

GENERAL SERVICES ADMINISTRATION

FEDERAL SUPPLY SERVICE

AUTHORIZED PROFESSIONAL ENGINEERING SERVICES SCHEDULE PRICELIST

INDUSTRIAL GROUP 871, INDUSTRIAL CLASS 8711 and 8731

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!, a menu-driven database system. The INTERNET address GSA Advantage! is:

<http://www.gsaadvantage.gov/>.

Contract GS-23F-0046P

For more information on ordering from Federal Supply Schedules, click on the FSS Schedules button at fss.gsa.gov

Period of Performance: 11/18/03 – 11/10/08

Option Period: 11/11/08 – 11/10/13

Space Dynamics Laboratory, a unit of the Utah State University Research Foundation

1695 North Research Pkwy

North Logan, UT 84341

<http://www.sdl.usu.edu/>

SDL/USURF is classified as a Large Business. SDL/USURF can accept classified orders.

This schedule can accept the following types of orders:

- **Time and Material**
- **Fixed Price**
- **Labor Hour**

Table of Contents

CAPABILITIES STATEMENT	3
CATALOG INFORMATION	4
1 a. Special Item Numbers (SINs) and Professional Engineering Disciplines	4
1 b. Hourly Rates and Labor Categories	4
2. Maximum Order	6
3. Minimum Order	6
4. Geographic coverage (delivery area)	7
5. Point(s) of Production	7
6. Discount from List Prices or Statement of Net Price	7
7. Quantity Discounts	7
8. Prompt Payment Terms	7
9. Notification that Government Purchase Cards are Accepted at, Below, or Above the Micro-Purchase Threshold	7
10. Foreign items (List Items by Country of Origin)	7
11a. Time of Delivery	7
11b. Expedited Delivery	7
11c. Overnight and 2-day delivery	7
11d. Urgent Requirements	7
12. F.O.B point(s)	7
13a. Ordering Address	7
13b. Ordering Procedures	8
14. Payment Address	8
15. Warranty Provision	8
16. Export Packing Charges	8
17. Terms and Conditions of Government Purchase Card Acceptance	8
18. Terms and Conditions of Rental, Maintenance, and Repair	8
19. Terms and Conditions of Installation	8
20. Terms and Conditions of Repair Parts Indicating Date of Parts Price Lists and any Discounts from List Prices	8
21. List of Service and Distribution Points	8
22. List of Participating Dealers	8
23. Preventive Maintenance	8
24a. Special Attributes Such as Environmental Attributes	9
24b. Section 508 Compliance	9
25. Data Universal Number System (DUNS) Number	9
26. Notification Regarding Registration in Central Contractor Registration (CCR) Database	9
APPENDIX A	10
APPENDIX B	17

CAPABILITIES STATEMENT

SDL conceives and develops state-of-the-art sensor and satellite systems and subsystems; performs space-, air- and ground-based experiments; conducts rapid development of prototype sensor hardware and associated software; performs concept definition and planning, validation studies and demonstrations; performs simulations, modeling and analyses; develops thermal management systems including cryogenic and cryocooler systems, thermal links and thermal switches; and calibrates and characterizes the performance of electro-optical systems. SDL's intelligence, surveillance and reconnaissance branch develops state-of-the-art technologies for data acquisition, transmission and visualization applications.

Core competencies include infrared, visible, ultraviolet, hyperspectral, hypertemporal, and polarimetric electro-optical sensor systems; lidar and ladar systems; small rockets and payloads; data compression and visualization; contamination control and materials science; space agriculture; vehicle environment interaction; atmospheric science; calibration and on-orbit performance assessment and validation including stray light modeling and performance analyses; cryogenics and thermal management; specialized mechanisms and controls; structures and structural analysis.

SDL provides full program management, systems engineering, cost analysis, scheduling, documentation, environmental testing (thermal, thermal-vacuum, vibrational, EMI/EMC), computer aided design and machining, surface mount circuit board design and production, and full optical, electrical, and mechanical design and analysis services.

CATALOG INFORMATION

1 a. Special Item Numbers (SINs) and Professional Engineering Disciplines

SDL/USURF has been awarded the following Special Item Numbers (SINs) and Professional Engineering Disciplines:

Special Item Number	Description	Primary Engineering Discipline	
		Electrical	Mechanical
871-1	STRATEGIC PLANNING FOR TECHNOLOGY PROGRAMS/ACTIVITIES	X	X
871-2	CONCEPT DEVELOPMENT AND REQUIREMENTS ANALYSIS	X	X
871-3	SYSTEM DESIGN, ENGINEERING AND INTEGRATION	X	X
871-4	TEST AND EVALUATION	X	X
871-5	INTEGRATED LOGISTICS SUPPORT	X	X
871-6	ACQUISITION AND LIFE CYCLE MANAGEMENT	X	X

Please see Appendix A for full descriptions of the SINs, Professional Engineering Disciplines, and Services not provided for under this Schedule.

1 b. Hourly Rates and Labor Categories

SDL/USURF has negotiated the following hourly rates and labor categories under this Schedule. These rates are applicable to all SINs. On-Site rates are used for personnel located in SDL/USURF owned facilities. Off-Site rates are used for personnel located in facilities not owned by SDL/USURF.

All rates are inclusive of .75% Industrial Funding Fee.

Other Direct Costs: To be determined on a Task Order by Task Order basis.

Annual Escalation Factor: 3.7% from Base Period, Years 1-5 and 3.7% for the option period, if exercised, years 6-10.

Descriptions of the labor categories can be found in Appendix B.

