories. Works on unusually

complex technical problems and provides solutions which are highly innovative and ingenious. Works under consultative direction towards predetermined long-range goals and objectives. Assignments are often self-initiated. Determines and pursues courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior. Develops advanced technological ideas and guides their development into a final product. Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications.

PROJECT SUPPORT

May conceive, design, lay out, and coordinate editorial illustrations and creative artwork for publications such as magazines, brochures, handbooks, and posters, translating facts and features of subject material into graphic terms that best convey intended meaning. May provide guidance on graphic technology. May work closely with internal company contacts to understand requirements and create cost efficient graphic designs through available mediums. May provide computer graphic services for web artwork. CAD/CAM activities may include conducting or participating in multidisciplinary research and collaborating with circuit designers and/or product line engineers in the design, development, and utilization of software to simulate the characteristics and parameters of integrated systems components, modules, or complete products under operating environment. May write, rewrite and/or edit technical documents such as technical procedure manuals, user manuals, programming manuals, service manuals, operations specifications, and related technical publications to communicate clearly and effectively technical specifications and instructions to a wide range of audiences. May develop new courses and/or conduct formal professional training for customers, and/or in-house customer engineers, and/or OEM (original equipment manufacturers) customer engineers in all facets of computer hardware and software technology.

Project Support 1

Minimum Experience: Entry level 0 years professional experience

Education: Bachelor's degree in a related technical discipline

Functional Responsibility: Limited use and/or application of technical principles, theories, and concepts. Develops solutions to routine technical problems of limited scope. Work is closely supervised. Follows specific, detailed instructions. Contributes to the completion of routine technical tasks. Contacts are primarily with immediate supervisor, project leaders, and other personnel in the section or group.

Project Support 2

Minimum Experience: 2 years of professional experience or 0 years of experience with related Masters degree. Considered experienced, but still a learner.

Education: Bachelor's degree in a related technical discipline

Functional Responsibility: Frequent use and application of technical standards, principles, theories, concepts, and techniques. Provides solutions to a variety of technical problems of moderate scope and complexity. Works under general supervision. Follows established procedures. Work is reviewed for soundness of technical judgment and overall adequacy. Contributes to the completion of milestones associated with specific projects. Primarily internal company contacts. Infrequent inter-organizational and outside customer contacts on routine matters.

Project Support 3

Minimum Experience: 5 years of professional experience or 3 years of related experience with Masters degree. Considered career, or journey, level.

Education: Bachelor's degree in a related technical discipline

Functional Responsibility: Complete understanding and wide application of technical principles, theories and concepts, in the field. General knowledge of other related disciplines. Provides technical solutions to a wide range of difficult problems. Solutions are imaginative, thorough, and practicable, and consistent with organization objectives. Works under only general direction.

Independently determines and develops approach to solutions. Work is reviewed upon completion for adequacy in meeting objectives. Contributes to the completion of specific programs and projects. Frequent inter-organizational and outside customer contacts. Represents the organization in providing solutions to difficult technical issues associated with specific projects.

Project Support 4

Minimum Experience: 9 years of professional experience or 7 years of related experience with Masters degree. Considered an emerging authority.

Education: Bachelor's degree in a related technical discipline

Functional Responsibility: Applies extensive technical expertise, and has full knowledge of other related disciplines. Develops technical solutions to complex problems, which require the regular use of ingenuity and creativity. Work is performed without appreciable direction. Exercises considerable latitude in determining technical objectives and approaches to assignments. Completed work is reviewed from a relatively long-term perspective for desired results. Guides the successful completion of major programs and may function in a project leadership role. Represents the organization as the prime technical contact on contracts and projects. Interacts with senior external personnel on significant technical matters often requiring coordination between organizations.

Project Support 5

Minimum Experience: 14 years or more of professional experience or 12 years of related experience with Masters degree. Considered an expert, authority in discipline.

