

TRANDES CORPORATION



General Services Administration - Federal Supply Service
Authorized Federal Supply Schedule Price List on-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through *GSA Advantage!*, a menu-driven database system. The INTERNET address *GSA Advantage!* is: <http://www.GSAAdvantage.gov>

Professional Engineering Services (PES) Price List

**GSA FSC Group 87:
SIN 871-6 / 871-6RC Acquisition and Life Cycle Management Projects**

**Planning, Budgetary, Contract and Systems/Program Management
Procurement and/or Production
Operational Support
Life Cycle Support
Maintenance, Repair, Supply and Engineering Logistics
Operation and Maintenance
Program/Project Management
Technology Transfer/Insertion
Training
Privatization and Outsourcing**

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

Contract Number: GS-23F-0114K

TRANDES Corporation
4601 Presidents Drive, Suite 360
Lanham, MD 20706
Voice: (800) 878-0201, Ext. 31
Fax: (800) 878-1069
E-Mail: gsasched@trandes.com

Contract Period: Option I, 1 March 2005 – 03/01/ 2010
Business Size: Small Business

Pricelist effective through: Amendment 3, effective 5/15/2009

CUSTOMER INFORMATION:

1a. TABLE OF AWARDED SPECIAL ITEM NUMBER: SIN 871-6 / 871-6RC, ACQUISITION AND LIFE CYCLE MGT

Services required under this SIN involve all of the planning, budgetary, contract and systems/program management functions required to procure and/or produce, render operational and provide life cycle support (maintenance, repair, supplies, engineering specific logistics) to technology-based systems, activities, subsystems, projects, etc. Typical associated tasks include, but are not limited to operation and maintenance, program/project management, technology transfer/insertion, training, privatization and outsourcing.

DISCIPLINES:

ELECTRICAL ENGINEERING	MECHANICAL ENGINEERING
Design Engineering	Design Engineering
Electronic Systems	Electrical and Electronic Packaging
Aerospace Systems	Information Storage and Processing Systems
Circuits and Systems	Structural
Computer	Materials
Information Theory	Management
Antennas and Propagation	Materials Handling
Communications	Non-Destructive Evaluation
Engineering Management	Power
Industrial Electronics	Noise Control
Magnetics	Process Industries
Components Packaging, and Manufacturing Tech.	Applied Mechanics
Control Systems	Manufacturing
Electromagnetic Compatibility	
Power Electronics	
Reliability	
Microwave Theory and Techniques	
Professional Communication	
Signal Processing	

**Engineering Tasking Authorized
Within The Disciplines:**

- Acquisition and Life Cycle Management
- Analysis of Program Goals, Mission, Objectives, Performance
- Computer Aided Design (CAD)
- Computer Aided Engineering (CAE)
- Computer Aided Management (CAM)
- Concept development
- Demonstration and Validation
- Design/Specifications
- Demonstration and Information Dissemination
- Environmental Control for Electrical Units
- Independent Verification and Validation (IV&V)
- Information Services
- Instrumentation
- Systems Integration
- Investigative Engineering Service
- Life Cycle Costing
- Logistics
- Integrated Logistics Support (ILS)
- Long-Term Reliability and Maintainability
- Operation and Maintenance (O&M)
- Plan, Organize, Establish, Implement, Manage, Maintain, Upgrade and Control of Technical Systems
- Privatization and Outsourcing
- Program and Project Management
- Prototype Development and First Article Production
- Radar
- Sonar
- TACAN
- Navigation Aids
- Reliability and Maintainability Analysis
- Reverse Engineering
- Signal Processing
- Simulation and Modeling
- Site Development
- Source Data Development
- Source Data Validation
- Special Projects and Studies
- Statistical Analysis
- Support Services
- Systems Engineering
- Technical Analysis
- Technical and Management Support
- Technical Writing
- Editorial Support
- Test and Evaluation (T&E)
- Training
- Economic/Business Case Analysis
- Assessment Support

1b. Identification of the lowest priced model number and lowest unit price for that model for each special item number awarded in the contract. This price is the Government price based on a unit of one, exclusive of any quantity/dollar volume, prompt payment, or any other concession affecting price. Those contracts that have unit prices based on the geographic location of the customer, should show the range of the lowest price, and cite the areas to which the prices apply. NOT APPLICABLE

1c. If the Contractor is proposing hourly rates, a description of all corresponding commercial job titles, experience, functional responsibility and education for those types of employees or subcontractors who will perform services shall be provided. SEE APPENDIX B, LABOR AND CATEGORY DESCRIPTIONS.

2. MAXIMUM ORDER: \$750,000.00.

Notwithstanding this limit, agencies may place and TRANDES may honor orders exceeding this limit in accordance with FAR 8.404. The maximum order is the suggested renegotiation point whereby agencies should seek additional concessions if orders exceed this amount.