ON-SITE RATES										
	BASIC CONTRACT (5 Years)					OPTION 1 (ADDITIONAL 5 YEARS)				
	7/1/03 – 6/30/04	7/1/04 – 6/30/05	7/1/05 – 6/30/06	7/1/06 – 6/30/07	7/1/08 – 6/30/09	7/1/09 – 6/30/10	7/1/10 – 6/30/11	7/1/11 – 6/30/12	7/1/12 – 6/30/13	7/1/13 – 6/30/14
Labor Category	Year 1 (\$)	Year 2 (\$)	Year 3 (\$)	Year 4 (\$)	Year 5 (\$)	Year 6 (\$)	Year 7 (\$)	Year 8 (\$)	Year 9 (\$)	Year 10 (\$)
Sr. Program Mgr/Sr. Systems Eng	186.59	193.49	200.65	208.08	215.77	223.76	232.04	240.62	249.52	258.76
Program Mgr	146.40	151.81	157.43	163.26	169.30	175.56	182.06	188.79	195.78	203.02
Systems Eng, General	124.26	128.86	133.63	138.57	143.70	149.02	154.53	160.25	166.18	172.32
Systems Eng, Scientist	134.30	139.27	144.42	149.77	155.31	161.06	167.02	173.19	179.60	186.25
Systems Eng, Electrical	125.47	130.11	134.92	139.91	145.09	150.46	156.03	161.80	167.79	173.99
Systems Eng, Electro-Optical	126.93	131.63	136.50	141.55	146.79	152.22	157.85	163.69	169.75	176.03
Systems Eng, Software	128.78	133.55	138.49	143.61	148.93	154.44	160.15	166.08	172.22	178.59
Sr. Eng, Scientist	103.21	107.03	110.99	115.10	119.36	123.77	128.35	133.10	138.03	143.13
Sr. Eng, Mech & Therm	108.79	112.82	116.99	121.32	125.81	130.46	135.29	140.30	145.49	150.87
Sr. Eng, Electrical	120.24	124.69	129.30	134.09	139.05	144.19	149.53	155.06	160.80	166.75
Sr. Eng, Electro-Optical	110.05	114.13	118.35	122.73	127.27	131.98	136.86	141.92	147.17	152.62
Sr. Eng, Software	112.34	116.50	120.81	125.28	129.92	134.72	139.71	144.88	150.24	155.80
Eng, General	93.17	96.62	100.19	103.90	107.75	111.73	115.87	120.15	124.60	129.21
Eng, Scientist	82.72	85.78	88.96	92.25	95.66	99.20	102.87	106.68	110.62	114.72
Eng, Mech & Therm	92.44	95.86	99.41	103.08	106.90	110.85	114.95	119.21	123.62	128.19
Eng, Electrical	94.32	97.81	101.43	105.18	109.07	113.11	117.29	121.63	126.13	130.80
Eng, Software	99.37	103.04	106.86	110.81	114.91	119.16	123.57	128.14	132.88	137.80
Jr. Eng, Electrical	71.51	74.15	76.90	79.74	82.69	85.75	88.92	92.21	95.63	99.16
Jr. Eng, Electro-Optical	72.89	75.58	78.38	81.28	84.29	87.41	90.64	93.99	97.47	101.08
Jr. Eng, Software	74.94	77.71	80.59	83.57	86.66	89.87	93.20	96.64	100.22	103.93
Sr. Designer	89.80	93.12	96.56	100.14	103.84	107.68	111.67	115.80	120.09	124.53
Designer	69.07	71.63	74.28	77.02	79.87	82.83	85.89	89.07	92.37	95.79
Sr. Technologist	81.64	84.66	87.79	91.04	94.40	97.90	101.52	105.28	109.17	113.21
Technologist	65.31	67.73	70.23	72.83	75.53	78.32	81.22	84.23	87.34	90.57
Technician	52.51	54.46	56.47	58.56	60.73	62.97	65.30	67.72	70.23	72.82
Sr. Support Staff/Tech Writer	87.80	91.05	94.42	97.91	101.53	105.29	109.19	113.23	117.42	121.76
Support Staff/Tech Writer	66.11	68.55	71.09	73.72	76.45	79.27	82.21	85.25	88.40	91.67
Jr. Support Staff/Tech Writer	48.70	50.50	52.37	54.30	56.31	58.40	60.56	62.80	65.12	67.53
Assemblers, Logistics, Support Staff	42.06	43.62	45.23	46.90	48.64	50.44	52.31	54.24	56.25	58.33
Graduate Students	25.40	26.34	27.31	28.33	29.37	30.46	31.59	32.76	33.97	35.22
Undergraduate Students	20.24	20.99	21.77	22.57	23.41	24.28	25.17	26.10	27.07	28.07