Education: Bachelor's degree in a related technical discipline

Functional Responsibility: Applies advanced technical principles, techniques, theories and concepts. Contributes to the development of new principles and theories. Works on unusually complex technical problems and provides solutions which are highly innovative and ingenious. Works under consultative direction towards predetermined long-range goals and objectives. Assignments are often self-initiated. Determines and pursues courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior. Develops advanced technological ideas and guides their development into a final product. Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications.

FIELD SERVICE ENGINEER

May perform a variety of activities in one or more of the following and/or related areas: personal computer applications training, data control and scheduling coordination, systems administration, data security administration, and associated fields. May install, operate, maintain, repair, and modify equipment. May conduct technical analysis of product implementations. May perform modifications and enhancements to product in accordance with specific customer specifications and implementations. May troubleshoot technical problems and issues, may determine technical solution in accordance with product and customer specifications, and may recommend actions to company or customer representatives for coordinative product solutions. May assess product needs in accordance with customer specifications. May conduct technical training and product briefing with customers, vendors and company representatives. May act as local on-site representative to customer's organization.

Field Service Engineer 2

Minimum Experience: 2 years of professional experience or 0 years of experience with related Masters degree. Considered experienced, but still a learner.

Education: Bachelor's degree in a related technical discipline

Functional Responsibility: Frequent use and application of technical standards, principles, theories, concepts, and techniques. Provides solutions to a variety of technical problems of moderate scope and complexity. Works under general supervision. Follows established procedures. Work is reviewed for soundness of technical judgment and overall adequacy.

Contributes to the completion of milestones associated with specific projects. Primarily internal company contacts. Infrequent inter-organizational and outside customer contacts on routine matters.

Field Service Engineer 3

Minimum Experience: 5 years of professional experience or 3 years of related experience with Masters degree. Considered career, or journey, level.

Education: Bachelor's degree in a related technical discipline

Functional Responsibility: Complete understanding and wide application of technical principles, theories and concepts, in the field. General knowledge of other related disciplines. Provides technical solutions to a wide range of difficult problems. Solutions are imaginative, thorough, and practicable, and consistent with organization objectives. Works under only general direction. Independently determines and develops approach to solutions. Work is reviewed upon completion for adequacy in meeting objectives. Contributes to the completion of specific programs and projects. Frequent inter-organizational and outside customer contacts. Represents the organization in providing solutions to difficult technical issues associated with specific projects.

PROFESSIONAL ADMINISTRATION

May perform purchasing activities such as compiling and analyzing statistical data to determine feasibility of buying products and to establish price objectives necessary for the operation of an organization. May review proposals, negotiate prices, select or recommend suppliers, analyze trends, follow up on orders placed, verify delivery, approve payment, and maintain necessary records. May develop subcontract specifications, work statements, and terms and conditions for the procurement of specialized materials, equipment, and services. May negotiate and coordinate additions, deletions, or modifications to subcontracts. May participate with contracts administration and purchasing to develop subcontract policies and procedures. May participate in the control of costs and schedules on contracts requiring validated cost schedule control system. May incorporate contractual changes into control systems by staying aware of outstanding work against each contract in order to maintain realistic contract cost and schedule baselines. May develop and administer integrated logistics strategies, including supply chain activities from point of manufacture through information management support, deployment freight, warehousing, customer freight, order management, customer warehousing, customer store shipment, and customer placement.

Professional Administration 1

Minimum Experience: Entry level 0 years professional experience

Education: Bachelor's degree in a related applicable discipline

Functional Responsibility: Limited use and/or application of basic principles, theories, and concepts. Limited knowledge of industry practices and standards. Solves routine problems of limited scope and complexity following established policies and procedures. Work is closely supervised. Follows specific, detailed instructions. Contributions are usually limited to task-related activities. Contacts are primarily with immediate supervisor and other personnel in the section or group.

Professional Administration 2

Minimum Experience: 3 years of professional experience or 1 year of experience with related Masters degree. Considered experienced, but still a learner.