3. MINIMUM ORDER: \$100.00.

When the Government requires supplies or services covered by this contract in an amount less than \$100, the Government is not obligated to purchase, nor is TRANDES obligated to furnish those supplies or services under the contract. However, if the Government places such orders, they shall be deemed to be accepted by TRANDES, unless returned to the ordering office within 5 workdays after receipt by TRANDES.

4. GEOGRAPHICAL COVERAGE (DELIVERY AREA): The geographic scope of this contract is the 48 contiguous states, the District of Columbia, Alaska, Hawaii, the Commonwealth of Puerto Rico, and all U.S. Government installations and/or agencies abroad.

5. POINTS OF PRODUCTION: All locations within scope of the contract.

6. DISCOUNT FROM LIST PRICES OR STATEMENT OF NET PRICE: Appendix A rates reflect net hourly rates.

7. QUANTITY DISCOUNTS: 1% following achievement of annual PES revenue discount threshold of \$10,000,000.

8. PROMPT PAYMENT TERMS: None; Net 30.

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

10. On pre-coordination, Government purchase cards will be accepted above the micro-purchase threshold.

11a. TIME OF DELIVERY: Not applicable.

11b. EXPEDITED DELIVERY: Not applicable.

11c. OVERNIGHT AND TWO DAY DELIVERY: Not applicable.

11d. URGENT REQUIREMENTS: Not applicable.

12. F.O.B. POINTS: As specified in delivery orders.

13a. ORDERING ADDRESS:

**TRANDES CORPORATION
4601 Presidents Drive, Suite 360
Lanham, MD 20706**

Voice: (800) 878-0201, Ext. 31

Fax: (800) 878-1069

E-Mail: gsasched@trandes.com

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

14. PAYMENT ADDRESS:

**TRANDES CORPORATION
4601 Presidents Drive, Suite 360
ATTN: A/R
Lanham, MD 20706
Voice: (800) 878-0201, Ext. 34 (or 23)**

15. WARRANTY PROVISION: As identified in individual delivery orders.

16. EXPORT PACKING CHARGES: As identified in individual delivery orders.

17. Terms and conditions of Government purchase card acceptance (any thresholds above the micro-purchase level): **As identified in individual delivery orders.**

18. Terms and conditions of rental, maintenance, and repair (if applicable): **As identified in individual delivery orders.**

19. Terms and conditions of installation: **As identified in individual delivery orders.**

20. Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices (if applicable): Not Applicable.

20a. Terms and conditions for any other services: N/A.

21. List of service and distribution points (if applicable): N/A.

22. List of participating dealers: N/A.

23. Preventive maintenance: **As identified in individual delivery orders.**

24a. Special attributes such as environmental attributes (e.g., recycled content, energy efficiency, and/or reduced pollutants): As identified in individual delivery orders.

24b. If applicable, indicate that Section 508 compliance information is available on Electronic and Information Technology (EIT) supplies and services and show where full details can be found: N/A.

25. Data Universal Number System (DUNS) number: 08-106-4651.

26. Notification regarding registration in Central Contractor Registration (CCR) database. Trandes Corporation is registered in CCR under the DUNS above.

Appendix A follows.