OFF-SITE RATES										
	BASIC CONTRACT (5 Years)					OPTION 1 (ADDITIONAL 5 YEARS)				
	7/1/03 – 6/30/04	7/1/04 – 6/30/05	7/1/05 – 6/30/06	7/1/06 – 6/30/07	7/1/08 – 6/30/09	7/1/09 – 6/30/10	7/1/10 – 6/30/11	7/1/11 – 6/30/12	7/1/12 – 6/30/13	7/1/13 – 6/30/14
Labor Category	Year 1 (\$)	Year 2 (\$)	Year 3 (\$)	Year 4 (\$)	Year 5 (\$)	Year 6 (\$)	Year 7 (\$)	Year 8 (\$)	Year 9 (\$)	Year 10 (\$)
Sr. Program Mgr/Sr. Systems Eng	144.67	150.02	155.57	161.33	167.30	173.49	179.91	186.56	193.47	200.62
Program Mgr	113.65	117.86	122.22	126.74	131.43	136.29	141.34	146.57	151.99	157.61
Systems Eng, General	96.57	100.15	103.85	107.69	111.68	115.81	120.10	124.54	129.15	133.93
Systems Eng, Scientist	104.32	108.18	112.18	116.33	120.64	125.10	129.73	134.53	139.51	144.67
Systems Eng, Electrical	97.50	101.11	104.85	108.73	112.75	116.92	121.25	125.74	130.39	135.21
Systems Eng, Electro-Optical	98.63	102.28	106.07	109.99	114.06	118.28	122.66	127.20	131.90	136.78
Systems Eng, Software	100.06	103.76	107.60	111.58	115.71	119.99	124.43	129.04	133.81	138.76
Sr. Eng, Scientist	80.33	83.30	86.38	89.58	92.89	96.33	99.90	103.59	107.42	111.40
Sr. Eng, Mech & Therm	84.63	87.77	91.01	94.38	97.87	101.49	105.25	109.14	113.18	117.37
Sr. Eng, Electrical	93.47	96.93	100.51	104.23	108.09	112.09	116.24	120.54	125.00	129.62
Sr. Eng, Electro-Optical	85.61	88.78	92.06	95.47	99.00	102.66	106.46	110.40	114.48	118.72
Sr. Eng, Software	87.37	90.61	93.96	97.44	101.04	104.78	108.66	112.68	116.85	121.17
Eng, General	72.58	75.27	78.05	80.94	83.93	87.04	90.26	93.60	97.06	100.65
Eng, Scientist	64.52	66.90	69.38	71.95	74.61	77.37	80.23	83.20	86.28	89.47
Eng, Mech & Therm	72.02	74.68	77.44	80.31	83.28	86.36	89.56	92.87	96.31	99.87
Eng, Electrical	73.46	76.18	79.00	81.93	84.96	88.10	91.36	94.74	98.24	101.88
Eng, Software	77.36	80.22	83.19	86.27	89.46	92.77	96.21	99.76	103.46	107.28
Jr. Eng, Electrical	55.86	57.93	60.07	62.30	64.60	66.99	69.47	72.04	74.70	77.47
Jr. Eng, Electro-Optical	56.93	59.03	61.22	63.48	65.83	68.27	70.79	73.41	76.13	78.95
Jr. Eng, Software	58.51	60.68	62.92	65.25	67.67	70.17	72.77	75.46	78.25	81.14
Sr. Designer	69.98	72.57	75.25	78.03	80.92	83.92	87.02	90.24	93.58	97.04
Designer	53.98	55.98	58.05	60.20	62.43	64.74	67.13	69.61	72.19	74.86
Sr. Technologist	63.68	66.03	68.48	71.01	73.64	76.36	79.19	82.12	85.16	88.31
Technologist	51.08	52.97	54.93	56.96	59.07	61.26	63.52	65.88	68.31	70.84
Technician	41.20	42.73	44.31	45.95	47.65	49.41	51.24	53.14	55.10	57.14
Sr. Support Staff/Tech Writer	68.44	70.97	73.59	76.32	79.14	82.07	85.10	88.25	91.52	94.91
Support Staff/Tech Writer	51.69	53.61	55.59	57.65	59.78	61.99	64.29	66.66	69.13	71.69
Jr. Support Staff/Tech Writer	38.26	39.68	41.14	42.67	44.24	45.88	47.58	49.34	51.16	53.06
Assemblers, Logistics, Support Staff	33.14	34.37	35.64	36.96	38.32	39.74	41.21	42.74	44.32	45.96
Graduate Students	19.34	20.06	20.80	21.57	22.37	23.20	24.06	24.95	25.87	26.83
Undergraduate Students	16.14	16.74	17.36	18.00	18.67	19.36	20.07	20.82	21.59	22.39

2. Maximum Order

\$750,000.00. This is the suggested renegotiation point, agencies should seek additional concessions if orders exceed this amount.

3. Minimum Order

\$100.00

4. Geographic coverage (delivery area)

48 contiguous states. Does not include Alaska, Hawaii, or Puerto Rico.

5. Point(s) of Production

Logan, Utah and Bedford Massachusetts.

6. Discount from List Prices or Statement of Net Price

The prices listed are the discounted hourly rates.

7. Quantity Discounts

None

8. Prompt Payment Terms

Net 30

9. Notification that Government Purchase Cards are Accepted at, Below, or Above the Micro-Purchase Threshold

SDL accepts Government purchase cards at, below, and above the micropurchase threshold.

10. Foreign items (List Items by Country of Origin)

SDL currently does not have any foreign items that will be used on this schedule.

11a. Time of Delivery

To be negotiated per task order.

11b. Expedited Delivery

No items are listed for expedited delivery. Expedited delivery can be negotiated per task order.

11c. Overnight and 2-day delivery

No items are listed for expedited delivery. Expedited delivery can be negotiated per task order.

11d. Urgent Requirements

Urgent requirements will be negotiated per task order.

12. F.O.B point(s)

Destination

13a. Ordering Address

For RFPs/PO's/Contract Awards:

Cage: 05924

DUNS: 09 776 0433

Utah State University Research Foundation

1695 North Research Pkwy

North Logan, UT 84341

Attn: Hilary Lovell
Phone: (435) 797-5825
Fax: (435) 797-4328
E-mail: hilary.lovell@usurf.usu.edu

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 (fss.gsa.gov/schedules).

14. Payment Address

Please remit payments to:

Mr. Lyndon Loosle, Treasurer and Controller
Utah State University Research Foundation
1695 North Research Pkwy
North Logan, UT 84341

15. Warranty Provision

Warranty language will be negotiated on a per Task Order basis.

16. Export Packing Charges

Export packing charges will be negotiated on a per Task Order basis.

17. Terms and Conditions of Government Purchase Card Acceptance

Please see Item #9 above.

18. Terms and Conditions of Rental, Maintenance, and Repair

Terms and Conditions of rental, maintenance, and repair will be negotiated on a per Task Order basis.

