

**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 for GSA Advantage! is: GSAAdvantage.gov. For more information on ordering from Federal Supply Schedules, click on the FSS Schedules button at fss.gsa.gov

Information Technology Schedule (IT)

FSC GROUP 70

SIN 132-51

Information Technology Professional Services

Contract Number: GS-35F-4995H

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

Period Covered by Contract:
January 22, 1998 through January 21, 2013

T.R. Systems, Inc. d/b/a TRAWICK

8270 Greensboro Drive, Suite 850

McLean, VA. 22102

Phone: (703) 584-8600

Fax: (703) 921-1610

Web Site Address: <http://www.trawick.com>

Large Business

TABLE OF CONTENTS

SECTION #	SECTION	PAGE #
1	TABLE OF AWARDED SPECIAL ITEM NUMBER (S)	2
2	BASIC DISCOUNTS	2
3	PROMPT PAYMENT DISCOUNT	2
4	QUANTITY DISCOUNT	2
5	DOLLAR VOLUME DISCOUNT	2
6	GOVERNMENT INSTITUTIONS	2
8	GUARANTEE	2
9	MAXIMUM ORDERS	2
10	DELIVERY	2
11	F.O.B. POINT(S)	2
12a	TERMS AND CONDITIONS FOR ANY OTHER SERVICES	3
12(a)(i)	INSPECTION/ACCEPTANCE	3
12(a)(ii)	ASSIGNMENT	3
12(a)(iii)	DISPUTES	3
12(a)(iv)	DEFINITIONS	3
12(a)(v)	EXCUSABLE DELAYS	3
12(a)(vi)	INVOICE REQUIREMENTS	3
12(a)(vii)	PATENT INDEMNITY	4
12(a)(viii)	PAYMENT	4
12(a)(ix)	RISK OF LOSS	4
12(a)(x)	TAXES	4
12(a)(xi)	WARRANTY	4
13	LIST OF SERVICE AND DISTRIBUTION POINTS	5
14	LIST OF PARTICIPATING DEALERS	5
15	PREVENTIVE MAINTENANCE	5
16a	SPECIAL ATTRIBUTES	5
16b	SECTION 508 COMPLIANCE INFORMATION	5
17	DATA UNIVERSAL NUMBER SYSTEM (DUNS) NUMBER	5
18	CENTRAL CONTRACTOR REGISTRATION (CCR)	5
19	PAID OVERTIME AND UNCOMPENSATED OVERTIME	5
	DESCRIPTION OF INFORMATION SERVICES	6
	INFORMATION TECHNOLOGY PRICE LIST	11
	MOBIS LABOR CATEGORIES	13

Customer Information

**AUTHORIZED IT PROFESSIONAL SERVICES SCHEDULE
PRICE LIST FSC GROUP 70, PART I, SECTIONS B & C**

**GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY EQUIPMENT,
END USER COMPUTERS (NORMALLY MICROCOMPUTERS) AND
EQUIPMENT USED PRIMARILY OFF-LINE, AND SOFTWARE**

IT Professional Services include, but are not limited to, Systems Analysis and Design, Systems Installation, Programming, Conversion and Implementation Support, Network Services, Project Management, Data/Records Management, Resources and Facilities Management, and Database Planning and Design.

Applicable Special Item Number, FPDS Code, and Category Code are as follows:

1. Awarded Special Item Numbers (SINs)

SINs	Description	Page No.
132-51	Consulting Services	6

FPDS Code D301 IT Facility Operation and Maintenance
FPDS Code D308 Programming Services

2. Basic Discount: Prices shown are NET Prices: Basic Discounts have been deducted- 8.83%

3. Prompt Payment Discount: 1%, Net-20 Days

4. Quantity Discount: None

5. Dollar Volume Discount: None

6. Government Educational Institutions: Shall receive the same discounts, terms and conditions as all other Government customers.

7. Government Commercial Credit Card: Trawick accepts the Government Credit Cards.

8. Guarantee: Personnel provided under this contract shall have the experience, education, and expertise as outlined in the GSA Authorized IT Schedule Price List. And personnel are on staff and employed by Trawick.