Appendix A: Price List: OPTION I PERIOD

	3/1/05-- 2/28/06	3/1/06-- 2/28/07	3/1/07-- 2/28/08	3/1/08-- 2/28/09	3/1/09-- 2/28/10
Senior Engineering Program Manager	\$155.90	\$160.58	\$165.40	\$170.36	\$175.47
Engineering Program Manager	\$96.82	\$99.72	\$102.72	\$105.80	\$108.97
Senior Engineering Scientist	\$128.82	\$132.69	\$136.67	\$140.77	\$144.99
Engineering Scientist	\$96.82	\$99.72	\$102.72	\$105.80	\$108.97
Systems Analyst	\$79.98	\$82.38	\$84.85	\$87.40	\$90.02
Senior Systems Engineer	\$87.97	\$90.61	\$93.33	\$96.13	\$99.01
Systems Engineer	\$79.98	\$82.38	\$84.85	\$87.40	\$90.02
Design Engineer, Digital Electronics	\$79.98	\$82.38	\$84.85	\$87.40	\$90.02
Design Engineer, Analog & Radio Frequency	\$79.98	\$82.38	\$84.85	\$87.40	\$90.02
Design Engineer, Mechanical/Structural	\$79.98	\$82.38	\$84.85	\$87.40	\$90.02
Design Technician, Electronics	\$60.21	\$62.02	\$63.88	\$65.80	\$67.77
Design Technician, Mechanical/Structural	\$60.21	\$62.02	\$63.88	\$65.80	\$67.77
Senior Electronic Engineering Aide	\$42.49	\$43.76	\$45.07	\$46.43	\$47.82
Electronics Engineering Aide	\$36.70	\$37.80	\$38.93	\$40.10	\$41.30
Sr. Practicing Engineer, Comm.-Electronics	\$72.69	\$74.87	\$77.11	\$79.43	\$81.81
Practicing Engineer, Comm-Electronics	\$60.21	\$62.02	\$63.88	\$65.80	\$67.77
ILS Manager	\$69.46	\$71.55	\$73.69	\$75.90	\$78.18
Configuration Management Specialist	\$69.46	\$71.55	\$73.69	\$75.90	\$78.18
Supplies Engineering Specialist	\$41.06	\$42.29	\$43.56	\$44.86	\$46.21
Engineering Data Manager	\$37.30	\$38.42	\$39.57	\$40.75	\$41.98
Data Entry Clerk-Typist	\$24.31	\$25.04	\$25.79	\$26.56	\$27.36
Engineering/Technical Manual Specialist	\$54.66	\$56.30	\$57.99	\$59.73	\$61.52
Engineering/Technical Editor/Writer	\$45.18	\$46.53	\$47.93	\$49.36	\$50.85
Senior Systems Training Specialist	\$79.98	\$82.38	\$84.85	\$87.40	\$90.02
Systems Training Specialist	\$55.55	\$57.21	\$58.93	\$60.70	\$62.52
Engineering Publications Aide	\$45.18	\$46.53	\$47.93	\$49.36	\$50.85
Senior Design Draftsman	\$45.18	\$46.53	\$47.93	\$49.36	\$50.85
Computer Draftsman	\$37.30	\$38.42	\$39.57	\$40.75	\$41.98
Technical Typist	\$24.31	\$25.04	\$25.79	\$26.56	\$27.36
Material Specialist	\$33.95	\$34.97	\$36.02	\$37.10	\$38.21
Warehouseman	\$29.04	\$29.91	\$30.80	\$31.73	\$32.68
Supervisory Electronics Installation Aide	\$57.95	\$59.69	\$61.48	\$63.32	\$65.22
Electronics Installation Aide	\$42.49	\$43.76	\$45.07	\$46.43	\$47.82
Engineering Metalwork Specialist	\$41.06	\$42.29	\$43.56	\$44.86	\$46.21
Journeyman Electrician	\$42.49	\$43.76	\$45.07	\$46.43	\$47.82
Prototype Component Fabrication Aide	\$41.06	\$42.29	\$43.56	\$44.86	\$46.21
Prototype Component Coatings Aide	\$41.06	\$42.29	\$43.56	\$44.86	\$46.21
Student Engineering Aide	\$32.30	\$33.27	\$34.27	\$35.30	\$36.35

Appendix B: Labor Category Descriptions:

1. **Commercial Job Title:** Senior Engineering Program Manager

Minimum/General Experience: Twenty years of recent relevant experience in military electronic system design/test/evaluation, acquisition management, specification development

Functional Responsibility: Manger of multiple Engineering Program Managers. Demonstrated aptitude and capacity for conducting management and senior engineering functions. Experienced in directing the integration of a program team which includes engineering, purchasing, manufacturing, installation, quality assurance, documentation, and financial administration supporting multi-year projects with demonstrated experience and success in the technical management of command, control and communications system development programs.

Minimum Education: An advanced degree in an engineering, or scientific discipline: or a Bachelors Degree in an engineering or scientific discipline and an MBA or an equivalent combination of education and experience.

2. **Commercial Job Title:** Engineering Program Manager

Minimum/General Experience: Ten years of recent relevant experience in military electronic system design test, evaluation, acquisition management, specification development.

Functional Responsibility: Demonstrated aptitude and capacity for conducting management and senior engineering functions. Experienced in directing the integration of a program team which includes engineering, purchasing, manufacturing, installation, quality assurance, documentation, and financial administration supporting multi-year projects with demonstrated experience and success in the technical management of command, control and communications system development programs.

Minimum Education: An advanced degree in an engineering, or scientific discipline: or a Bachelors Degree in an engineering or scientific discipline and an MBA or an equivalent combination of education and experience.

3. **Commercial Job Title:** Senior Engineering Scientist

Minimum/General Experience: The Senior Engineering Scientist shall have at a minimum (8) eight years recent relevant experience in the Airspace Systems field.

Functional Responsibility: Clearly demonstrate the capability for providing in-depth, professional review of the various sophisticated electronics, and electronics related, problems that are encompassed by the scope of the contract This background shall include a minimum of four (4) years experience in providing top-level assessment reviews involving the resolution of complex problems. As a minimum, be capable of independently performing high-level assessment and review functions for problems called out in the individual delivery orders and shall be required to provide definitive written and results/recommendations.

Minimum Education: Shall have, as a minimum, an advanced degree (MS or PhD) in a technical field (Engineering, Physics, or Computer Science) or an equivalent combination of education and experience.