19. Terms and Conditions of Installation

Installation will be negotiated on a per Task Order basis.

20. Terms and Conditions of Repair Parts Indicating Date of Parts Price Lists and any Discounts from List Prices

Terms and Conditions of repair parts indicating date of parts price lists and any discounts from list prices will be negotiated on a per Task Order basis.

21. List of Service and Distribution Points

Not applicable.

22. List of Participating Dealers

Not applicable.

23. Preventive Maintenance

This will be negotiated on a per Task Order basis.

24a. Special Attributes Such as Environmental Attributes

Not applicable.

24b. Section 508 Compliance

Not applicable.

25. Data Universal Number System (DUNS) Number

09 776 0433

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

Database

SDL/USURF is registered in the CCR database under DUNS number 09 776 0433 and CAGE codes 05924 and 1VNP0. Our CCR number is 1997J287997.

APPENDIX A

Descriptions of Special Item Numbers, Professional Engineering Disciplines, and Services that ARE NOT included in the PES Schedule.

871-1 STRATEGIC PLANNING FOR TECHNOLOGY PROGRAMS/ACTIVITIES

Services available 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.*

871-2 CONCEPT DEVELOPMENT AND REQUIREMENTS ANALYSIS Services available 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 tasks include, but are not limited to: requirements analysis, cost-performance trade-off analysis, feasibility analysis, regulatory compliance support, technological 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.*

871-3 SYSTEM DESIGN, ENGINEERING AND INTEGRATION

Services available 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, trace ability, 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, prototype 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.*

871-4 TEST AND EVALUATION

Services available 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) 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 a 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 involves 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.

SIN 871-6 ACQUISITION AND LIFE CYCLE MANAGEMENT

Services required under this SIN involve all 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 (including, but not limited to, construction 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.

PROFESSIONAL ENGINEERING DISCIPLINES DESCRIPTIONS:

- **Electrical Engineering (EE):**

Includes 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 photonics, satellites, missiles and guidance systems, space vehicles, fiber optics, robotics etc.). There are several specialties within the scope of work for electrical engineering. They include:

- Aerospace and Electronic Systems
- Antennas and Propagation
- Broadcast Technology
- Circuits and Systems
- Communications
- Components Packaging and Manufacturing Technology
- Computer*
- Consumer Electronics
- Control Systems
- Dielectrics and Electrical Insulation
- Education
- Electromagnetic Compatibility
- Engineering in Medicine and Biology
- Engineering Management
- Geosciences and Remote Sensing
- Industrial Electronics
- Industry Applications
- Information Theory
- Instrumentation and Measurement
- Intelligent Transportation Systems
- Lasers and Electro-Optics
- Magnetics
- Microwave Theory and Techniques
- Neural Networks Council
- Nuclear and Plasma Sciences
- Oceanic Engineering
- Power Engineering
- Professional Communication
- Reliability
- Robotics and Automation
- Signal Processing on Social Implications of Technology
- Solid-State Circuits
- Systems, Man and Cybernetics
- Ultrasonics, Ferroelectrics and Frequency Control

- Vehicular Technology
- Other Chemical Engineering Specialties not listed in the “Services not Included Paragraph”

- **Mechanical Engineering (ME):**

It includes planning, development, evaluation and control of systems and components involving the production and transfer of energy, with the conversion of one form of energy to another. Mechanical engineering 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.). There are several specialties within the scope of work for mechanical engineering. They include:

- Advanced Energy Systems
- Aerospace Engineering
- Applied Mechanics
- ASME Heat Transfer/K16
- 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
- Materials Handling Engineering*
- Microchannel Flow and Heat Transfer
- Noise Control and Acoustics
- Non-Destructive Evaluation Engineering
- Nuclear Engineering
- Ocean Engineering
- Offshore Mechanics and Arctic Engineering
- Petroleum

- Plant Engineering and Maintenance
- Power
- Pressure Vessels and Piping
- Process Industries
- Rail Transportation
- Safety Engineering and Risk Analysis
- Solar Energy
- Solid Waste Processing
- Technology and Society
- Textile Engineering
- Tribology
- Other Mechanical Engineering Specialties not listed in the “Services not Included Paragraph”

***Services Not Included**

The following services are not currently being solicited. However, GSA reserves the sole right to include these services under PES at a future time during the period of performance. If GSA exercises this right, it will refresh the solicitation and consider offers from all eligible sources.

1. Construction and Architect-Engineering Services as set forth in FAR Part 36:

Construction services as defined in FAR 2.101 must be procured in accordance with FAR Part 36, **except for Construction Management Services***. Architect-Engineering (A/E) services related to real property, as defined in FAR 36.601-3, are also excluded. If an agency is interested in ordering Construction and Architect-Engineering Services, please contact GSA’s Public Building Service (PBS) on (202) 501-1100 for additional information.

***Note:** Construction Management Services that neither meet the FAR 36.601-3 definition of A/E Services nor the FAR 2.101 definition of construction CAN be performed under all of the SINs of the Professional Engineering Services schedule if it is considered as a commercial item.

2. Production and Manufacturing: Please note- the manufacture, fabrication, installation or production for the purpose of developing working models or prototypes that may be used for further testing, analysis and evaluation before full scale production begins IS allowed under the PES schedule. The number of prototypes or working models to be produced is dependent upon the ordering activities requirement for testing and analysis. However, the predominate amount of the work on PES task orders should be performed by professional labor categories.

3. Computer Engineering and Information Technology Services: These services include computer/ software engineering and information technology. If an agency is interested in obtaining these types of services, please look to GSA’s Group 70 schedule for Information Technology or contact the IT Center’s Customer Service at (703) 305-3038.

