

**General Services Administration
Federal Supply Service**

**Authorized Federal Supply Schedule Price List
For
PROFESSIONAL ENGINEERING SERVICES**



FSC GROUP 87 * FSC CLASS 871

Contract Number: GS-23F-0006M

Period of Performance: 04/10/2007 – 10/09/2011

Pricelist is current through Modification PS-0012, dated 03/12/2008



6220 Culebra Road
San Antonio, Texas 78238

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www.swri.org

Business Size: Large

Products and Ordering Information in this Authorized Professional Engineering Schedule Price List is also available on the GSA *Advantage!*TM System. Agencies can browse GSA *Advantage!*TM by accessing GSA's Home Page via Internet at www.fss.gsa.gov.

TABLE OF CONTENTS

	Page
Customer Ordering Information	<u>1</u>
Terms and Conditions	<u>2</u>
Agency Ordering Procedures	<u>5</u>
USA Commitment to Promote Small Business Participation	<u>Appendix A</u>
Suggested Blanket Purchase Agreement	<u>Appendix B</u>
Contractor Team Arrangements	<u>Appendix C</u>
A Brief History of Southwest Research Institute	<u>Appendix D</u>
Professional Engineering Services (PES) Descriptions	<u>Appendix E</u>
Labor Category Descriptions and Rates	<u>Appendix F</u>

CUSTOMER ORDERING INFORMATION

SPECIAL ITEM NUMBERS AWARDED ON THIS SCHEDULE

- ❖ **871-1** Strategic Planning for Technology Programs/Activities
- ❖ **871-2** Concept Development and Requirements Analysis
- ❖ **871-3** System Design Engineering & Integration
- ❖ **871-4** Test and Evaluation

PRIMARY ENGINEERING DISCIPLINES AWARDED ON THIS SCHEDULE:

- ❖ Chemical, Electrical and Mechanical Engineering

CONTRACTOR'S ORDERING ADDRESS:

Southwest Research Institute
6220 Culebra Road
San Antonio, TX 78238-5166

CONTRACTOR'S REMITTANCE ADDRESS:

Southwest Research Institute
P.O. Box 841671
Dallas, TX 75284-1671

For SwRI PES information concerning SwRI's technical capabilities, general inquiries, including instructions on how to use the schedule and submissions of statement of work, contact:

David Ogden
Tel: (210) 522-6928
Fax: (210) 522-2572
david.ogden@swri.org.

For SwRI contracting information or to send an order, contact

Alex Garza
Tel: (210) 522-2397
Fax: (210) 522-3559
alex.garza@swri.org.

TERMS AND CONDITIONS

1. **Maximum Order:**
\$750,000; this maximum order threshold is the suggested dollar value at which agencies should seek additional discounts.
2. **Minimum Order:**
The minimum order designated for delivery orders/task orders awarded under this schedule contract is \$100.00.
3. **Geographic Scope:**
The geographic scope of this contract is the 48 contiguous states, the District of Columbia, Alaska, Hawaii, and the Commonwealth of Puerto Rico. Work can also be performed at all U.S. Government installations and/or agencies abroad, and any country in which trade is not prohibited by the U.S. Government, subject to negotiation on an individual task order basis.
4. **Point(s) of Production (City, County and State or Foreign Country):**
United States of America
5. **Discounts from List Price or Statement of Net Price:**
Determined by Delivery/task Order
6. **Quantity Discounts:**
None
7. **Prompt Payment Terms:**
None
8. **Government Purchase Cards:**
Government purchase cards will be accepted for payment up to the micro-purchase threshold. Government purchase cards will not be acceptable for payments above the micro-purchase threshold.
9. **Foreign Items:**
None
10. **Time of Delivery:**
Determined by the Delivery/Task Order
11. **Expedited Delivery:**
Determined by the Delivery/Task Order
12. **Overnight and 2-Day Delivery:**
Determined by the Delivery/Task Order

13. **Urgent Requirements:**
Determined by the Delivery/Task Order
14. **F.O.B. Points:**
When deliveries are made to destinations outside the contiguous 48 States and the District of Columbia, delivery will be F.O.B. inland carrier, point of exportation (FAR 52.247-38), with the transportation charges to be paid by the Government from point of exportation to destination in Alaska, Hawaii, or the Commonwealth of Puerto Rico, as designated by the ordering office. The Contractor shall add the actual cost of transportation to destination from the point of exportation in the 48 contiguous States nearest to the designated destination. Such costs will, in all cases, be based upon the lowest regularly established rates on file with the Interstate Commerce Commission, the U.S. Maritime Commission (if shipped by water), or any State regulatory body, or those published by the U.S. Postal Service; and must be supported by paid freight or express receipt or by a statement of parcel post charges including weight of shipment.
- The right is reserved to ordering agencies to furnish Government bills of lading.
- Ordering offices will be required to pay differential between freight charges and express charges where the Government desires express deliveries.
15. **Warranty:**
None
16. **Export Packing Charges, if applicable:**
Not Applicable
17. **Terms and Conditions of Rental, Maintenance, and Repair (if applicable):**
Not Applicable
18. **Terms and Conditions of Installation (if applicable):**
Not Applicable
19. **Terms and Conditions of Repair Parts Indicating Date of Parts Price Lists and Any Discounts from List Prices (if applicable):**
Not Applicable
20. **Terms and Conditions for any Other Services (if applicable):**
Not Applicable
21. **List of Service and Distribution Points (if applicable):**
Not Applicable
22. **List of Participating Dealers (if applicable):**
Not Applicable.

23. **Preventive Maintenance (if applicable):**
Not Applicable
24. **Environmental Attributes, e.g., Recycled Content, Energy Efficiency, and/or Reduced Pollutants:**
Not Applicable
25. **Data Universal Number System (DUNS) Number:**
00-793-6842
26. **Notification Regarding Registration in Central Contractor Registration (CCR) Database:**
SwRI is registered in the CCR database
27. **Cage Code:**
26401

CUSTOMER (AGENCY) ORDERING PROCEDURES

Introduction

GSA has established special ordering procedures for services that require a Statement of Work. These special ordering procedures take precedence over the procedures in FAR 8.404 (b)(2) through (b)(3).

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

Suggested Procedure

When ordering services, ordering offices shall:

1. Prepare a Request for Quote

- A. A performance-based statement of work that outlines, at a minimum, the work to be performed, location of work, period of performance, deliverable schedule, applicable standards, acceptance criteria, and any special requirements (i.e., security clearances, travel, special knowledge, etc.) should be prepared.
- B. A request should be prepared which includes the performance based statement of work and request the contractors to submit either a firm-fixed price or a ceiling price to provide the services outlined in the statement of work. A firm-fixed price order shall be requested, unless the ordering office makes a determination that it is not possible at the time of placing the order to estimate accurately the extent or duration of the work or to anticipate cost with any reasonable degree of confidence. When such a determination is made, a labor hour or time-and-materials proposal may be requested. The firm-fixed price shall be based on the prices in the schedule contract and shall consider the mix of labor categories and level of effort required to perform the services described in the statement of work. The firm-fixed price of the order should also include any travel costs or other direct charges related to performance of the services ordered, unless the order provides for reimbursement of travel costs at the rates provided in the Federal Travel or Joint Travel Regulations. A ceiling price must be established for labor-hour and time-and-materials orders.

- C. The request may ask the contractors, if necessary or appropriate, to submit a project plan for performing the task, and information on the contractor's experience and/or past performance performing similar tasks.
- D. The request shall notify the contractors what basis will be used for selecting the contractor to receive the order. The notice shall include the basis for determining whether the contractors are technically qualified and provide an explanation regarding the intended use of any experience and/or past performance information in determining technical qualification of responses.