4. Commercial Job Title: Engineering Scientist

Minimum/General Experience: A minimum of eight years recent relevant experience in research or development of digital computer systems evolving and applying new concepts, methods, and techniques to information storage, manipulation, transformation, and presentation.

Functional Responsibility: Clearly demonstrate the capability for providing in-depth, professional review of the various sophisticated electronics, and electronics related, problems that are encompassed by the scope of the contract. This background shall include a minimum of two (2) years experience in providing top-level assessment reviews involving the resolution of complex problems. As a minimum, be capable of independently performing high-level assessment and review functions for problems called out in the individual delivery orders and shall be required to provide definitive written and oral results/recommendations.

Minimum Education: As a minimum, an advanced degree (MS) or PhD) in Computer Science, Physics, Electronic Engineering, or a related technical field or an equivalent combination of education and experience.

5. Commercial Job Title: Systems Analyst

Minimum/General Experience: Five (5) years recent relevant experience in systems operation and applications, analysis, design specifications, top-down program design, and system program development/testing.

Functional Responsibility: A current knowledge of system hardware capabilities, systems specifications, types of displays, micro-computer capabilities and leased-line system services and related programs is mandatory. Capable of independently executing responsibility for accomplishing all assignments for developing methods of generating and processing data and integrating these into processing systems and plans.

Minimum Education: As a minimum, a Bachelors Degree in Computer Science or an equivalent combination of education and experience.

6. Commercial Job Title: Sr. Systems Engineer

Minimum/General Experience: Fifteen years of recent relevant experience in design, integration, and installation of military systems in one or more of the following fields: communications; electronic warfare; navigation; direction finding; data processing equipment.

Functional Responsibility: Expertise in system configuration, trade-off analysis, detailed system and component analysis, control systems, electronic circuits, power, grounding, Tempest, and high speed data. A total of three years of experience in four of the following disciplines:

(a) System component and interface hardware/software specification development, design, integration, and testing

(b) Analytical studies and detailed planning for the integration and installation of various military systems on U.S. Navy ship and shore stations

(c) Performance prediction analysis

(d) Spread spectrum/frequency hopping

(e) Millimeter microwave component and system performance

(f) EW, LPI vulnerability analysis.

Minimum Education: An advanced degree in Electronic/Electrical Engineering or Physics.

7. Commercial Job Title: Design Engineer Digital Electronics

Minimum/General Experience: Experience in the design of electronic systems installation plans and supplementary documentation. Eight (8) years recent relevant experience in the design and development of ship and/or shore digital electronic equipment and systems.

Functional Responsibility: The design engineer shall be capable of independently, effectively, and efficiently assessing equipment operating requirements and developing appropriate designs. The engineer shall be capable of analyzing equipment operating and performance specifications, schematic diagrams, drawings and manuals; developing and executing test plans and procedures; and of analyzing test results and recommending corrective actions. Experience shall include not less than (4) four years design experience in new product development using microprocessors, signal processors, ASICs and PALs.

Minimum Education: A Bachelor's Degree in Electronic or Electrical Engineering or an equivalent combination of education and experience.

8. Commercial Job Title: Design Engineer Analog and Radio Frequency

Minimum/General Experience: The engineer shall be capable of independently, effectively, and efficiently assessing equipment operating requirements and developing appropriate designs.

Functional Responsibility: The engineer shall be capable of analyzing equipment operating and performance specifications, schematic diagrams, drawings and manuals; developing and executing test plans and procedures; and of analyzing test results and recommending corrective actions. Experience shall include not less than (4) four years design experience in high power transmitter systems and antennas operating in the UHF and SHF frequency range and (2) two years experience in analog circuit design.

Minimum Education: A Bachelor's Degree in Electronic or Electrical Engineering with experience in the design of electronic systems installation plans and supplementary documentation. The design engineer shall have, as a minimum, eight (8) years recent relevant experience in the design and development of ship and/or shore analog and if electronic equipment and systems or an equivalent combination of education and experience.

9. Commercial Job Title: Design Engineer Mechanical/Structural

Minimum/General Experience: Five (5) years recent relevant experience in the design, structural analysis, and testing of ship and/or shore military hardware platforms and their electrical, hydraulic and mechanical systems.

Functional Responsibility: Mounting stands, foundations, cabinets, etc., for various shipboard and/or shore electronic equipment enclosures, antenna platforms and other mechanical structures. Shall be experienced in optimum thermal heat load calculations, design of air conditioning systems, air handling systems and fluid cooling systems for electronic equipment.

Minimum Education: A Bachelor's Degree in Mechanical Engineering or an equivalent combination of education and experience.

10. Commercial Job Title: Design Technician, Electronics

Minimum/General Experience: Capable of independently conducting equipment/software evaluation tests, analyzing test results, preparing/reviewing and modifying test plans and procedures, and developing report data/summaries.