9. Maximum Orders: 132-51\$5,000,000.

10. Delivery: As negotiated between the ordering agency and Trawick.

11. FOB Point: The FOB Point for the services offered to GSA is as follows: F.O.B. Origin.

12a. Terms and Conditions for any other Services:

(i) **Inspection/Acceptance.** Trawick will only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government will require repair or replacement of nonconforming supplies or re-performance of nonconforming services at no increase in contract price. The Government will exercise its post acceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(ii) **Assignment.** Trawick or its assignee's rights to be paid amounts due as a result of performance of this contract, may be assigned to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727).

(iii) **Disputes.** This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. Trawick will proceed diligently with performance arising under the contract.

(iv) **Definitions.** FAR 52.202-1, Definitions, is incorporated in the Addendum to this clause.

(v) **Excusable Delays.** Trawick will be liable for default unless nonperformance is caused by an occurrence beyond Trawick's reasonable control and without its fault or negligence such as acts of God or the public enemy, acts of the Government in its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. Trawick will notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence. Trawick will also notify the Contracting Officer of the ordering activity agency in writing as set forth above when service is expected to be delayed.

(vi) **Invoice Requirements.** The number of invoices required is an original and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include:

- (a) Name and address of the Contractor;
- (b) Invoice date;
- (c) Contract number, contract line item number and, if applicable, the order number;
- (d) Description, quantity, unit of measure, unit price and extended price of the item delivered;

- (e) Shipping number and date of shipment including the bill of lading number and weight of shipment if shipped on Government bill of lading;
- (f) Terms of any prompt payment discount offered;
- (g) Name and address of official to whom payment is to be sent; and,
- (h) Name, title, and phone number of person to be notified in event of defective invoice.

Invoices must be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) Circular A-125, Prompt Payment.

(vii) Patent Indemnity. Trawick will indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided Trawick is reasonably notified of such claims and proceedings.

(viii) Payment. Payment will be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) Circular A-125, Prompt Payment. Unless otherwise provided by an addendum to this contract, the Government will make payment in accordance with the clause FAR 52.232-33, Mandatory Information for Electronic Funds Transfer Payment, which is incorporated herein by reference. In connection with any discount offered for early payment time will be computed from the date of the invoice. For the purpose of computing the discount earned, payment will be considered to have been made on the date, which appears on the payment check, or the specified payment date if an electronic funds transfer payment is made.

(ix) Risk of Loss. Unless the contract specifically provides otherwise, risk of loss or damage to be supplies provided under this contract will remain with Trawick until, and will pass to the Government upon:

- (a) Delivery of the supplies to a carrier, if transportation is F.O.B. origin; or
- (b) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is F.O.B. destination.

(x) Taxes. The contract price includes all applicable Federal, State, and local taxes and duties.

(xi) Warranty. Trawick warrants and implies that the services delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

13. List of Service and Distribution Points:

Trawick is required to provide all services for each SIN offered in accordance with the requirements of this contract.

14. List of Participation Dealers:

Not Applicable.

15. Preventive Maintenance:

Not Applicable.

16a. Special Attributes such as Environmental Attributes:

Not Applicable.

16b. Section 508 Compliance

Not Applicable.

17. Data Universal Number System (DUNS) Number:

T.R. Systems, Inc., d/b/a Trawick's DUNS number is 161579222.

18. Notification Regarding Registration in Central Contractor Registration (CCR) Database:

T.R. Systems, Inc d/b/a Trawick. is registered in the CCR database.

19. Paid Overtime and Uncompensated Overtime:

The company follows the Fair Labor Standards Act and associated guidelines for the designation of positions as exempt or non-exempt, and for the proper payment of overtime for non-exempt personnel as it is worked. Trawick does not utilize the concept of uncompensated overtime.

Trawick Information Technology Services

IT Professional Services (SIN 132-51)

IT Professional Services include, but are not limited to, Systems Analysis and Design, Systems Installation, Programming, Conversion and Implementation Support, Network Services, Project Management, Data/Records Management, Resources and Facilities Management, and Database Planning and Design.