2. Transmit the Request to Contractors:

- A. Based upon an initial evaluation of catalogs and price lists, the ordering office should identify the contractors that appear to offer the best value (considering the scope of services offered, pricing and other factors such as contractors' locations, as appropriate).
- B. The request should be provided to three (3) contractors if the proposed order is estimated to exceed the micro-purchase threshold, but not exceed the maximum order threshold. For proposed orders exceeding the maximum order threshold, the request should be provided to additional contractors that offer services that will meet the agency's needs. Ordering offices should strive to minimize the contractors' costs associated with responding to requests for quotes for specific orders. Requests should be tailored to the minimum level necessary for adequate evaluation and selection for order placement. Oral presentations should be considered, when possible.

3. Evaluate Response and Select the Contractor to Receive the Order:

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

Blanket Purchase Agreements (BPAs):

The establishment of Federal Supply Schedule Blanket Purchase Agreements (BPAs) for recurring services is permitted within the procedures outline herein are followed. All BPAs for services must define the services that may be ordered under the BPA, along with delivery or performance time frames, billing procedures, etc. The potential volume of orders under BPAs, regardless of the size of individual orders, may offer the ordering office the opportunity to secure volume discounts. When establishing BPAs, ordering offices shall inform contractors in the request (based on the agency's requirement) if a single BPA or multiple BPAs will be established, and indicate the basis that will be used for selecting the contractors to be awarded the BPAs.

- A. **SINGLE BPA:** Generally, a single BPA should be established when the ordering office can define the tasks to be ordered under the BPA and establish a firm-fixed price or ceiling price for individual tasks or services to be order. When this occurs, authorized users may place the order directly under the established BPA when the need for services arises. The schedule contractor that represents the best value should be awarded the BPA. (See FAR 8.404)

 - B. **MULTIPLE BPAs:** When the ordering office determines multiple BPAs are needed to meet its requirements, the ordering office should determine which contractors can meet any technical qualifications before establishing the BPAs. When multiple BPAs are established, the authorized users must follow the procedures in (a)(2)(ii) above and then place the order with the Schedule contractor that represents the best value.
3. **Review BPAs periodically:**
Such reviews shall be conducted at least annually. The purpose of the review is to determine whether the BPA still represents the best value (considering price, special qualifications, administrative costs, etc) and results in the lowest overall cost alternative to meet the agency’s needs.
4. **Small Business:**
The Ordering Office should give preference to small business concerns when two or more contractors can provide the services at the same firm-fixed price or ceiling price.

APPENDIX A

USA COMMITMENT TO PROMOTE SMALL BUSINESS PARTICIPATION PROCUREMENT PROGRAMS

PREAMBLE

Southwest Research Institute (SwRI) provides commercial products and services to the Federal Government. We are committed to promoting participation of small, small disadvantaged, veteran-owned, and women-owned small businesses in our contracts. We pledge to provide opportunities to the small business community through reselling opportunities, mentor-protégé programs, joint ventures, team arrangements, and subcontracting.

COMMITMENT

To actively seek and partner with small businesses.

To identify, qualify, mentor and develop small, small disadvantaged, veteran-owned and women-owned small businesses by purchasing from these business whenever practical.

To develop and promote company policy initiatives which demonstrate our support for awarding contracts and subcontracts to small business concerns.

To undertake significant efforts to determine the potential of small, small disadvantaged, veteran-owned, and women-owned small businesses to supply products and services to our company.

To ensure procurement opportunities are designed to permit the maximum possible participation of small, small disadvantaged, veteran-owned, and women-owned small businesses.

To attend business opportunity workshops, minority business enterprise seminars, trade fairs, procurement conferences, etc., to identify and increase small businesses with whom to partner.

To publicize in our marketing publications our interest in meeting small businesses that may be interested in subcontracting opportunities.

We signify our commitment to work in partnership with small, small disadvantaged, veteran-owned, and women-owned small businesses to promote and increase their participation in Federal Government contracts. To accelerate potential opportunities, please contact Southwest Research Institute, Paul Easley, (210) 522-3077; fax (210) 522-2262; peasley@swri.org.

APPENDIX B

**BEST VALUE
BLANKET PURCHASE AGREEMENT
FEDERAL SUPPLY SCHEDULE**

(Insert Company Name)

In the spirit of the Federal Acquisition streamlining Act (Agency) and (Contractor) enter into a cooperative agreement to further reduce the administrative costs of acquiring commercial items from the General Services Administration (GSA) Federal Supply Schedule Contract(s)

Federal Supply Schedule contract BPAs eliminate contracting and open market costs such as: search for sources; the development of technical documents, solicitations and the evaluation of offers. Team Arrangements are permitted with Federal Supply Schedule contractors in accordance with Federal Acquisition Regulation (FAR) 9.6.

The BPA will further decrease costs, reduce paperwork, and save time by eliminating the need for repetitive, individual purchases from the schedule contract. The end result is to create a purchasing mechanism for the Government that works better and costs less.

Signatures

Agency Date

Contractor Date

BPA NUMBER _____

(CUSTOMER NAME)
BLANKET PURCHASE AGREEMENT

Pursuant to GSA Federal Supply Schedule Contract Number(s) _____, Blanket Purchase Agreements, the Contractor agrees to the following terms of a Blanket Purchase Agreement (BPA) EXCLUSIVELY WITH (Ordering Agency):

- (1) The following contract items can be ordered under this BPA. All orders placed against this BPA are subject to the terms and conditions of the contract, except as noted below;

Model Number/Part Number	Special BPA Discount/Price
_____	_____
_____	_____
_____	_____

(2) Delivery: Destination	Delivery Schedules/Dates
_____	_____
_____	_____
_____	_____

- (3) The Government estimates, but does not guarantee, that the volume of purchase through this agreement will be _____.

- (4) This BPA does not obligate any funds.

- (5) This BPA expires on _____, or at the end of the contract period, whichever is earlier.

- (6) The following office(s) is hereby authorized to place orders under this BPA:

Office	Point of Contact
_____	_____
_____	_____
_____	_____

- (7) Orders will be placed against this BPA via Electronic Data Interchange (EDI), FAX, or paper.

- (8) Unless otherwise agreed to, all deliveries under this BPA must be accompanied by delivery tickets or sales slips that must contain the following information as a minimum:
- (a) Name of Contractor
 - (b) Contract Number
 - (c) BPA Number
 - (d) Model Number or National Stock Number (NSN)
 - (e) Purchase Order Number
 - (f) Date of Purchase
 - (g) Quantity, Unit Price, and Extension of each item (unit prices and extensions need not be shown when incompatible with the use of automated systems, provided that the invoice is itemized to show the information) and
 - (h) Date of Shipment
- (9) The requirements of a proper invoice are specified in the Federal Supply Schedule Contract. Invoices will be submitted to the address specified with the purchase order transmission issued against the BPA.
- (10) The terms and conditions included in this BPA apply to all purchases made pursuant to it. In the event of an inconsistency between the provisions of this BPA and the Contractor's invoice, the provisions of the BPA will take precedence.

APPENDIX C

BASIC GUIDELINES FOR USING “CONTRACTOR TEAM ARRANGEMENTS”

Federal Supply Schedule Contractors may use “Contractor Team Arrangements” (see FAR 9.6) to provide solutions when responding to a customer agency requirements.

These Team Arrangements can be included under a Blanket Purchase Agreement (BPA). BPAs are permitted under all Federal Supply Schedule contracts.

Orders under a Team Arrangement are subject to terms and conditions of Federal Supply Schedule Contract.

Participation in a Team Arrangement is limited to Federal Supply Schedule Contractors.

Here is a general outline on how it works:

- The customer identifies their requirements.
- Federal Supply Schedule Contractors may individually meet the customer’s needs, or
- Federal Supply Schedule Contractors may individually submit a Schedule “Team solution” to meet the customer’s requirements.
- Customers make a best value selection.

APPENDIX D

A BRIEF HISTORY OF SwRI

Southwest Research Institute (SwRI), headquartered in San Antonio, Texas, is one of the oldest and largest independent, nonprofit, applied research and development (R&D) organizations in the United States. Founded in 1947, SwRI provides contract research and development services to industrial and government clients. The Institute is governed by a board of directors, which is advised by approximately 100 trustees.