4. Environmental Advisory Services include:

A) Environmental Planning Services and Documentation: environmental impact statements; endangered species, wetlands, watersheds and other natural resource management plans, studies and consultations; archeological, historical and other cultural resources management plans, studies and consultations; and economic, technical and risk analyses in support of environmental needs;

B) Environmental Compliance Services: environmental compliance audits; compliance management planning; and pollution prevention surveys;

C) Environmental/Occupational Training Services Specific to Environmental Planning and Environmental Compliance as Discussed Above: conventional course development and presentation; customized courses to meet specific needs; and computer-based interactive course development;

D) Waste Management Services: 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.

E) Hazardous Materials Management Advisory Services: furnishing of Material Safety Data Sheets (MSDS) by compact disc, on-line via Internet, mail or facsimile (FAX); and reporting and compliance software, hazardous materials tracking software and other related software/services.

F) Telephone Advisory Services: telephone assistance with hazardous material spills, poisons, MSDS, and other related services.

For agencies interested in purchasing Environmental Advisory Services, please examine GSA's schedule 899 for Environmental Services or contact Customer Service at (800) 241-7246.

5. Foundations and Landscape Engineering: Please contact GSA's Public Building Service (PBS) on (202) 501-1100 or visit their website at www.gsa.gov/pbs for additional information about these services.

6. 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: For agencies interested in utilizing these types of services, please contact GSA's PBS on (202) 501-1100 or visit their website at www.fss.gsa.gov/pbs for additional information. **Please note-** HVAC related to the manufacture, production, furnishing, construction, alteration, repair, processing or assembling of vessels, aircraft, or other kinds of personal property is included within the scope of the PES schedule.

7. Research and Development as Set Forth in FAR Part 35. The research and development covered by FAR Part 35 includes open-ended research with no specific deliverables. **Please**

note- research, analysis and developmental work that is linked to providing a solution to an engineering requirement is allowed under the PES schedule.

8. Surveying as it relates to real property.

9. Products/Materials Already Solicited Under Other Federal Supply Service (FSS) Schedule Contracts (e.g., information technology, paper, chemicals, pharmaceuticals, laboratory instruments, etc.): Even though these types of services are not covered by the PES schedule, PES contractors may team across FSS schedules to provide a total solution to agency requirements.

APPENDIX B

Descriptions of Labor Categories

USURF/SDL uses the following labor categories for persons working specifically on and chargeable as direct labor to a contract. Those labor categories that are stricken are not currently available under this schedule. Other categories that have parentheses do not have a specific labor rate, but the labor category in parentheses is the rate that is used. For example, labor category #7 “Senior Calibration Engineer” has a rate that corresponds with Senior Engineering, Electro-Optical.

STATUS: N=Non-Exempt X=Exempt

1. Sr. Program Manager/Sr. Systems Engineer Status: X

Responsible for managing large government programs. Ensures that all required resources such as engineering, manpower, production, computer time, facilities and the like are available for the program. Plans, directs and monitors program budget and serves as primary customer contact for program information.

MINIMUM POSITION REQUIREMENTS

- Education MS degree with emphasis in engineering or technical discipline.
- Experience 10+ (with BS) or 8+ (with MS) years in an engineering, research or scientific functions.

2. Program Manager & Systems Engineer (General, Scientist, Electrical, Electro-Optical, Software) Status: X

Scientific and engineering capabilities span broad ranges of disciplines. Able to translate system needs into requirements and coordinate the technical aspects of design, fabrication, testing, and integration of satellites to meet these requirements. Includes detailed design and evaluation of assigned projects as well as supervision of engineering and technical staff. Presents concepts and designs before critical audiences are required.

MINIMUM POSITION REQUIREMENTS

- Education MS degree with emphasis in engineering or technical discipline or equivalent experience.
- Experience Minimum of 8 years of related experience

3. Senior Engineer/Scientist **Status: X**

Plans and performs scientific duties on new and varied problems where only general objectives are stated. Coordinates broad phases of the project and performs advanced development work to obtain or maintain technical leadership in assigned field. Plans scientific effort in coordination with related activities or other projects, departments, etc. Collaborates with supervisor to determine scheduling, budget, manpower, equipment and supplies required for assigned project. Demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles. May provide work leadership for lower level employees.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) Degree in Mathematics, Physics, Chemistry, a related field or equivalent experience.
- Experience 9-12 (with BS) or 7-8 (with MS) years related experience in an engineering or scientific function, including research

4. Senior Mechanical & Thermal Engineer **Status: X**

Develops and applies advanced mechanical design theories and researches techniques in the investigation and solution of complex and advanced technical problems in structural and thermal analysis and fabrication. Plans, conducts and technically directs entire projects or major phases of significant projects.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 9-12 (with BS) or 4-8 (with MS) years applicable engineering experience.

5. Senior Electrical Engineer **Status: X**

Develops and applies advanced hardware design methods, theories and research techniques in the investigation and solution of complex and advanced technical problems. Plans, conducts and technically directs projects or major phases of significant projects.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 8-12 years (with BS) or 4-8 (with MS) years applicable engineering experience.

6. Senior Electro & Optical Engineer

Status: X

Works in the area of optical sensors and instrument design. Performs system engineering and detailed optical design of electro-optical systems both visible and infrared. Also carries out optical modeling and analysis using commercial optical analysis software to evaluate competitive design options. Experienced with the use of optical analysis software and optical alignment and test equipment including theodolites, and the Zygo or Lupi interferometers.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 9-12 years (with BS) or 4-8 (with MS) years applicable engineering experience.

7. Senior Calibration Engineer (Sr. Engineer, Electro-Optical)

Status: X

Characterizes and calibrates infrared sensors. Responsible for developing and writing calibration plans, identifying/specifying calibration sources and related supporting hardware, gives oral and written presentations at technical interchange meetings, and performs data collection/analyses. Develops and applies advanced hardware design methods, theories and research techniques in the investigation and solution of complex and advanced technical problems. Plans, conducts and technically directs projects or major phases of significant projects. Reports calibration results in oral presentations as well as written reports and papers.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 9-12 years (with BS) or 4-8 (with MS) years applicable engineering experience.