Functional Responsibility: Familiarity with shipboard and/or shore electronics and peripheral systems is required.

Minimum Education: A High School Diploma or equivalent, two (2) years training in an appropriate industry trade school, military school, or recognized college and a total of eight (8) years recent relevant experience in ship installation design, installation and certification of hardware or software systems, test and evaluation.

11. Commercial Job Title: Design Technician Mechanical/structural

Minimum/General Experience: Knowledge of shipboard and/or shore mechanical and structural requirements related to electronics installations such as antenna supports, equipment foundations, bulkhead and hull penetrations of cables and waveguide is mandatory.

Functional Responsibility: Familiarity with shipboard and/or shore air conditioning, venting and cooling systems is required.

Minimum Education: a High School Diploma or equivalent, five (5) years recent relevant experience in the mechanical/structural assembly, repair and layout with a minimum of three (3) years recent relevant experience in mechanical and structural planning.

12. Commercial Job Title: Senior Electronics Engineering Aide

Minimum/General Experience: Four (4) years of experience in the testing, repair, installation, and engineering documentation of ship and/or shore electronic systems. Shall be experienced at analyzing equipment operating and performance specifications, schematic diagrams, drawings and manuals: developing and executing test plans and procedures and of analyzing test results.

Functional Responsibility: Shall be capable of independently assessing redundant equipment failures and developing appropriate repair procedures and engineering change proposals. Must be able to provide on-the-job training on equipment/system testing, operation, maintenance, troubleshooting and repair to personnel. Must have not less than three (3) years specialized experience supervising the troubleshooting and repair of electronics equipment. Shall be responsible for checking and verifying the quality of work performed by other technicians.

Minimum Education: Two (2) years of training, in an appropriate industry trade school, military service school or civilian college, twelve (12) years recent relevant experience, of which seven (7) years are military ship/shore electronic systems design, development, component analysis, and development of repair procedures

13. Commercial Job Title: Electronics Engineering Aide

Minimum/General Experience: Must have a significant understanding of the fundamentals of analog and digital electronics, and electrical circuitry theory. Must be proficient in the use of a wide range of electronic test equipments common to the trade.

Functional Responsibility: Must be able to provide on-the-job training on equipment/system testing, operation, maintenance, troubleshooting and repair to personnel. Be capable of independently, effectively and efficiently operating within a broad set of established guidelines to accomplish the various electronics oriented assignments.

Minimum Education: Two (2) years of training in an appropriate industry trade school, military service school or civilian college, eight (8) years recent relevant experience, of which five (5) years are cumulative practical experience in electronics related to military ship/shore electronic systems design, development, component analysis, maintenance, and repair.

14. Commercial Job Title: Senior Practicing Engineer (Communications)

Minimum/General Experience: Ten (10) years cumulative experience in engineering or physical science fields and must have a demonstrated working knowledge of the applicable standards and specifications listed in the Delivery Orders. At least four (4) of those years must demonstrate recent, relevant specialized experience performing engineering functions on ATC and NAVAJDS Systems, Communication Systems, Information Exchange Systems or Platform Broadcast Systems.

Functional Responsibility: Shall have demonstrated recent experience in each of the following areas: 1) Preparation, review and modification of technical documents and data, 2) Installation design, installation and certification of military communications or software systems, 3) Development, review and analysis or results of communications systems test plans, 4) Development or validation of system specifications.

Minimum Education: A High School Diploma or equivalent and two (2) years of training in an appropriate industrial trade school, military service school or civilian college. An Associates Degree in Electronics or related scientific field is desirable.

15. Commercial Job Title: Practicing Engineer (Communications)

Minimum/General Experience: Eight (8) years cumulative experience in engineering or physical science fields and must have a demonstrated working knowledge of the applicable standards and specifications listed in the Delivery Order. At least three (3) of those years must show demonstrated recent, relevant experience in performing engineering functions on Airspace or communications systems.

Functional Responsibility: Shall have demonstrated experience in each of the following areas: 1) Preparation, review and modification of technical documents and data 2) Installation design, installation and certification of military electrical/electronics systems, 3) Development, review and analysis of results of electrical/electronic systems test plans 4) Development or validation of systems specifications.

Minimum Education: A High School Diploma or equivalent and two (2) years of training in an appropriate industry trade school, military service school or civilian college. An Associates Degree in Electronics or related scientific field is desirable.

16. Commercial Job Title: ILS Manager

Minimum/General Experience: Ten (10) years recent relevant experience in logistics. Military system logistics experience must include development of logistics support analyses, level of repair analysis, provisioning, integrated logistics support plans, and other related ILS documentation.