SwRI initiates contracts with clients based on consultations and prepares a formal proposal outlining the scope of work. Subject to client wishes, programs are kept confidential. As part of a long-held tradition, patent rights arising from sponsored research are often assigned to the client. SwRI generally retains the rights to Institute-funded advancements.

SwRI consists of 11 technical divisions that offer multidisciplinary, problem-solving services in a variety of areas in engineering and the physical sciences. Historically, nearly 2,000 projects are open at the Institute at any one time. These projects are funded almost equally between the government and commercial sectors. SwRI's total revenue for fiscal year 2007 was \$501 million. During 2007, SwRI provided \$6 million to fund innovative research through its internally sponsored R&D program.

SwRI's headquarters occupy almost two million square feet of office and laboratory space on more than 1,200 acres in San Antonio. The Institute has technical offices and laboratories in Ann Arbor, Michigan; Boulder, Colorado; Fort Hood, Texas; Ogden, Utah; Huntsville, Alabama; Oklahoma City, Oklahoma; Panama City, Florida; Rockville, Maryland; Warner-Robins, Georgia; Beijing, China; and other locations. SwRI provides environmental monitoring expertise at munitions demilitarization sites at the Umatilla Army Depot at Hermiston, Oregon, and the Pine Bluff Chemical Depot at Pine Bluff, Arkansas.

At the close of fiscal year 2007, the staff numbered 3,134. Of this number, 251 hold degrees at the doctorate level, 486 at the master's level, and 778 hold bachelor's degrees. In 2007, staff members published 473 papers in the technical literature; made 451 presentations at technical conferences, seminars, and symposia around the world; submitted 70 invention disclosures; filed 56 patent applications; and received 51 patent awards. The Institute supports professional development of its staff through onsite technical and training courses and tuition reimbursement.

The Institute holds more than 870 patents awarded to its staff members, has earned 32 R&D 100 awards, and has been inducted in the U.S. Space Foundation's Space Technology Hall of Fame. The Institute has received two Department of Defense James S. Cogswell Outstanding Industrial Security Achievement Awards. Dr. Thomas W. Ryan III was elected the 2008 president of the Society of Automotive Engineering International, the leading standards research and development organization for mobility engineering. C. Nils Smith was named the Engineering

Manager of the Year by the Engineering Management Society of the Institute of Electrical and Electronics Engineers. Steven G. Fritz was elected a Fellow of the American Society of Mechanical Engineers, and Steven R. Westbrook received the American Society for Testing Materials International 2007 Award of Merit, which recognizes him as an ASTM Fellow. Several SwRI divisions have achieved ISO 9001 or ISO 14001 certification and ISO/IEC Guide 24 accreditation. The Ford Motor Company has designated the Institute a Tier 1 product development engineering services supplier and has awarded the Institute its Q1-2000 award.

A partial listing of research areas includes antennas and propagation; automation, robotics, and intelligent systems; avionics and support systems; bioengineering; chemistry and chemical engineering; communications systems; corrosion and electrochemistry; Earth and planetary sciences; emissions research; engineering mechanics; fire technology; fluid systems and machinery dynamics; and fuels and lubricants. Additional areas include geochemistry and mining engineering; hydrology and geohydrology; space science and engineering; materials sciences and fracture mechanics; modeling and simulation; nondestructive evaluation; oil and gas exploration; pipeline technology; surface modification and coatings; training systems and simulators; and vehicle, engine, and powertrain design, research, and development.

APPENDIX E

PROFESSIONAL ENGINEERING SERVICES (PES) DESCRIPTIONS

Southwest Research Institute provides all resources including personnel, management, supplies, services, materials, equipment, facilities and transportation necessary to support and conduct a wide range of Professional Engineering Services. SwRI will provide the requisite mechanical and/or electrical technical and associated support expertise for the services specified, but not limited to, in the following SIN descriptions:

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.

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.

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.

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 to testing of a prototype and first article(s) testing, environmental testing, independent verification and validation, reverse engineering, simulation and modeling (to test the feasibility of a concept), system safety, quality assurance, physical testing of the product or system, training, privatization and outsourcing.

APPENDIX F

LABOR CATEGORY DESCRIPTIONS AND RATES

	Page
Chemistry and Chemical Engineering Division	<u>F-2</u>
Chemistry and Chemical Engineering Division (Demilitarization)	<u>F-8</u>
Engine, Emissions, and Vehicle Research Division	<u>F-13</u>
Training, Simulation and Performance Improvement Division	<u>F-19</u>
Fuels and Lubricants Engineering Division	<u>F-25</u>
Aerospace Electronics & Information Technology Division	<u>F-31</u>
Automation and Data Systems Division	<u>F-37</u>
Applied Physics Division	<u>F-43</u>
Space Science and Engineering Division	<u>F-49</u>
Signal Exploitation and Geolocation Division	<u>F-55</u>
Mechanical and Materials Engineering Division	<u>F-61</u>
Geological and Materials Engineering	<u>F-67</u>

CHEMISTRY AND CHEMICAL ENGINEERING DIVISION

LABOR CATEGORY	Year 7	Year 8	Year 9	Year 10
	10/10/07 10/09/08	10/10/08 10/09/09	10/10/09 10/09/10	10/10/10 10/09/11
Chemist and Chemical Engineer 1	189.35	196.26	202.18	209.08
Chemist and Chemical Engineer 2	189.35	196.26	202.18	209.08
Chemist and Chemical Engineer 3	123.71	128.22	132.09	136.60
Chemist and Chemical Engineer 4	92.96	96.35	99.26	102.64
Chemist and Chemical Engineering Support 1	68.38	70.88	73.02	75.51
Chemist and Chemical Engineering Support 2	45.75	47.42	48.85	50.51
Chemist and Chemical Engineering Support 3	54.34	56.04	57.74	59.44
Chemist and Chemical Engineering Support 4	46.29	47.98	49.42	51.11

Contract Modification PO-0011, 28 March 2007

CHEMIST AND CHEMICAL ENGINEER 1***Task Description***

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology in the chemistry, testing, and chemical engineering area.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and testing and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.
- Assumes responsibility for highly specialized technical objectives or problems.

Qualifications

Individuals successfully lead major business and technical activities primarily in chemistry, fire technology, and chemical engineering and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include, but are not limited to, design, integration, evaluation, instrumentation, method development, research development, and testing. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

CHEMIST AND CHEMICAL ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in chemistry, fire technology, and chemical engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence, which extends into the professional community. Technical areas of expertise include, but are not limited to, design, integration, evaluation, instrumentation, method development, research development, and testing. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

CHEMIST AND CHEMICAL ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects in chemistry, testing, and engineering. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, analysts, or specialty areas assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work in the divisional capabilities.
- Develop new research areas and promote research development.
- Provide new development of programs and statistical studies.

- Provide recommendations to management regarding planning, program development and project and promotional efforts.
- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects, and have the aptitude to lead others and administer the technical, financial, client interaction, and organizational aspects of programs primarily in chemistry, fire technology, and chemical engineering. Technical areas of expertise include, but are not limited to, design, integration, evaluation, instrumentation, method development, research development, and testing. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

CHEMIST AND CHEMICAL ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in chemistry, fire technology, and chemical engineering. Technical areas of expertise include, but are not limited to, research, evaluation, and other duties required to provide support to the professional staff of the chemistry, fire testing, and analytical testing for the division. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

CHEMIST AND CHEMICAL ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in chemistry, fire technology, and chemical engineering. Technical areas of support include, but are not limited to, design, integration, evaluation, instrumentation, method development, research development, and testing. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

CHEMIST AND CHEMICAL ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in chemistry, fire technology, and chemical engineering. Technical areas of support include, but are not limited to, research, evaluation, and other duties required to provide

support to the professional staff of the chemistry, fire testing, and analytical testing for the division. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

CHEMIST AND CHEMICAL ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.
- Produces internal Institute forms to satisfy internal procedures as required for desired changes or as necessitated for project requirements.
- Develops training courses for staff in delegated authority and identifies external training resources needed for staff development.
- Assists with the implementation of Institute policies and procedures for technical management.
- Coordinates meetings, appointments, schedules, and facilities as requested by supervision.
- Prepares work schedules, daily and weekly reports, and processes offsite rotating personnel.