TRAWICK INFORMATION TECHNOLOGY (70) Price List

Trawick provides the following labor categories and corresponding hourly rates for the indicated SINs. This Price List includes the IFF of .75%.

T.R. SYSTEMS, INC d/b/a TRAWICK - GS-35F-4995H - PriceList						
Skill	Position Title	1/22/08 - 1/21/09	1/22/09 - 1/21/10	1/22/10 - 1/21/11	1/22/11 - 1/21/12	1/22/12 - 1/21/13
101	Senior Project Manager	\$133.47	\$137.74	\$142.15	\$146.70	\$151.39
102	Project Manager	\$119.45	\$123.28	\$127.22	\$131.29	\$135.49
103	Senior Subject Matter Specialist	\$106.04	\$109.43	\$112.93	\$116.55	\$120.28
104	Subject Matter Specialist	\$95.13	\$98.17	\$101.32	\$104.56	\$107.90
105	Senior Analyst	\$70.08	\$72.33	\$74.64	\$77.03	\$79.49
106	Analyst	\$49.73	\$51.32	\$52.97	\$54.66	\$56.41
107	Senior Software Engineer	\$53.63	\$55.35	\$57.12	\$58.95	\$60.83
108	Software Engineer	\$41.45	\$42.77	\$44.14	\$45.55	\$47.01
109	Junior Software Engineer	\$37.33	\$38.52	\$39.75	\$41.03	\$42.34
110	Senior Enterprise Engineer	\$99.95	\$103.15	\$106.45	\$109.85	\$113.37
111	Enterprise Engineer	\$82.89	\$85.54	\$88.28	\$91.11	\$94.02
112	Junior Enterprise Engineer	\$60.95	\$62.90	\$64.91	\$66.99	\$69.13
113	Senior Engineer (Electrical)	\$73.13	\$75.47	\$77.88	\$80.37	\$82.95
114	Engineer (Electrical)	\$65.84	\$67.95	\$70.12	\$72.37	\$74.68
115	Technical Writer	\$35.95	\$37.11	\$38.29	\$39.52	\$40.78
116	Word Processor	\$28.07	\$28.97	\$29.90	\$30.85	\$31.84
117	Senior Security Analyst	\$85.50	\$88.24	\$91.06	\$93.97	\$96.98
118	Security Analyst	\$64.79	\$66.86	\$69.00	\$71.21	\$73.49
119	Junior Security Analyst	\$43.27	\$44.66	\$46.09	\$47.56	\$49.08
120	Senior DBMS Specialist	\$74.11	\$76.48	\$78.93	\$81.45	\$84.06
121	DBMS Specialist	\$51.70	\$53.36	\$55.07	\$56.83	\$58.65
122	Management Requirements Analyst	\$52.71	\$54.40	\$56.14	\$57.94	\$59.79