Functional Responsibility: Experience may be in any of the design/logistic support areas applicable to complex military electronic equipments or systems, and must provide an exposure to problems encountered in day-to-day military logistic support operations. Experience working to MIL-STD-1369 (integrated Logistics Support Program Requirements), MIL-STD-I 385/I (Logistic Support Analysis) MIL-STD- 138812 (Logistic Support Analysis Record) and MIL-STD-973 Configuration Management is mandatory.

Minimum Education: High School Diploma.

17. Commercial Job Title: Configuration Management Specialist

Minimum/General Experience: The CM Specialist shall have a minimum of eight (8) years recent relevant DOD/Industry experience in CM and exhibit an understanding of the importance and impact that CIA has on cost, operation, response, and maintenance.

Functional Responsibility: Must have a related knowledge of engineering, technical, and in whole or at varying levels for configuration tracking, and accounting.

Minimum Education: High School Diploma.

18. Commercial Job Title: Supply Engineering Specialist

Minimum/General Experience: The Supply Specialist shall have a minimum of six (6) years recent relevant DoD/Industry experience which shall consist of three (3) years general experience in support environments interpreting engineering drawings, equipment specifications, technical publications; e.g., manuals, TRS, TPS, MRC, PTD, APL, etc.; participating in provisioning conferences, validations and verifications, and technical/operational evaluations (TECHEVAL/OPEVAL); and two (2) years specialized experience in identifying test and support equipment, maintenance requirements, and facility support equipment.

Functional Responsibility: Experience may be in the design/logistic support areas applicable to complex military electronic equipments or systems, and must provide an exposure to problems encountered in day-to-day military supply support operations.

Minimum Education: High School Diploma

19. Commercial Job Title: Engineering Data Manager

Minimum/General Experience: Three (3) years recent relevant experience in the design, control, and administration of data systems. In addition, two (2) years of specialized experience working with the computerized development of physical and logical data structures that included the utilization of associated security systems is mandatory. Two (2) years experience working with the manual development of data information systems or one (1) year College level education may be substituted for

one (1) year of general experience. No substitute for the specialized experience will be accepted. Shall be capable of independently performing complete data base administration, entry and maintenance functions without direct supervision.

Minimum Education: High School Diploma (or have an equivalent GED certificate) or an equivalent combination of education and experience.

20. Commercial Job Title: Data-Entry Clerk-Typist

Minimum/General Experience: The Data Entry Clerk-Typist shall be certified and have a minimum of two (2) years recent relevant experience with technical publications and correspondence preparation.

Functional Responsibility: Utilizing word processors such as Microsoft Word, Word Perfect, and spread sheets such as Excel or Lotus 123. Must be capable of accurately typing in excess of sixty (60) words-per-minute.

Minimum Education: High School Diploma

21. Commercial Job Title: Engineering Technical Manual Specialist

Minimum/General Experience: Technical Manual Specialist shall be knowledgeable of all aspects of SPA WAR, NAVAIR, and NAVSEA technical manual requirements for the development and quality assurance of technical manuals. Shall have a minimum of ten (10) years recent relevant experience in the technical publications field of which a minimum, of five (5) years must have been in a responsible position in which technical data support programs were established and maintained and program support plans developed.

Functional Responsibility: Shall be familiar with maintenance concepts in order to present technical data accurately for fleet operation and maintenance personnel.

Minimum Education: High School Diploma

22. Commercial Job Title: Technical Editor/ Writer

Minimum/General Experience: The Technical Writer/Editor shall have a minimum of five (5) recent relevant years experience writing technical manuals which meet industry and military specifications and standards.

Functional Responsibility: Must be able to write other technical and management reports, plans and documents within the broad scope as defined by engineers, technicians, and logistics managers, and utilize a word processor.

Minimum Education: High School Diploma

23. Commercial Job Title: Senior Systems Training Specialist

Minimum/General Experience: The Senior Training Specialist shall have an extensive working knowledge of the development cycle for the generation of a Navy Training Plan (NTP). Shall have a minimum of ten (10) years recent relevant Navy training experience. This shall consist of four (4) years general experience in preparing and coordinating Navy Training Plans (NTPs) for Navy technical equipment, subsystems and systems; and four (4) years specialized experience estimating types and quantities for preparing technical training materials in accordance with MIL-STD-1379 requirements.

Functional Responsibility: Experience with Computer Aided Instruction (CAI) and Computer Based Instruction (CBI) training development is required. Must have experience in determining and identifying manpower and personnel specialty requirements. Must have a working knowledge of Computer Interactive Video Disc (CIVD) development.

Minimum Education: High School Diploma

24. Commercial Job Title: Systems Training Specialist

Minimum/General Experience: The Training Specialist shall have an working knowledge of the development cycle for the generation of a Navy Training Plan (NTP). The Training Specialist shall have a minimum of six (6) years recent relevant Navy training experience. This shall consist of: three (3) years general experience in preparing and coordinating Navy Training Plans (NTPs) for Navy technical equipment, subsystems and systems; and three (3) years specialized experience estimating types and quantities for preparing, technical training materials in accordance with MIL-STD- 1379 requirements.