Education: Bachelor's degree in a related applicable discipline

Functional Responsibility: Frequent use and general knowledge of industry practices, techniques, and standards. General application of standard concepts and principles. Develops solutions to a variety of problems of moderate scope and complexity. Refers to policies and practices for guidance. Works under very general supervision. Work is reviewed for soundness of judgment and overall adequacy and accuracy. Contributes to the completion of organizational projects and goals by performing tasks requiring discretion and general knowledge and ability.

Frequent internal company and external contacts. Represents organization on specific projects and teams.

Professional Administration 3

Minimum Experience: 6 years of professional experience or 4 years of related experience with Masters degree. Considered career, or journey, level.

Education: Bachelor's degree in a related applicable discipline

Functional Responsibility: Complete understanding and application of principles, concepts, practices, and standards. Full knowledge of industry and company practices. Develops solutions to a variety of complex problems. May refer to established precedents and policies. Work is performed under general direction. Participates in determining objectives of assignment. Plans schedules and arranges own activities in accomplishing objectives. Work is reviewed upon completion for adequacy in meeting objectives. Exerts some influence on the overall objectives and long-range goals of the organization. Represents organization as a prime contact on contracts or projects. Interacts with senior internal and external personnel on significant matters often requiring coordination between organizations.

ENGINEERING TECHNICIAN

May perform a variety of duties in the electronic, mechanical, electromechanical, or optical areas such as constructing, troubleshooting, calibrating, adjusting, testing, and maintaining equipment, components, devices, or systems. May work from schematics, engineering drawings, and written or verbal instructions. May operate related equipment; conduct tests and develops report data in prescribed format. May use a variety of methods, sequences, and setups to inspect or test specific equipment or product, making modifications and adjustments as necessary. May perform calibration and alignment checks; make adjustments, modifications, and replacements as directed. May prepare prescribed compounds and solutions. May determine methods, operations, sequences, and set procedures for calibration, test, or alignment. May develop or modify products and equipment to requirements. May assist in determining prescribed compounds and solutions. May provide technical support to engineers on a variety of technical tasks. May gather, maintain, format, compile, and manipulate technical data, such as laboratory or material test results and engineering design changes. May produce engineering documentation, reports, and drawings (flow charts, block diagrams, and schematics). May conduct tests and record data to assist with engineering evaluation or analysis. May perform detailed mathematical calculations using established formulae; preliminary analyses of data where guidelines are provided in such areas as trajectory adequacy, model dimensional consistency; and quantitative judgments concerning technical data. May also include other positions such as machinists, inspectors, welders, and various technicians not previously mentioned. May include represented or non-represented personnel.

Engineering Technician 1

Minimum Experience: 0 to 1 Year of experience

Education: High School diploma with additional technical training sufficient enough to perform required basic calculations, electronic/mechanical assembly/test, computer operations, etc.

Functional Responsibility: Apprentice or Trainee. Moderate understanding of general job aspects and superficial understanding of the technical phases of the job. Performs routine, repetitive, and basic tasks where precedent, methods and processes are well established. Makes simple decisions, but refers to more experienced personnel. Impact to overall activity is minimal. Close supervision involving detailed instructions and constant checking on work performance.

Engineering Technician 2

Minimum Experience: 1 year of experience.

Education: High School diploma with additional specialized technical training equivalent to a technical Associate degree and/or demonstrated ability to perform assigned technical/para-engineering tasks.

Functional Responsibility: Good knowledge of the job. Substantial acquaintance with and understanding of general aspects of the job with a limited understanding of the technical phases

of the job. Performs a variety of activities, which involve standard procedures. Gathers and manipulates common data, verifies adequacy and appropriateness; develops charts, diagrams, and standard reports. In technical or production positions, may also set up and operate standard electronic or mechanical equipment used to develop, produce and/or test products or process data. Impact to overall activity limited to immediate functional area. General supervision with instructions given for routine work and detailed instructions for new lines of work or special assignments.

Engineering Technician 3

Minimum Experience: 3 years of experience

Education: High School diploma with additional specialized technical training equivalent to a technical Associate degree and/or demonstrated ability to perform assigned technical/para-engineering tasks.