8. Senior Computer Engineer (Software)

Status: X

Develops and applies advanced methods, theories and research techniques in the investigation and solution of complex and advanced software applications and programs. Plans, conducts and technically directs projects or major phases of significant projects.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 9-12 (with BS) or 4-8 (with MS) years applicable engineering experience.

9. Senior Contamination Engineering (Sr. Engineer/Scientist) Status: X

Plans and performs scientific duties on new and varied problems where only general objectives are stated. Coordinates broad phases of the project and performs advanced development work to obtain or maintain technical leadership in assigned field. Plans scientific effort in coordination with related activities or other projects, departments, etc. Collaborates with supervisor to determine scheduling, budget, manpower, equipment and supplies required for assigned project. Demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles. May provide work leadership for lower level employees.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 9-12 (with BS) or 2-4 (with MS) years applicable engineering experience.

10. Engineer/Scientist Status: X

Carries out development and testing of programs on systems, components and materials concurrent with design, fabrication or testing to better evaluate and minimize future problems. Develops alternative solutions to existing problems. Performs or delegates all detail work necessary to determine optimum solution(s). Evaluates proposals and makes recommendations based on sound scientific principles and practical considerations. Prepares cost and schedule estimates and technical documents on proposed projects in assigned area. Demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in mathematics, physics, chemistry, a related field or equivalent experience.
- Experience 5-8 (with BS) or 3-6 (with MS) years in an engineering, research or scientific functions.

11. Mechanical & Thermal Engineering Status: X

Develops, modifies and evaluates conceptual mechanical design. Performs structural and thermal analysis and fabrication. Has technical responsibility for planning and conducting technical projects or phases of projects and may coordinate the efforts of technical support personnel in testing and field support of state-of-the-art instruments.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 5-8 (with BS) or 2-4 (with MS) years applicable engineering experience.

12. Electrical Engineer Status: X

Designs, develops, modifies and evaluates complex and difficult hardware devices and/or systems. Has technical responsibility for planning and conducting technical projects or phases of projects and may coordinate the efforts of technical support personnel, drafters, technical writers and engineering technicians as required.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 4-8 (with BS) or 2-4 (with MS) years applicable engineering experience.

13. Calibration Engineering (Electro-Optical Engineer) Status: X

~~Characterizes and calibrates infrared sensors. Responsible for performing trade-offs with sensor engineers, developing and writing calibration plans, identifying/specifying calibration sources and related support hardware, gives oral and written presentations at technical interchange meetings, and performs data collection/analyses. Has technical responsibility for planning and conducting technical projects or phases of projects and may coordinate the efforts of technical support personnel. Leadership role in performing the tasks listed above. Reports calibration results in oral presentations as well as written reports and papers.~~

MINIMUM POSITION REQUIREMENTS

- ~~• Education BS (MS preferred) degree in engineering discipline or equivalent experience.~~
- ~~• Experience 5-8 (with BS) or 2-4 (with MS) years applicable engineering experience.~~

14. Contamination Engineering (Engineer/Scientist) Status: X

Carries out development and testing of programs on systems, components and materials concurrent with design, fabrication or testing to better evaluate and minimize future problems. Develops alternative solutions to existing problems. Performs or delegates all detail work necessary to determine optimum solution(s). Evaluates proposals and makes recommendations based on sound scientific principles and practical considerations. Prepares cost and schedule estimates and technical documents on proposed projects in assigned area. Demonstrates creative ability through patent disclosures, problem solving, scientific reports or technical papers and articles.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 5-8 (with BS) or 2-4 (with MS) years applicable engineering experience.

15. Computer Engineer (Software) Status: X

Designs, develops and analyzes complicated and difficult software programs for computer based systems. Performs systems modeling, simulation and analysis. Designs and develops utility programs. Collaborates with hardware design engineers on machine characteristics that affect the program.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 5-8 (with BS) or 2-4 (with MS) years applicable engineering experience.

16. Electro & Optical Engineering Status: X

~~Works in the area of optical sensors and instrument design. Performs system engineering and detailed optical design of electro-optical systems both visible and infrared. Also carries out optical modeling and analysis using commercial optical analysis software to evaluate competitive design options. Experienced with the use of optical analysis software and optical alignment and test equipment including theodolites, and the Zygo or Lupi interferometers.~~

MINIMUM POSITION REQUIREMENTS

- ~~• Education BS (MS preferred) degree in engineering discipline or equivalent experience.~~
- ~~• Experience 5-8 (with BS) or 2-4 (with MS) years applicable engineering experience.~~

17. Junior Engineer/Scientist Status: X

~~Responsible for analyzing problems and developing experimental or theoretical techniques for formalized engineering or scientific studies. Resolves a variety of technical problems leading to advanced engineering studies designed to increase efficiency or reduce costs. Demonstrates creative ability through patent disclosures or published papers. Prepares technical manuals, reports and procedures reflecting advanced knowledge in assigned area of expertise.~~

MINIMUM POSITION REQUIREMENTS

- ~~• Education BS (MS preferred) degree in mathematics, physics, chemistry, a related field or equivalent experience.~~

- ~~Experience 0-4 years related experience involving application of scientific functions.~~

18. Junior Electrical Engineer Status: X

Designs, develops, modifies, and evaluates complex hardware devices and/or systems. Diagnoses malfunctions in existing products and makes improvements or modifications to produce desired results. Compiles and evaluate design and test data and prepares technical specifications. Analyzes, develops and recommends design approaches to meet production requirements for new or improved products and/or processes. Interfaces with technical support personnel, drafters, technical writers and engineering technicians as required.