Functional Responsibility: Experience with Computer Aided Instruction (CAI) and Computer Based Instruction (CBI) training development is required. Must have experience in determining and identifying manpower and personnel specialty requirements.

Minimum Education: High School Diploma.

25. Commercial Job Title: Engineering Publications Aide

Minimum/General) Experience: The Publications Aide shall have as a minimum one (1) year recent relevant experience in the publications field gathering, filing and retrieving data.

Functional Responsibility: Must be capable of updating data banks, proof-reading and assisting in publications productions.

Minimum Education: High School Diploma

26. Commercial Job Title: Senior Design Draftsman

Minimum/General Experience: Eight (8) years recent relevant experience in electronic, electrical, or mechanical drafting on Department of Defense or equivalent government projects. Thorough knowledge of and experience in working to DoD-D- 1000 (Drawing Engineering and Associated List) and DoD-STD-100 (Engineering Drawing Practices) is required. Work experience must include 4 years of design and layout of systems, units, or components to carry out design concepts and requirements determined by the engineer.

Functional Responsibility: Must be familiar in gathering essential basic information, providing design layout and arrangements, and have recent (within previous 2 years) experience in directing other draftsmen in the preparation of engineering or manufacturing drawings. Experience in checking the work of others is required. Must have background knowledge of shop practices relative to manufacturing and shipboard installation techniques.

Minimum Education: The standards for this category are, 2 years of college or be a graduate of a trade school or an equivalent combination of experience and education.

27. Commercial Job Title: Computer Draftsman

Minimum/General Experience: The Computer Draftsman shall be experienced in working from design information in a variety of documented formats as well as verbal instructions, and shall be able to make mathematical calculations preliminary to or in the preparation of working drawings and associated lists.

Functional Responsibility: Be capable of independently performing a full range of Computer Aided Design drafting functions consistent with the scope of this contract. Experience working to DoD-D-I 000 and DoD-STD-I 00 (Engineering Drawing Practices) in a CAD environment is mandatory.

Minimum Education: High School Diploma and five (5) years of recent relevant drafting experience with a minimum of two (2) years specialized experience in the use of the state-of the-art Computer Aided Design/Computer Aided Manufacture (CAD/CAM) systems. An Occupational Associate in Drafting (including theory, lab, and hands on experience with an industrial CAD/CAM system) may be substituted in lieu of the two (2) years specialized experience, or an equivalent combination of education and experience.

28. Commercial Job Title: Technical Typist

Minimum/General Experience: In addition, the technical typist shall have a minimum of six (6) months experience in the use of office computer word processing software.

Functional Responsibility: Capable of independently, effectively, and efficiently entering and extracting information, in a variety of formats, from various established data base programs, preparing reports from compiled data and other related functions common to performance in this field. Accurate typing in excess of 50 words per minute is mandatory.

Minimum Education: High School Diploma or equivalent and two (2) years of recent relevant experience in typing involving a high degree of technical and scientific notation that includes preparing test documents, tables, matrices, and wire lists with a background in the formation of technical files.

29. Commercial Job Title: Material Specialist

Minimum/General Experience: Responsible for material planning, inventory control, storage, shipping and receiving functions for work accomplished under this contract. Must have a minimum of four (4) years recent relevant experience in development and maintenance of computerized inventory control systems to track status of inventory levels, production requirements, physical locations. Must be skilled at performing efficient movement of materials, reviewing production schedules and preparing requirement plans. Must have six (6) years experience in maintaining status and records of shipments, warehoused equipment, spare parts, and production material.

Functional Description: Must be computer literate and capable of using spreadsheets, data bases, etc. Through analysis of delivery schedules, and installation schedules, forecasts for anticipated materials and shipping requirements. Coordinates with installation and ISEA supervisors, and with client's material management branch to insure availability and timely delivery of materials and equipment to meet installation schedules, and tech assists.

Minimum Education: High School Diploma

30. Commercial Job Title: Warehouseman

Minimum/General Experience: A total of four (4) years recent relevant experience is required. Must be qualified to operate independently, to provide services including the assembly of installation equipments and components, staging of equipments and components, and assembling various kits.

Functional Responsibility: Receiving and sorting materials, preparing materials for shipment, maintaining inventory levels. Preparing appropriate documentation on all components, equipments, and materials, maintaining records and other related tasks. Must be qualified to operate appropriate material handling and transportation equipment including forklifts and trucks. Must be computer literate and capable of using spreadsheets, data bases, etc. Must be capable of working with little or no supervision.