Functional Responsibility: Normally top-level jobs requiring considerable knowledge of the job. Complete acquaintance with and understanding of the general aspects and technical phases of the job and their practical applications to problems and situations ordinarily encountered. Independently performs non-routine and moderately complex assignments. Researches assignments, processes, and analyzes data and may develop recommendations. Competently uses computers and other systems to access, maintain, and manipulate data. May provide leadership, direction to lower level employees. In technical or production positions, may determine methods, operations, and sequences; develops and/or modifies products and equipment to requirements. Contributes to and supports the completion of major organization activity. Limited supervision. No instructions are needed on routine work, and only general instructions are given on new lines of work or special assignments.

Engineering Technician 4

Minimum Experience: 5 or more years of experience

Education: High School diploma with additional specialized technical training equivalent to a technical Associate degree and/or demonstrated ability to perform assigned technical/para-engineering tasks.

Functional Responsibility: Requires extensive knowledge in specialized functions. A wide and comprehensive acquaintance with and understanding of both general and specific aspects and the technical phases of the job and their practical application to complex problems and situations ordinarily encountered. Usually works without established procedures, performing a wide variety of nonstandard complex tasks using advanced techniques and requiring extensive knowledge of discipline. Analyzes requirements for special projects and recommends methods and processes to accomplish. Conducts research and assists in investigational studies. Supports the design/development of new or modified equipment or methods/systems for improved performance through analysis and checkout. Evaluates and resolves calibrating and troubleshooting problems. Leads and mentors others and lower level employees, may assign work and schedule workflow. Minimal supervision. Work may be done without established procedures. Leads and mentors others and lower level employees, may assign work and schedule workflow.

ADMINISTRATIVE- SUPPORT

May perform a variety of administrative/clerical tasks within such areas as finance, purchasing, human resources, contracts, and material or for a specific project/business/technical unit. Duties may include shipping and receiving, property and material control, mail distribution, data control, maintenance of records, processing purchase orders, storage control, project support, and laboratory support. Tasks may range from establishing and/or maintaining filing systems and verifying accuracy of data, to developing and analyzing data, developing reports, reviewing status reports and budgets, recommending actions based on various reports and statistics. May compile statistics and data using personal computers, databases; generates reports, tables, graphs and correspondence. May assign work to others and prioritize and schedule workflow. May include represented or non-represented personnel.

Administrative Support 1

Minimum Experience: 0 to 1 year of experience

Education: High School diploma

Functional Responsibility: Apprentice or Trainee. Moderate understanding of general job aspects and superficial understanding of the technical phases of the job. Performs routine, repetitive, and basic tasks where precedent, methods and processes are well established. Makes simple decisions, but refers most to more experienced personnel. Close supervision involving detailed instructions and constant checking on work performance.

Administrative Support 2

Minimum Experience: 3 years of experience

Education: High School diploma with additional specialized training in specific aspects of job functions and/or demonstrated ability to perform assigned tasks

Functional Responsibility: Normally top-level jobs requiring considerable knowledge of the job. Complete acquaintance with and understanding of the general aspects and technical phases of the job and their practical applications to problems and situations ordinarily encountered. Independently performs non-routine and moderately complex assignments. Researches assignments, processes, and analyzes data and may develop recommendations. Competently uses computers and other systems to access, maintain, and manipulate data. May provide leadership, direction to lower level employees. In technical or production positions, may determine methods, operations, and sequences; develops and/or modifies products and equipment to requirements. Limited supervision. No instructions are needed on routine work, and only general instructions are given on new lines of work or special assignments.