MINIMUM POSITION REQUIREMENTS

- Education BS in electrical engineering
- Experience 1-4 years of related experience

19. Junior Mechanical & Thermal Engineering Status: X

~~Works in all phases of space flight programs with emphasis on thermal vacuum design, analysis, and testing of state-of-the-art instruments. Duties include concept development, proposal preparation, mechanical design, thermal analysis, fabrication support, vacuum testing, and field support. Works, and often leads in a team environment.~~

MINIMUM POSITION REQUIREMENTS

- ~~Education BS (MS preferred) degree in mathematics, physics, chemistry, a related field or equivalent experience.~~
- ~~Experience 0-4 years relevant experience or an MSME. Proficient in the use of design tools such as CAD and solid modeling packages. Experienced with SDRC I-DEAS and NASTRAN software as well as opto-mechanical/electro-mechanical design and environmental testing.~~

20. Junior Computer Engineer (Software) Status: X

Designs, develops, troubleshoots and analyzes software programs for computer based systems. Performs systems modeling, simulation and analysis. Designs and develops utility programs. Advises hardware design engineers on machine characteristics that affect the program.

MINIMUM POSITION REQUIREMENTS

- Education BS in engineering, applied optics, physics, or other related fields
- Experience 0-4 years design experience, including one year experience with design concepts and elements.

21. Junior Electro & Optical Engineering Status: X

Works in the area of optical sensors and instrument design. Performs system engineering and detailed optical design of electro-optical systems both visible and infrared. Also carries out optical modeling and analysis using commercial optical analysis software to evaluate competitive design options. Experienced with the use of optical analysis software and optical alignment and test equipment including theodolites, and the Zygo or Lupi interferometers.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) Applied Optics, Optics or related field.
- Experience 0-4 years design experience with infrared systems and optical infrared detectors, cryogenic and vacuum equipment, and Fourier spectroscopy equipment.

22. Junior Calibration Engineering (Electro-Optical Jr. Engineer) Status: X

Characterizes and calibrates infrared sensors. Responsible for performing trade-offs with sensor engineers, developing and writing calibration plans, identifying/specifying calibration sources and related supporting hardware, gives oral and written presentations at technical interchange meetings, and performs data collection/analyses. Leadership role in performing the tasks listed above. Reports calibration results in oral presentations as well as written reports and papers.

MINIMUM POSITION REQUIREMENTS

- Education BS in engineering, applied optics, physics, or other related fields
- Experience 0-4 years design experience, including one year experience with design concepts and elements.

23. Junior Contamination Engineering (Jr. Engineer General) — Status: X

~~Responsible for analyzing problems and developing experimental or theoretical techniques for formalized engineering or scientific studies. Resolves a variety of technical problems leading to advanced engineering studies designed to increase efficiency or reduce costs. Demonstrates creative ability through patent disclosures or published papers. Prepares technical manuals, reports and procedures reflecting advance knowledge in assigned area of expertise.~~

MINIMUM POSITION REQUIREMENTS

- ~~• Education — BS in engineering, applied optics, physics, or other related fields~~
- ~~• Experience — 0-4 years design experience, including one year experience with design concepts and elements.~~

24. Senior Mechanical & Thermal Designers Status: X

Solves design problems with the aid of specialized computer software and gathers support information as required to meet design requirements. Produces production drawings and serves as a machine shop liaison. Produces prototype parts using standard machine tools. Interfaces with suppliers to insure that required components are purchased and delivered within specifications. Assembles and tests precision opto-mechanical assemblies and make suggestions for improvement where appropriate.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 8-12 years (with BS) or 4-8 (with MS) years applicable engineering experience.

25. Mechanical & Thermal Designers Status: X

Solves design problems with the aid of specialized computer software and gathers support information to meet design requirements. Produces production drawings and serves as a machine shop liaison. Produces prototype parts using standard machine tools. Interfaces with suppliers to insure that required components are purchased and delivered within specifications. Assembles and tests precision opto-mechanical assemblies and makes suggestions for improvement where appropriate.

MINIMUM POSITION REQUIREMENTS

- Education BS (MS preferred) degree in engineering discipline or equivalent experience.
- Experience 4-8 (with BS) or 2-4 (with MS) years applicable engineering experience.

26. Junior Mechanical & Thermal Designers Status: X

~~Solves design problems with the aid of specialized computer software and gathers support information to meet design requirements. Produces production drawings and serves as a machine shop liaison. Produces prototype parts using standard machine tools. Interfaces with suppliers to ensure that required components are purchased and delivered within specifications. Assembles and tests precision opto-mechanical assemblies and makes suggestions for improvement where appropriate.~~

MINIMUM POSITION REQUIREMENTS

- ~~• Education 2 year Associates degree or equivalent applicable experience. Education and /or technical training in mechanical design/CAD drafting.~~

- ~~Experience 0-4 years of experience producing prototype parts on standard machine shop practices. Has mechanical technician capabilities for assembling and testing mechanical/optical components.~~

27. Senior Mechanical & Thermal Technicians (Sr. Technologist) Status: N

Performs a variety of complex technical functions related to the support of development engineering activities such as set up, operation, maintenance, modification, circuit testing, calibration and troubleshooting of electronic, mechanical or optical systems.

MINIMUM POSITION REQUIREMENTS

- Education Technical training equivalent to an Associates degree.
- Experience 8 years related experience as an electronic technician.

28. Senior Electrical Technician (Technologist) Status: N

Performs a variety of complex technical functions related to the support and development of engineering activities such as set up, operation, maintenance, modification, circuit testing, calibration and troubleshooting of electronic mechanical or optical systems. Responsibilities also include conventional soldering operations, including operating rework equipment for SMT and conventional printed wire boards. Has a thorough knowledge of electronic components and their functions.