Qualifications

Individuals provide support to projects primarily in chemistry, fire technology, and chemical engineering. Technical areas of support include, but are not limited to, research, evaluation, and other duties required to provide support to the professional staff of the chemistry, fire testing, and analytical testing for the division. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

CHEMIST AND CHEMICAL ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.
- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in chemistry, fire technology, and chemical engineering. Technical areas of expertise include, but are not limited to, research, evaluation, and other duties required to provide support to the professional staff of the chemistry, fire testing, and analytical testing for the division. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[Back to Appendix F Table of Contents](#)

Chemistry and Chemical Engineering Division (Demilitarization)

LABOR CATEGORY	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
	10/10/07 10/09/08	10/10/08 10/09/09	10/10/09 10/09/10	10/10/10 10/09/11
Chemical Demil Engineer 2	166.19	172.26	177.46	183.51
Chemical Demil Engineer 3	106.54	110.43	113.76	117.64
Chemical Demil Engineer 4	85.95	89.09	91.78	94.91
Chemical Demil Engineering Support 1	64.18	66.52	68.53	70.87
Chemical Demil Engineering Support 2	50.30	52.14	53.71	55.54
Chemical Demil Engineering Support 3	37.78	38.97	40.15	41.33
Chemical Demil Engineering Support 4	33.61	34.67	35.72	36.77

Contract Modification PO-0011, 28 March 2007

CHEMICAL DEMIL ENGINEER 2***Task Description***

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in chemical demilitarization engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence, which extends into the professional community. Technical areas of expertise include, but are not limited to, analytical laboratory or air monitoring related to chemical agents. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

CHEMICAL DEMIL ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects in chemistry, testing, and engineering. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, analysts, or specialty areas assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work in the divisional capabilities.
- Develop new research areas and promote research development.
- Provide new development of programs and statistical studies.
- Provide recommendations to management regarding planning, program development and project and promotional efforts.
- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects, and have the aptitude to lead others and administer the technical, financial, client interaction, and organizational aspects of programs primarily in chemical demilitarization engineering. Technical areas of expertise include, but are not limited to, analytical laboratory or air monitoring related to chemical agents. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

CHEMICAL DEMIL ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in chemical demilitarization engineering. Technical areas of expertise include, but are not limited to, analytical laboratory or air monitoring related to chemical agents. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

CHEMICAL DEMIL ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in chemical demilitarization engineering. Technical areas of support include, but are not limited to, analytical laboratory or air monitoring related to chemical agents. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

CHEMICAL DEMIL ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in chemical demilitarization engineering. Technical areas of support include, but are not limited to, analytical laboratory or air monitoring related to chemical agents. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

CHEMICAL DEMIL ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.
- Produces internal Institute forms to satisfy internal procedures as required for desired changes or as necessitated for project requirements.
- Develops training courses for staff in delegated authority and identifies external training resources needed for staff development.

- Assists with the implementation of Institute policies and procedures for technical management.
- Coordinates meetings, appointments, schedules, and facilities as requested by supervision.
- Prepares work schedules, daily and weekly reports, and processes offsite rotating personnel.

Qualifications

Individuals provide support to projects primarily in chemical demilitarization engineering. Technical areas of support include, but are not limited to, analytical laboratory or air monitoring related to chemical agents. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

CHEMICAL DEMIL ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.
- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in chemical demilitarization engineering. Technical areas of expertise include, but are not limited to, analytical laboratory or air monitoring related to chemical agents. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[Back to Appendix F Table of Contents](#)

Engine, Emissions, and Vehicle Research Division

LABOR CATEGORY	<u>Year 7</u> 10/10/07 10/09/08	<u>Year 8</u> 10/10/08 10/09/09	<u>Year 9</u> 10/10/09 10/09/10	<u>Year 10</u> 10/10/10 10/09/11
Automotive Engineer 1	198.75	206.00	212.22	219.46
Automotive Engineer 2	198.75	206.00	212.22	219.46
Automotive Engineer 3	145.01	150.30	154.84	160.12
Automotive Engineer 4	115.38	119.59	123.21	127.41
Automotive Engineering Support 1	72.05	74.68	76.94	79.56
Automotive Engineering Support 2	45.52	47.18	48.60	50.26
Automotive Engineering Support 3	66.65	68.74	70.82	72.90
Automotive Engineering Support 4	43.24	44.60	45.95	47.30

Contract Modification PO-0011, 28 March 2007

AUTOMOTIVE ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in automotive engineering and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include, but are not limited to, powertrains, fuel systems, chassis, hydraulics, electronics, control systems, test systems, and contamination control. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

AUTOMOTIVE ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in automotive engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include, but are not limited to, powertrains, fuel systems, chassis, hydraulics, electronics, control systems, test systems, and contamination control. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

AUTOMOTIVE ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work.
- Provide recommendations to management regarding planning, program development and project and promotional efforts.

- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in automotive engineering. Technical areas of expertise include, but are not limited to, powertrains, fuel systems, chassis, hydraulics, electronics, control systems, test systems, and contamination control. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

AUTOMOTIVE ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in automotive engineering. Technical areas of expertise include, but are not limited to, powertrains, fuel systems, chassis, hydraulics, electronics, control systems, test systems, and contamination control. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

AUTOMOTIVE ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in automotive engineering. Technical areas of support include, but are not limited to, powertrains, fuel systems, chassis, hydraulics, electronics, control systems, test systems, and contamination control. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

AUTOMOTIVE ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in automotive engineering. Technical areas of support include, but are not limited to, powertrains, fuel systems, chassis, hydraulics, electronics, control systems, test

systems, and contamination control. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

AUTOMOTIVE ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in automotive engineering. Technical areas of support include, but are not limited to, powertrains, fuel systems, chassis, hydraulics, electronics, control systems, test systems, and contamination control. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

AUTOMOTIVE ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.
- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in automotive engineering. Technical areas of expertise include, but are not limited to, powertrains, fuel systems, chassis, hydraulics, electronics, control systems, test systems, and contamination control. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[*Back to Appendix F Table of Contents*](#)

Training, Simulation and Performance Improvement Division

LABOR CATEGORY	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
	10/10/07 10/09/08	10/10/08 10/09/09	10/10/09 10/09/10	10/10/10 10/09/11
Simulation and Training Engineer 1	187.14	193.97	199.82	206.64
Simulation and Training Engineer 2	187.14	193.97	199.82	206.64
Simulation and Training Engineer 3	125.91	130.50	134.44	139.03
Simulation and Training Engineer 4	95.85	99.35	102.35	105.84
Simulation and Training Engineering Support 1	69.71	72.25	74.44	76.97
Simulation and Training Engineering Support 2	66.69	69.12	71.21	73.64
Simulation and Training Engineering Support 3	46.91	48.38	49.84	51.31
Simulation and Training Engineering Support 4	43.24	44.60	45.95	47.30

Contract Modification PO-0011, 28 March 2007

SIMULATION AND TRAINING ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in simulation, training and performance improvement domain areas and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include instructional systems design, interactive courseware, Web-based distance learning, training devices, simulators, simulation models and databases, distributed simulation, 3D graphics, and virtual and augmented reality. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

SIMULATION AND TRAINING ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in simulation, training and performance improvement domain areas. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include instructional systems design, interactive courseware, Web-based distance learning, training devices, simulators, simulation models and databases, distributed simulation, 3D graphics, and virtual and augmented reality. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

SIMULATION AND TRAINING ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work.