Minimum Education: High School Diploma

31. Commercial Job Title: Supervisory Electronics Installation Aide

Minimum/General Experience: Ten (10) years recent relevant experience in the Field of electronics repair, fabrication, and installation that clearly demonstrates a thorough knowledge of the principles of electronics and electricity, including the current industrial provisions of the National Electric Code.

Functional Responsibility: The ability to supervise all technical and mechanical trades. A sound working, knowledge of the trades, including: sheet-metal, welding, pipefitting, rigging, painting and all other trades relevant to the installation of electronics equipments/systems ship or shore. Able to work from blueprints, drawings, manuals, handbooks, and technical specifications depicting a variety of requirements such as cooling ducts, cable trays, equipment platforms, antenna towers, signal cabling, power cabling, grounding, waveguide, dry air, and chilled water systems typical of Navy ship and shore installations. Must be able to provide on-the-job training on equipment/system testing, operation, maintenance, troubleshooting and repair to personnel. Six years experience as a fully qualified electronics installation technician as described elsewhere herein. Two years specialized experience supervising the installation of electronics equipment aboard ship or shore with responsibility for checking and verifying the quality of work performed by all other members of the installation team.

Minimum Education: High School Diploma and two years of training in an appropriate industry training school, military school, or recognized college or the equivalent combination of education and experience.

32. Commercial Job Title: Electronics Installation Aide

Minimum/General Experience: The standards for this position are, extensive and thorough knowledge of the principles of electricity, electronics, and shop practices and techniques, including electrical and electronic circuitry, obtained through a minimum of six (6) years recent relevant experience in the field of electronics repair, fabrication, and installation.

Functional Responsibility: Must be able to provide on-the-job training on equipment/system testing, operation, maintenance, troubleshooting and repair to personnel, installation experience must include the moving and uncrating of equipment, the installation of equipment foundations, ducts, cable ways, cables, high density cable connectors, R.F. cable connectors, waveguides, parabolic antennas, and associated items aboard ship. Must be experienced in reading, interpreting, and working from blueprints, drawings, manuals, handbooks, and technical specifications. In addition personnel assigned to this labor category shall possess a minimum of two years specialized experience on shipboard and/or shore electronic system . Must be able to work effectively with little or no supervision.

Minimum/General Experience: The standards for this position are, six (6) years of recent relevant experience in electrical repair and installation, three (3) years of which must be shipboard work. Must have a minimum of four (4) years experience in motors, generators, power supplies, alternators.

33. Commercial Job Title: Journeyman Electrician

Minimum/General Experience: The standards for this position are, six (6) years of recent relevant experience in electrical repair and installation, three (3) years of which must be shipboard work. Must have a minimum of four (4) years experience in motors, generators, power supplies, alternators.

Functional Responsibility: Shall possess extensive and thorough knowledge of the principles of electricity, shop practices and techniques, including, electrical circuitry and schematics. Must possess the ability to interpret and work from blueprints, drawings, manuals, handbooks, and technical specifications. Shall be capable of performing all work within the scope of their trade without direct technical supervision.

Minimum Education: High School Diploma

34. Commercial Job Title: Prototype Component Fabrication Aide:

Minimum/General Experience: The standards for this position are, three (3) years recent relevant experience in the fabrication and assembly of various electro mechanical and electronic assemblies.

Functional Responsibility: Shall be capable of assembling small mechanical parts per fabrication/assembly drawings. Shall be skillful in soldering with low wattage soldering devices. Must be skilled in assembling cable harnesses and high density electrical cable connectors as well as coaxial connectors. Personnel in this labor category shall be capable of performing work assignments within the scope of their trade without direct formal supervision.

Minimum Education: High School Diploma

35. Commercial Job Title: Prototype Component Coatings Aide

Minimum/General Experience: The standards for this position are, four (4) years recent relevant experience in the field of spray painting and hand brushing of enamel, lacquer, acrylics, two part epoxies, latex paints, primers etching and rust proofing agents on woodstock, metals, plastics, and fabricated items.

Functional Responsibility: Shall be knowledgeable and skilled in the preparation of surfaces for priming and finish painting. Cleans and prepares surfaces using sandblasters, solvents, paint removers torches, abrasives, and other cleaning agents. Sprays surfaces of machines, manufactured products, working areas, and other surfaces with protective or decorative coatings. Must be capable of performing work assignments within the scope of the trade without direct technical supervision.

Minimum Education: High School Diploma

36. Commercial Job Title: Student Engineering Aide

Minimum/General Experience: Must be a U.S. citizen 18 years of age and physically fit. Must have successfully completed one year of high school algebra with a final grade of "C" or better. Positions may be filled in any or all of the recognized trades and are encouraged.

Functional Responsibility: These positions shall only work under the direct supervision of journeymen of the same trade until such time as they fully complete their apprenticeship, and will be required to meet all requirements of the trade before they may become journeyman.

Minimum Education: Must be a high school graduate or have passed the GED test for high school equivalency.