MINIMUM POSITION REQUIREMENTS

- Education Technical training equivalent to an Associates degree. Certified to the NASA standards in both conventional and SMT soldering.
- Experience 8+ years related experience as an electronic technician.

29. Mechanical & Thermal Technicians Status: N

Performs moderately complex technical functions related to the support of development engineering activities such as set up, operation, maintenance, modification, circuit testing, calibration and troubleshooting of electronic mechanical or optical systems.

MINIMUM POSITION REQUIREMENTS

- Education Technical training equivalent to an Associates degree.
- Experience 4-8 years related experience as an electronic technician.

and testing procedures are implemented and maintained. Assists in the development of production standards to meet quality specifications and may recommend changes to basic procedures. Scope of responsibility is well defined, but requires some use of judgment. This is the intermediate level position.

MINIMUM POSITION REQUIREMENTS

- Education Associates degree or technical education or equivalent.
- Experience 5-8 years quality support experience.

34. Senior Financial/Cost Analyst (Sr. Support Staff) Status: X

Performs complex financial/administrative reporting for contracts and/or programs. Conducts cost, schedule, contract performance, variance and risk analysis and prepares reports as required. Participates in the development of cost controls, procedures, systems and forecasting techniques to evaluate contract/program status, ensuring compliance with government and customer requirements. May be assigned to government mandated cost/accounting systems

MINIMUM POSITION REQUIREMENTS

- Education BS degree or equivalent experience.
- Experience 9+ years cost analyst experience.

35. Financial/Cost Analyst (Support Staff) Status: X

Performs complex financial/administrative reporting for contracts and/or programs. Conducts cost, schedule, contract performance, variance and risk analysis and prepares reports as required. Participates in the development of cost controls, procedures, systems and forecasting techniques to evaluate contract/program status, ensuring compliance with government and customer requirements. May be assigned to government mandated cost/accounting systems.

MINIMUM POSITION REQUIREMENTS

- Education BS degree or equivalent experience.
- Experience 5-8 years cost analyst experience.

36. Junior Financial/Cost Analyst (Junior Support Staff) Status: X

Performs financial/administrative reporting for contracts and/or programs. Participates in cost, schedule, contract performance, variance, and risk analysis and prepares reports as required. May be assigned to government mandated cost/accounting management systems.

MINIMUM POSITION REQUIREMENTS

- Education BS degree or equivalent experience.

- Experience 0-4 years cost analysis experience.

37. Security Specialist **Status: X**

~~Administers and coordinates the DoD, DoE or other industrial security program and other security activities to ensure compliance with government and company security policies and procedures. Develops and implements security procedures in accordance with government and company security policies and procedures.~~

~~MINIMUM POSITION REQUIREMENTS~~

- ~~• Education BS degree or equivalent experience.~~
- ~~• Experience 4-8 years security experience.~~

38. Sr. Support Staff/Tech Writer **Status: X**

Plans, directs and coordinates the operations of design, machinery, assembly, testing, and logistics. Oversees the coordination of building space allocation, layout and communication services. Assists in day-to-day management and the coordination of finances. Writes and edits a variety of scientific and non-technical documentation including proposals, plans, procedures, reports, design review presentations and journal articles. Assists engineers, scientists, and other technical personnel in clearly and accurately describing project needs, status, and progress.

MINIMUM POSITION REQUIREMENTS

- Education BS degree in engineering/technical or scientific discipline. MS degree preferred.
- Experience 8+ years experience, including supervision sr. support staff). 4+ years technical writing experience (technical writer).

39. Support Staff/Tech Writer **Status: X**

Plans, directs and coordinates the operations of design, machinery, assembly, testing, and logistics. Oversees the coordination of building space allocation, layout and communication services. Assists in day-to-day management and the coordination of finances. / Writes and edits a variety of scientific and non-technical documentation including proposals, plans, procedures, reports, design review presentations and journal articles. Assists engineers, scientists, and other technical personnel in clearly and accurately describing project needs, status, and progress.

MINIMUM POSITION REQUIREMENTS

- Education BS degree in engineering/technical or scientific discipline. MS degree preferred.
- Experience 4-8 years experience, including supervision sr. support staff). 2-4 years technical writing experience (technical writer).

40. Jr. Support Staff/Tech Writer**Status: X**

Plans, directs and coordinates the operations of design, machinery, assembly, testing, and logistics. Oversees the coordination of building space allocation, layout and communication services. Assists in day-to-day management and the coordination of finances. Writes and edits a variety of scientific and non-technical documentation including proposals, plans, procedures, reports, design reviews, and journal articles. Assists engineers, scientists, and other technical personnel in clearly and accurately conveying project needs, status, and progress.

MINIMUM POSITION REQUIREMENTS

- Education BS degree in engineering/technical or scientific discipline. MS degree preferred.
- Experience 0-4 years experience, including supervision sr. support staff). 0-2 years technical writing experience (technical writer).

41. Assemblers/Logistics/Support**Status: X**

Plans, directs and coordinates the operations of design, machinery, assembly, testing, and logistics. Oversees the coordination of building space allocation, layout and communication services. Assists in day-to-day management and the coordination of finances. Performs moderately complex accounting tasks in general or specialized accounting functions such as accounts receivable, accounts payable, payroll, cost accounting and the like. Interprets accounting data, prepares and analyzes reports.

MINIMUM POSITION REQUIREMENTS

- Education High school or equivalent experience.
- Experience Two years of electronics assembly experience.

42. Undergraduate/Graduate Students**Status: X**

Performs contamination control and testing for components on major programs. Responsible for assuring that all instruments are clean (standard). Reports contamination results in oral presentations as well as written reports and papers