- Provide recommendations to management regarding planning, program development and project and promotional efforts.
- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in simulation, training and performance improvement domain areas. Technical areas of expertise include instructional systems design, interactive courseware, Web-based distance learning, training devices, simulators, simulation models and databases, distributed simulation, 3D graphics, and virtual and augmented reality. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

SIMULATION AND TRAINING ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in simulation, training and performance improvement domain areas. Technical areas of expertise include instructional systems design, interactive courseware, Web-based distance learning, training devices, simulators, simulation models and databases, distributed simulation, 3D graphics, and virtual and augmented reality. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

SIMULATION AND TRAINING ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in simulation, training and performance improvement domain areas. Technical areas of support include instructional systems design, interactive courseware, Web-based distance learning, training devices, simulators, simulation models and databases, distributed simulation, 3D graphics, and virtual and augmented reality. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

SIMULATION AND TRAINING ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in simulation, training and performance improvement domain areas. Technical areas of support include instructional systems design, interactive courseware, Web-

based distance learning, training devices, simulators, simulation models and databases, distributed simulation, 3D graphics, and virtual and augmented reality. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

SIMULATION AND TRAINING ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in simulation, training and performance improvement domain areas. Technical areas of support include instructional systems design, interactive courseware, Web-based distance learning, training devices, simulators, simulation models and databases, distributed simulation, 3D graphics, and virtual and augmented reality. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

SIMULATION AND TRAINING ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.

- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in simulation, training and performance improvement domain areas. Technical areas of expertise include instructional systems design, interactive courseware, Web-based distance learning, training devices, simulators, simulation models and databases, distributed simulation, 3D graphics, and virtual and augmented reality. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[*Back to Appendix F Table of Contents*](#)

Fuels and Lubricants Engineering Division

LABOR CATEGORY	Year 7 10/10/07 10/09/08	Year 8 10/10/08 10/09/09	Year 9 10/10/09 10/09/10	Year 10 10/10/10 10/09/11
Fuels & Lubes Engineer 1	191.67	197.03	202.96	209.32
Fuels & Lubes Engineer 2	191.67	197.03	202.96	209.32
Fuels & Lubes Engineer 3	131.50	135.15	139.27	143.58
Fuels & Lubes Engineer 4	107.74	110.75	114.12	117.66
Fuels & Lubes Engineering Support 1	75.14	77.26	79.58	82.09
Fuels & Lubes Engineering Support 2	47.99	49.34	50.85	52.44
Fuels & Lubes Engineering Support 3	54.00	55.64	57.23	58.97
Fuels & Lubes Engineering Support 4	42.05	43.30	44.56	45.85

Contract Modification PO-0012, March 2008

FUELS & LUBES ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute.

Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in fuels and fluids engineering and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include, but are not limited to, managing fuels, lubricants, functional fluids research, development, and evaluation programs. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

FUELS & LUBES ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community.

Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in fuels and fluids engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include, but are not limited to, design, integration, test and evaluation programs primarily related to fuels, lubrication, automotive functional fluids science and engineering applications. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

FUELS & LUBES ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects.

Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects.

Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, analysts, or specialty areas assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work in the divisional capabilities.
- Develop new research areas and promote research development.
- Provide new development of programs and statistical studies.

- Provide recommendations to management regarding planning, program development and project and promotional efforts.
- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in fuels and fluids engineering. Technical areas of expertise include, but are not limited to, design, integration, test and evaluation programs primarily related to fuels, lubrication, automotive functional fluids science and engineering applications. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

FUELS & LUBES ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are critical technical assets who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in fuels and fluids engineering. Technical areas of expertise include, but are not limited to, fuels, lubrication, automotive functional fluids science and engineering applications. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity.

FUELS & LUBES ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in fuels and fluids engineering. Technical areas of support include, but are not limited to, fuels, lubrication, automotive functional fluids science and engineering applications. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

FUELS & LUBES ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in fuels and fluids engineering. Technical areas of support include, but are not limited to, fuels, lubrication, automotive functional fluids science and engineering applications. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

FUELS & LUBES ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in fuels and fluids engineering. Technical areas of support include, but are not limited to, fuels, lubrication, automotive functional fluids science and engineering applications. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

FUELS & LUBES ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.
- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in fuels and fluids engineering. Technical areas of expertise include, but are not limited to, fuels, lubrication, automotive functional fluids science and engineering applications. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[*Back to Appendix F Table of Contents*](#)

Aerospace Electronics & Information Technology Division

LABOR CATEGORY	Year 7	Year 8	Year 9	Year 10
	10/10/07 10/09/08	10/10/08 10/09/09	10/10/09 10/09/10	10/10/10 10/09/11
Aerospace Engineer 1	200.89	208.22	214.51	221.82
Aerospace Engineer 2	200.89	208.22	214.51	221.82
Aerospace Engineer 3	141.62	146.79	151.22	156.38
Aerospace Engineer 4	113.05	117.17	120.71	124.83
Aerospace Engineering Support 1	82.98	86.01	88.51	91.63
Aerospace Engineering Support 2	62.31	64.58	66.53	68.82
Aerospace Engineering Support 3	68.10	70.23	72.36	74.49
Aerospace Engineering Support 4	43.24	44.60	45.95	47.30

Contract Modification PO-0011, 28 March 2007

AEROSPACE ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in aerospace engineering and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include, but are not limited to, avionics, aircraft systems, unmanned aircraft, propulsion control and monitoring, electronic warfare, and instrumentation and test systems. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

AEROSPACE ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in aerospace engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include, but are not limited to, avionics, aircraft systems, unmanned aircraft, propulsion control and monitoring, electronic warfare, and instrumentation and test systems. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

AEROSPACE ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work.
- Provide recommendations to management regarding planning, program development and project and promotional efforts.

- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in aerospace engineering. Technical areas of expertise include, but are not limited to, avionics, aircraft systems, unmanned aircraft, propulsion control and monitoring, electronic warfare, and instrumentation and test systems. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

AEROSPACE ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in aerospace engineering. Technical areas of expertise include, but are not limited to, avionics, aircraft systems, unmanned aircraft, propulsion control and monitoring, electronic warfare, and instrumentation and test systems. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

AEROSPACE ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in aerospace engineering. Technical areas of support include, but are not limited to, avionics, aircraft systems, unmanned aircraft, propulsion control and monitoring, electronic warfare, and instrumentation and test systems. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

AEROSPACE ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in aerospace engineering. Technical areas of support include, but are not limited to, avionics, aircraft systems, unmanned aircraft, propulsion control and monitoring,

electronic warfare, and instrumentation and test systems. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

AEROSPACE ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in aerospace engineering. Technical areas of support include, but are not limited to, avionics, aircraft systems, unmanned aircraft, propulsion control and monitoring, electronic warfare, and instrumentation and test systems. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

AEROSPACE ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.
- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in aerospace engineering. Technical areas of expertise include, but are not limited to, avionics, aircraft systems, unmanned aircraft, propulsion control and monitoring, electronic warfare, and instrumentation and test systems. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[*Back to Appendix F Table of Contents*](#)

Automation and Data Systems Division

LABOR CATEGORY	<u>Year 7</u> 10/10/07 10/09/08	<u>Year 8</u> 10/10/08 10/09/09	<u>Year 9</u> 10/10/09 10/09/10	<u>Year 10</u> 10/10/10 10/09/11
Systems Engineer 1	214.13	221.94	228.65	236.44
Systems Engineer 2	214.13	221.94	228.65	236.44
Systems Engineer 3	159.17	164.98	169.96	175.75
Systems Engineer 4	112.11	116.21	119.72	123.80
Systems Engineering Support 1	86.57	89.73	92.44	95.60
Systems Engineering Support 2	47.47	49.20	50.69	52.42
Systems Engineering Support 3	69.48	71.65	73.82	75.99
Systems Engineering Support 4	39.88	41.13	42.37	43.62

Contract Modification PO-0011, 28 March 2007

SYSTEMS ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in systems engineering and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include, but are not limited to, communications, manufacturing, automation, bioengineering, intelligent transportation, process improvement/reengineering, and computer science. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

SYSTEMS ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in systems engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include, but are not limited to, communications, manufacturing, automation, bioengineering, intelligent transportation, process improvement/reengineering and computer science. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

SYSTEMS ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work.
- Provide recommendations to management regarding planning, program development and project and promotional efforts.

- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in systems engineering. Technical areas of expertise include, but are not limited to, communications, manufacturing, automation, bioengineering, intelligent transportation, process improvement/reengineering and computer science. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

SYSTEMS ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in systems engineering. Technical areas of expertise include, but are not limited to, communications, manufacturing, automation, bioengineering, intelligent transportation, process improvement/reengineering and computer science. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

SYSTEMS ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in systems engineering. Technical areas of support include, but are not limited to, communications, manufacturing, automation, bioengineering, intelligent transportation, process improvement/reengineering and computer science. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

SYSTEMS ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in systems engineering. Technical areas of support include, but are not limited to, communications, manufacturing, automation, bioengineering, intelligent

transportation, process improvement/reengineering and computer science. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

SYSTEMS ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in systems engineering. Technical areas of support include, but are not limited to, communications, manufacturing, automation, bioengineering, intelligent transportation, process improvement/reengineering and computer science. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

SYSTEMS ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.

- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in systems engineering. Technical areas of expertise include, but are not limited to, communications, manufacturing, automation, bioengineering, intelligent transportation, process improvement/reengineering and computer science. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[*Back to Appendix F Table of Contents*](#)

Applied Physics Division

LABOR CATEGORY	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
	10/10/07	10/10/08	10/10/09	10/10/10
	10/09/08	10/09/09	10/09/10	10/09/11
Electromechanical Systems Engineer 1	213.34	221.13	227.81	235.57
Electromechanical Systems Engineer 2	213.34	221.13	227.81	235.57
Electromechanical Systems Engineer 3	144.25	149.52	154.03	159.29
Electromechanical Systems Engineer 4	116.25	120.50	124.14	128.39
Electromechanical Systems Engineering Support 1	77.78	80.62	83.06	85.89
Electromechanical Systems Engineering Support 2	50.34	52.18	53.76	55.59
Electromechanical Systems Engineering Support 3	64.16	66.17	68.17	70.18
Electromechanical Systems Engineering Support 4	27.64	28.50	29.37	30.23

Contract Modification PO-0011, 28 March 2007

ELECTROMECHANICAL SYSTEMS ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in systems engineering and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include, but are not limited to, digital and analog electronics, physics and applications of physical science, chemistry, biology, robotics, electro-mechanical system design, optics, MEMs, and power systems. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

ELECTROMECHANICAL SYSTEMS ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in systems engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include, but are not limited to, digital and analog electronics, physics and applications of physical science, chemistry, biology, robotics, electro-mechanical system design, optics, MEMs, and power systems. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

ELECTROMECHANICAL SYSTEMS ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work.
- Provide recommendations to management regarding planning, program development and project and promotional efforts.

- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in systems engineering. Technical areas of expertise include, but are not limited to, digital and analog electronics, physics and applications of physical science, chemistry, biology, robotics, electro-mechanical system design, optics, MEMs, and power systems. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

ELECTROMECHANICAL SYSTEMS ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in systems engineering. Technical areas of expertise include, but are not limited to, digital and analog electronics, physics and applications of physical science, chemistry, biology, robotics, electro-mechanical system design, optics, MEMs, and power systems. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

ELECTROMECHANICAL SYSTEMS ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in systems engineering. Technical areas of support include, but are not limited to, digital and analog electronics, physics and applications of physical science, chemistry, biology, robotics, electro-mechanical system design, optics, MEMs, and power systems. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

ELECTROMECHANICAL SYSTEMS ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in systems engineering. Technical areas of support include, but are not

limited to, digital and analog electronics, physics and applications of physical science, chemistry, biology, robotics, electro-mechanical system design, optics, MEMs, and power systems. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

ELECTROMECHANICAL SYSTEMS ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in systems engineering. Technical areas of support include, but are not limited to, digital and analog electronics, physics and applications of physical science, chemistry, biology, robotics, electro-mechanical system design, optics, MEMs, and power systems. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

ELECTROMECHANICAL SYSTEMS ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.

- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in systems engineering. Technical areas of expertise include, but are not limited to, digital and analog electronics, physics and applications of physical science, chemistry, biology, robotics, electro-mechanical system design, optics, MEMs, and power systems. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[*Back to Appendix F Table of Contents*](#)

Space Science and Engineering Division

LABOR CATEGORY	Year 7	Year 8	Year 9	Year 10
	10/10/07 10/09/08	10/10/08 10/09/09	10/10/09 10/09/10	10/10/10 10/09/11
Space Science Engineer 1	202.77	210.17	216.51	223.90
Space Science Engineer 2	202.77	210.17	216.51	223.90
Space Science Engineer 3	152.18	157.74	162.50	168.04
Space Science Engineer 4	107.90	111.84	115.22	119.14
Space Science Engineering Support 1	84.22	87.29	89.93	92.99
Space Science Engineering Support 2	55.11	57.12	58.84	60.85
Space Science Engineering Support 3	66.98	69.08	71.17	73.26
Space Science Engineering Support 4	45.93	47.37	48.81	50.24

Contract Modification PO-0011, 28 March 2007

SPACE SCIENCE ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in space science engineering and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include, but are not limited to, power systems, space plasma physics, planetary science, space instrument systems, solar and stellar science, and planetary atmosphere science. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

SPACE SCIENCE ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in space science engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include, but are not limited to, power systems, space plasma physics, planetary science, space instrument systems, solar and stellar science, and planetary atmosphere science. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

SPACE SCIENCE ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work.
- Provide recommendations to management regarding planning, program development and project and promotional efforts.
- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in space science engineering. Technical areas of expertise include, but are not limited to, power systems, space plasma physics, planetary science, space instrument systems, solar and stellar science, and planetary atmosphere science. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

SPACE SCIENCE ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in space science engineering. Technical areas of expertise include, but are not limited to, power systems, space plasma physics, planetary science, space instrument systems, solar and stellar science, and planetary atmosphere science. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

SPACE SCIENCE ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in space science engineering. Technical areas of support include, but are not limited to, power systems, space plasma physics, planetary science, space instrument systems, solar and stellar science, and planetary atmosphere science. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

SPACE SCIENCE ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in space science engineering. Technical areas of support include, but are not limited to, power systems, space plasma physics, planetary science, space instrument systems,

solar and stellar science, and planetary atmosphere science. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

SPACE SCIENCE ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in space science engineering. Technical areas of support include, but are not limited to, power systems, space plasma physics, planetary science, space instrument systems, solar and stellar science, and planetary atmosphere science. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

SPACE SCIENCE ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.
- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in space science engineering. Technical areas of expertise include, but are not limited to, power systems, space plasma physics, planetary science, space instrument systems, solar and stellar science, and planetary atmosphere science. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[*Back to Appendix F Table of Contents*](#)

Signal Exploitation and Geolocation Division

LABOR CATEGORY	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
	10/10/07 10/09/08	10/10/08 10/09/09	10/10/09 10/09/10	10/10/10 10/09/11
Electromagnetics Engineer 1	196.83	204.01	210.17	217.34
Electromagnetics Engineer 2	196.83	204.01	210.17	217.34
Electromagnetics Engineer 3	141.60	146.77	151.20	156.35
Electromagnetics Engineer 4	106.50	110.39	113.72	117.60
Electromagnetics Engineering Support 1	70.01	72.57	74.76	77.31
Electromagnetics Engineering Support 2	46.74	48.45	49.91	51.61
Electromagnetics Engineering Support 3	56.50	58.27	60.03	61.80
Electromagnetics Engineering Support 4	43.24	44.60	45.95	47.30

Contract Modification PO-0011, 28 March 2007

ELECTROMAGNETICS ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in electromagnetics, signals, and communications engineering and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include signal processing, signal exploitation, direction finding, surveillance systems, geolocation, embedded systems, electromagnetics, antennas, communications systems, and radio-frequency (RF) analysis and design. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

ELECTROMAGNETICS ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in electromagnetics, signals, and communications engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include signal processing, signal exploitation, direction finding, surveillance systems, geolocation, embedded systems, electromagnetics, antennas, communications systems, and radio-frequency (RF) analysis and design. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

ELECTROMAGNETICS ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work.
- Provide recommendations to management regarding planning, program development and project and promotional efforts.

- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in electromagnetics, signals, and communications engineering. Technical areas of expertise include signal processing, signal exploitation, direction finding, surveillance systems, geolocation, embedded systems, electromagnetics, antennas, communications systems, and radio-frequency (RF) analysis and design. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

ELECTROMAGNETICS ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in electromagnetics, signals, and communications engineering. Technical areas of expertise include signal processing, signal exploitation, direction finding, surveillance systems, geolocation, embedded systems, electromagnetics, antennas, communications systems, and radio-frequency (RF) analysis and design. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

ELECTROMAGNETICS ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in electromagnetics, signals, and communications engineering. Technical areas of support include signal processing, signal exploitation, direction finding, surveillance systems, geolocation, embedded systems, electromagnetics, antennas, communications systems, and radio-frequency (RF) analysis and design. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

ELECTROMAGNETICS ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in electromagnetics, signals, and communications engineering. Technical

areas of support include signal processing, signal exploitation, direction finding, surveillance systems, geolocation, embedded systems, electromagnetics, antennas, communications systems, and radio-frequency (RF) analysis and design. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

ELECTROMAGNETICS ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in electromagnetics, signals, and communications engineering. Technical areas of support include signal processing, signal exploitation, direction finding, surveillance systems, geolocation, embedded systems, electromagnetics, antennas, communications systems, and radio-frequency (RF) analysis and design. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

ELECTROMAGNETICS ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.

- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in electromagnetics, signals, and communications engineering. Technical areas of expertise include signal processing, signal exploitation, direction finding, surveillance systems, geolocation, embedded systems, electromagnetics, antennas, communications systems, and radio-frequency (RF) analysis and design. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[*Back to Appendix F Table of Contents*](#)

Mechanical and Materials Engineering Division

LABOR CATEGORY	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
	10/10/07 10/09/08	10/10/08 10/09/09	10/10/09 10/09/10	10/10/10 10/09/11
Mechanical and Materials Engineer 1	199.47	206.75	212.99	220.25
Mechanical and Materials Engineer 2	199.47	206.75	212.99	220.25
Mechanical and Materials Engineer 3	143.90	149.15	153.66	158.90
Mechanical and Materials Engineer 4	112.21	116.30	119.81	123.90
Mechanical & Materials Engineering Support 1	74.49	77.21	79.54	82.26
Mechanical & Materials Engineering Support 2	49.97	51.79	53.36	55.18
Mechanical & Materials Engineering Support 3	65.55	67.61	69.66	71.70
Mechanical & Materials Engineering Support 4	40.85	42.13	43.41	44.68

Contract Modification PO-0011, 28 March 2007

MECHANICAL AND MATERIALS ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in mechanical and materials engineering and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include engineering dynamics, materials engineering, mechanical and fluids engineering, structural engineering, and electromagnetic compatibility engineering to improve the safety, reliability, efficiency and life of new or existing mechanical components, structures and systems. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications, patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

MECHANICAL AND MATERIALS ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in mechanical and materials engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include engineering dynamics, materials engineering, mechanical and fluids engineering, structural engineering, and electromagnetic compatibility engineering to improve the safety, reliability, efficiency and life of new or existing mechanical components, structures and systems. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

MECHANICAL AND MATERIALS ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work.
- Provide recommendations to management regarding planning, program development and project and promotional efforts.

- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in mechanical and materials engineering. Technical areas of expertise include engineering dynamics, materials engineering, mechanical and fluids engineering, structural engineering, and electromagnetic compatibility engineering to improve the safety, reliability, efficiency and life of new or existing mechanical components, structures and systems. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 20 or more years of experience and are serving in an equivalent technical capacity.

MECHANICAL AND MATERIALS ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in mechanical and materials engineering. Technical areas of expertise include engineering dynamics, materials engineering, mechanical and fluids engineering, structural engineering, and electromagnetic compatibility engineering to improve the safety, reliability, efficiency and life of new or existing mechanical components, structures and systems. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience. Individuals may have a Bachelor's Degree in Technology or an Associates Degree with continued education and 15 to 20 years of experience and are serving in an equivalent technical capacity. This category also includes senior non-technical staff that provides technical writing, project support services, and supervision of non-technical staff.

MECHANICAL AND MATERIALS ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in mechanical and materials engineering. Technical areas of support include engineering dynamics, materials engineering, mechanical and fluids engineering, structural engineering, and electromagnetic compatibility engineering to improve the safety, reliability, efficiency and life of new or existing mechanical components, structures and systems. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

MECHANICAL AND MATERIALS ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in mechanical and materials engineering. Technical areas of support include

engineering dynamics, materials engineering, mechanical and fluids engineering, structural engineering, and electromagnetic compatibility engineering to improve the safety, reliability, efficiency and life of new or existing mechanical components, structures and systems. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

MECHANICAL AND MATERIALS ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in mechanical and materials engineering. Technical areas of support include engineering dynamics, materials engineering, mechanical and fluids engineering, structural engineering, and electromagnetic compatibility engineering to improve the safety, reliability, efficiency and life of new or existing mechanical components, structures and systems. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

MECHANICAL AND MATERIALS ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.

- Use PCs and PC applications to maintain test data.
- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in mechanical and materials engineering. Technical areas of expertise include engineering dynamics, materials engineering, mechanical and fluids engineering, structural engineering, and electromagnetic compatibility engineering to improve the safety, reliability, efficiency and life of new or existing mechanical components, structures and systems. Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[*Back to Appendix F Table of Contents*](#)

Geological and Materials Engineering

LABOR CATEGORY	<u>Year 7</u> 10/10/07 10/09/08	<u>Year 8</u> 10/10/08 10/09/09	<u>Year 9</u> 10/10/09 10/09/10	<u>Year 10</u> 10/10/10 10/09/11
Geological and Materials Engineer 1	200.43	206.02	212.25	218.86
Geological and Materials Engineer 2	200.43	206.02	212.25	218.86
Geological and Materials Engineer 3	153.53	157.83	162.60	167.66
Geological and Materials Engineer 4	114.59	117.82	121.37	125.15
Geological and Materials Engineering Support 1	81.14	83.41	85.95	88.61
Geological and Materials Engineering Support 2	54.22	55.70	57.42	59.19
Geological and Materials Engineering Support 3	63.43	65.32	67.21	69.24
Geological and Materials Engineering Support 4	45.30	46.66	47.99	49.41

Contract Modification PO-0012, March 2008

GEOLOGICAL AND MATERIALS ENGINEER 1

Task Description

This is the highest technical and management level position at the Institute. Individuals at this level have achieved true technical or managerial eminence in his or her field through technical and program accomplishments and an outstanding record of achievement at the Institute. Individuals assigned in this position:

- Are the senior technical persons in their field and contribute directly to the planning and development of staff and new technology.
- Apply advanced scientific and engineering principles in the development of original research programs.
- Plan future staff, technology and laboratory requirements.
- Generate program ideas based on innovative approaches and knowledge of client needs.
- Perform the technical aspects of investigation at the highest degree of competence.
- Lead program development.
- Manage Institute Divisions and/or Departments.
- Are internationally renowned in their profession.

Qualifications

Individuals successfully lead major business and technical activities primarily in the geological and materials and engineering, and have built a program or direct multiple program activities in a wide technical field. Technical areas of expertise include, but are not limited to, geology, hydrology, natural hazard assessment, environmental engineering, and material science and engineering. Individuals are capable of formulating a broad perspective of Institute technical activities through technical accomplishments, typically greater than 25 years of experience and an advanced technical degree. Individuals are recognized through peer-review publications,

patents, appointments to national or international committees and extensive client and peer interaction. Individuals lead the growth of subordinate staff in their field of expertise.