Labor Rates

OPTION PERIOD 2

January 15, 2013 to January 14, 2018

Labor Category	1/15/13 to 1/14/14	1/15/14 to 1/14/15	1/15/15 to 1/14/16	1/15/16 to 1/14/17	1/15/17 to 1/14/18
Hdw/Gen Eng 1	\$ 90.56	\$ 92.64	\$ 94.77	\$ 96.95	\$ 99.18
Hdw/Gen Eng 2	\$ 106.12	\$ 108.56	\$ 111.05	\$ 113.61	\$ 116.22
Hdw/Gen Eng 3	\$ 127.02	\$ 129.94	\$ 132.93	\$ 135.98	\$ 139.11
Hdw/Gen Eng 4	\$ 152.79	\$ 156.30	\$ 159.89	\$ 163.57	\$ 167.33
Hdw/Gen Eng 5	\$ 174.07	\$ 178.08	\$ 182.17	\$ 186.36	\$ 190.65
Eng SW Dev 1	\$ 102.02	\$ 104.37	\$ 106.77	\$ 109.23	\$ 111.74
Eng SW Dev 2	\$ 119.93	\$ 122.68	\$ 125.51	\$ 128.39	\$ 131.35
Eng SW Dev 3	\$ 144.05	\$ 147.36	\$ 150.75	\$ 154.22	\$ 157.77
Eng SW Dev 4	\$ 173.64	\$ 177.64	\$ 181.72	\$ 185.90	\$ 190.18
Eng SW Dev 5	\$ 198.20	\$ 202.75	\$ 207.42	\$ 212.19	\$ 217.07
Scientist 1	\$ 94.18	\$ 96.34	\$ 98.56	\$ 100.83	\$ 103.15
Scientist 2	\$ 110.45	\$ 112.99	\$ 115.59	\$ 118.25	\$ 120.97
Scientist 3	\$ 132.36	\$ 135.40	\$ 138.51	\$ 141.70	\$ 144.96
Scientist 4	\$ 159.31	\$ 162.98	\$ 166.72	\$ 170.56	\$ 174.48
Scientist 5	\$ 181.62	\$ 185.80	\$ 190.07	\$ 194.45	\$ 198.92
Proj Mgmt 4	\$ 180.29	\$ 184.44	\$ 188.68	\$ 193.02	\$ 197.46
Proj Mgmt 5	\$ 205.85	\$ 210.58	\$ 215.43	\$ 220.38	\$ 225.45
Proj Supt 1	\$ 83.42	\$ 85.33	\$ 87.30	\$ 89.30	\$ 91.36
Proj Supt 2	\$ 97.46	\$ 99.70	\$ 102.00	\$ 104.34	\$ 106.74
Proj Supt 3	\$ 116.36	\$ 119.03	\$ 121.77	\$ 124.57	\$ 127.44
Proj Supt 4	\$ 139.65	\$ 142.86	\$ 146.15	\$ 149.51	\$ 152.95
Proj Supt 5	\$ 158.96	\$ 162.62	\$ 166.36	\$ 170.19	\$ 174.10
Field Serv Eng 2	\$ 86.49	\$ 88.48	\$ 90.52	\$ 92.60	\$ 94.73
Field Serv Eng 3	\$ 131.86	\$ 134.90	\$ 138.00	\$ 141.17	\$ 144.42
Eng Tech 1	\$ 61.72	\$ 63.14	\$ 64.59	\$ 66.08	\$ 67.60
Eng Tech 2	\$ 67.08	\$ 68.62	\$ 70.20	\$ 71.82	\$ 73.47
Eng Tech 3	\$ 72.96	\$ 74.64	\$ 76.35	\$ 78.11	\$ 79.91
Eng Tech 4	\$ 86.07	\$ 88.05	\$ 90.07	\$ 92.15	\$ 94.27
Prof Admin 1	\$ 79.81	\$ 81.65	\$ 83.53	\$ 85.45	\$ 87.41
Prof Admin 2	\$ 93.11	\$ 95.26	\$ 97.45	\$ 99.69	\$ 101.98
Prof Admin 3	\$ 122.10	\$ 124.90	\$ 127.78	\$ 130.71	\$ 133.72
Admin Supt 1	\$ 46.33	\$ 47.40	\$ 48.49	\$ 49.60	\$ 50.74
Admin Supt 2	\$ 48.93	\$ 50.06	\$ 51.21	\$ 52.38	\$ 53.59