GEOLOGICAL AND MATERIALS ENGINEER 2

Task Description

Individuals assigned are recognized as a vital technical resource, having established a reputation for scientific excellence at the Institute and to some extent in the external community. Individuals manage projects, programs and staff members in the pursuit of technical and financial objectives. Individuals assigned in this position:

- Accomplish advanced scientific and engineering work within technical area of expertise and discipline.
- Are recognized as highly qualified in a research specialty and possess a similar reputation with clients and the professional community.
- Develop collaborative efforts in research and development across division and company lines.
- Take the lead in the promotion of new projects and programs while advancing technology.
- Oversee the preparation, presentation, and follow-up of major proposals and/or program results that normally require a high degree of creativity and technical organization.
- Are recognized both internally and externally as an authority in a research specialty.
- Receive invitations to participate in technical conferences and serve on national committees.
- Manage Institute employee sections or large complex programs.

Qualifications

Individuals have superb verbal, written and interpersonal communications skills and are successful in building a technical program and/or program group primarily in geological and materials engineering. Individuals are a recognized critical resource and have established a reputation for technical excellence which extends into the professional community. Technical areas of expertise include, but are not limited to, geology, hydrology, natural hazard assessment, environmental engineering, and materials science and engineering. Individuals typically have an advanced degree and 15 to 25 years of technical experience that assists in providing self-initiated, consultative services. Individuals provide guidance to senior level management in technical direction and staff development.

GEOLOGICAL AND MATERIALS ENGINEER 3

Task Description

Individuals at this level demonstrate significant technical leadership within Institute Science and Engineering staff. Individuals contribute to and guide the technical direction of projects. Individuals comprise the corps of knowledgeable, responsible and experienced project managers operating under the technical management line of authority. Individuals serve as program managers of smaller and less complex initiatives or tasks of larger, more complex projects. Individuals assigned in this position:

- Plan, design, coordinate and control the progress of project work to meet client objectives.
- Supervise others as project managers, assuming full responsibility for technical, financial, and work product project completion goals.
- Lead proposal efforts and new promotional work.

- Provide recommendations to management regarding planning, program development and project and promotional efforts.
- Present and publish technical papers.
- Manage technical groups of employees with specific skill sets.

Qualifications

Individuals are successful in managing laboratory, testing and development projects and have the aptitude to lead others and administer the technical, financial, client interaction and organizational aspects of programs primarily in geological and materials engineering. Technical areas of expertise include, but are not limited to, geology, hydrology, natural hazard assessment, environmental engineering, and materials science and engineering. Individuals typically have a Bachelors degree and 7 to 15 years of technical experience or an advanced degree reflecting continued achievement in their chosen profession.

GEOLOGICAL AND MATERIALS ENGINEER 4

Task Description

Individuals at this level generally perform project activities in a support capacity. Emphasis at this level is on the development of skills as a project team member, the development of individual technical specializations, the development of abilities to innovatively support technical objectives and to serve as future program leaders. Individuals may manage tasks associated to larger programs and interact with client technical representatives. Individuals assigned in this position:

- Perform work involving conventional investigation within a technical specialty.
- Identify ideas for new projects and ensure technical quality of current project activities.
- Establish working relationships with clients.
- Develop proficiency in writing and verbal presentation skills
- Deal regularly with other researchers across the Institute to collaborate in studies of interest.
- Supervise laboratory staff in testing activities.

Qualifications

Individuals are typically technical personnel who have completed a Bachelor's Degree in a technical field. Individuals exercise judgment, diligence and an aptitude for carrying out technical assignments primarily in geological and materials engineering. Technical areas of expertise include, but are not limited to, geology, hydrology, natural hazard assessment, environmental engineering, and materials science and engineering. Individuals are typically considered entry level with up to 7 years of experience. Individuals may have completed an advanced degree with very limited technical experience.

GEOLOGICAL AND MATERIALS ENGINEERING SUPPORT 1

Task Description

Individuals assigned in these non-exempt positions possess in-depth skills and expertise in a specialty field and provide key support to scientific and engineering project personnel. Individuals exercise wide latitude in carrying out technical instructions and require minimum supervision. Individuals assigned in this position:

- Utilize personal discretion and knowledge to construct components, models and adaptations of standard equipment.
- Troubleshoot problems with test equipment and components.
- Interact with senior staff and clients in discussion of current tests or future activities.
- Provide input to technical reports, proposals and procedures.
- Analyze technical data to uncover anomalies and/or report pertinent data elements.
- Provide training and assist with development of subordinate staff.
- Mentor subordinate technical laboratory staff.

Qualifications

Individuals have in depth knowledge of technical practices and procedures and stay abreast of technical changes in their field. Individuals supervise and train subordinate staff and interact with project managers and client technical representatives to ensure proper laboratory testing of products or prototypes primarily in automotive engineering. Technical areas of support include, but are not limited to, geology, hydrology, natural hazard assessment, environmental engineering, and materials science and engineering. Individuals typically have a High School Degree or equivalent education, an Associates Degree, Trade School education or continuing education and 7 to 20 years of relevant experience.

GEOLOGICAL AND MATERIALS ENGINEERING SUPPORT 2

Task Description

Individuals assigned at these non-exempt positions provide support to the skilled senior technical staff. Using developed skills and practical knowledge. The technician is expected to do assigned tasks in the laboratory and/or testing environment under supervision. Individuals assigned in this position:

- Set up experimental apparatus following written or verbal instructions.
- Prepare samples, specimens, prototype instruments and/or test materials following defined procedures.
- Conduct, observe and document standardized test and analyses data following established protocols.
- Conduct routine maintenance on equipment.
- Maintain and order required materials.

Qualifications

Individuals have basic knowledge of tasks associated with the technical area of work with skills in the application of mathematical functions, the use of PC software and hands-on craft abilities. Individuals are able to read schematics, drawings, sketches and technical instructions of testing protocols primarily in automotive engineering. Technical areas of support include, but are not limited to, geology, hydrology, natural hazard assessment, environmental engineering, and materials science and engineering. Individuals typically have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and 2 to 7 years of relevant experience.

GEOLOGICAL AND MATERIALS ENGINEERING SUPPORT 3

Task Description

Individuals assigned in these non-exempt positions execute all clerical and administrative duties required to support the scientific and engineering staff in the performance of project responsibilities. Individuals use office equipment, and using internal processes to complete required project and Institute correspondence and filing requirements. Individuals organize meetings, make travel arrangements and deal effectively with clients. Individuals assigned in this position:

- Have good communication skills to interact with Institute staff and client representatives.
- Answer telephones and exhibit good judgment in answering basic questions.
- Compile administrative, operating or program data and formats based on instructions or established standards.
- Prepare correspondence, proposals and reports editing for format, spelling, punctuation and grammar.
- Act on their own initiative within defined responsibility to carry out routine tasks and procedures.
- Interact with vendors and support services in the normal execution of duties.

Qualifications

Individuals provide support to projects primarily in geological and materials engineering. Technical areas of support include, but are not limited to, geology, hydrology, natural hazard assessment, environmental engineering, and materials science and engineering. In this broad classification of Institute employees, individuals have a high school degree or equivalent education. Individuals may have a continuing education or certification as a professional secretary and is skilled in providing administrative software support. Individuals have up to 20 years of clerical experience with the ability to exercise discretion within dictated areas of responsibility and may supervise subordinate staff.

GEOLOGICAL AND MATERIALS ENGINEERING SUPPORT 4

Task Description

Individuals assigned in these non-exempt positions perform entry-level technical support functions of a routine nature under the close supervision of senior technical staff. Individuals at this level have an ability to learn, knowledge of general technical areas and materials and equipment. Individuals assigned in this position:

- Clean laboratory equipment, materials, and components for testing following defined procedures.
- Assist skilled personnel in performing technical work.
- Use PCs and PC applications to maintain test data.
- Conduct routine tests as directed by supervisors following written or verbal protocols.
- Assists with data documentation and analysis.

Qualifications

Individuals perform general technical activities that support projects primarily in automotive engineering. Technical areas of expertise include, but are not limited to, geology, hydrology, natural hazard assessment, environmental engineering, and materials science and engineering.

Individuals have a high school degree or equivalent education, an Associates Degree, Trade School education or continuing education and zero to 2 years of relevant experience.

[Back to Appendix F Table of Contents](#)