T.R. SYSTEMS, INC d/b/a TRAWICK - GS-35F-4995H - PriceList						
Skill	Position Title	1/22/08 - 1/21/09	1/22/09 - 1/21/10	1/22/10 - 1/21/11	1/22/11 - 1/21/12	1/22/12 - 1/21/13
201	Supervisory Systems Technician	\$65.11	\$67.19	\$69.34	\$71.56	\$73.85
202	Senior Systems Technician	\$46.06	\$47.53	\$49.05	\$50.62	\$52.24
203	Systems Technician	\$33.44	\$34.51	\$35.61	\$36.75	\$37.93
204	Supervisory Network Engineer	\$91.19	\$94.11	\$97.12	\$100.22	\$103.43
205	Senior Network Engineer	\$81.83	\$84.45	\$87.15	\$89.94	\$92.81
206	Network Engineer	\$72.96	\$75.30	\$77.71	\$80.19	\$82.76
207	Supervisory Network Administrator	\$65.79	\$67.90	\$70.07	\$72.31	\$74.62
208	Senior Network Administrator	\$54.65	\$56.40	\$58.21	\$60.07	\$61.99
209	Network Administrator	\$42.13	\$43.47	\$44.87	\$46.30	\$47.78
210	Supervisory Help Desk Specialist	\$60.78	\$62.73	\$64.74	\$66.81	\$68.95
211	Senior Help Desk Specialist	\$49.76	\$51.36	\$53.00	\$54.69	\$56.45
212	Help Desk Specialist	\$39.52	\$40.78	\$42.08	\$43.43	\$44.82
213	Supervisory Data Technician	\$41.51	\$42.84	\$44.21	\$45.62	\$47.08
214	Senior Data Technician	\$35.56	\$36.70	\$37.88	\$39.09	\$40.34
215	Data Technician	\$30.14	\$31.11	\$32.10	\$33.13	\$34.19
216	Supervisory Help Desk Analyst	\$106.81	\$110.23	\$113.76	\$117.40	\$121.15
217	Senior Help Desk Analyst	\$92.66	\$95.63	\$98.69	\$101.85	\$105.11
218	Help Desk Analyst	\$83.17	\$85.83	\$88.58	\$91.41	\$94.34
219	Supervisory Enterprise Administrator	\$88.72	\$91.56	\$94.49	\$97.51	\$100.63
220	Senior Enterprise Administrator	\$76.24	\$78.68	\$81.20	\$83.80	\$86.48
221	Enterprise Administrator	\$65.42	\$67.51	\$69.67	\$71.90	\$74.20
222	Supervisory Asset Control Specialist	\$70.68	\$72.94	\$75.28	\$77.69	\$80.17
223	Senior Asset Control Specialist	\$61.27	\$63.23	\$65.25	\$67.34	\$69.50
224	Asset Control Specialist	\$39.22	\$40.47	\$41.77	\$43.10	\$44.48

TRAWICK INFORMATION TECHNOLOGY (70)

Labor Categories

SIN 132-51, Information Technology Professional Services

Description of IT Services and Pricing

A. FPDS CODE D308 - PROGRAMMING SERVICES

101. Commercial Job Title: Senior Project Manager

Minimum/General Experience:

Ten (10) years of intensive and progressive experience in management of broad-based information systems (IS) programs. Five (5) of the seven (7) years must reflect management of projects applying current technologies and must have occurred within the last seven (7) calendar years.

Specialized Experience:

Experience shall include management of system design, system integration, complex network design, network administration, telecommunications and data processing projects. This experience shall consist of at least three (3) years within the last five (5) years of direct management experience in the specific IT specialty for which Project Management is being proposed.

Functional Responsibility:

Provides direct customer liaison at the senior program management level and the senior user level. Develops and implements systems and performance strategies. Develops and maintains management controls to ensure projects are completed on time, within budget, and compliant with customer specifications. Develops personnel skill requirements, selects prospective candidates, and monitors performance to achieve project objectives. Typically manages several projects or multiple tasks on a single project.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which either: (1) provides substantial knowledge useful in managing large, complex IS projects, (2) is closely related to the project to be supported, or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IT or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be performed may be substituted for one (1) year of general experience.

102. Commercial Job Title: Project Manager

Minimum/General Experience:

Seven (7) years of intensive and progressive experience in management of broad-based information systems (IS) programs. Three (3) of the seven (7) years must reflect management of projects applying current technologies and must have occurred within the last five (5) calendar years.

Specialized Experience:

Experience shall include management of system design, system integration, complex network design, network administration, telecommunications and data processing projects. This experience shall consist of at least two (2) years within the last five (5) years of direct management experience in the specific IT specialty for which Project Management is being proposed.

Functional Responsibility:

Provides direct customer liaison at the program management level and the senior user level. Develops and implements systems and performance strategies. Develops and maintains management controls to ensure projects are completed on time, within budget, and compliant with customer specifications. Develops personnel skill requirements, selects prospective candidates, and monitors performance to achieve project objectives.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which either: (1) provides substantial knowledge useful in managing large, complex IS projects, (2) is closely related to the project to be supported, or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IT or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be performed may be substituted for one (1) year of general experience.

103. Commercial Job Title: Senior Subject Matter Specialist

Minimum/General Experience:

Eight (8) years within the past twelve (12) calendar years of intensive and progressive experience in the individual's field of study and specialization.

Specialized Experience:

Four (4) years within the past six (6) calendar years of intensive and progressive experience in functional information systems (IS) analysis of subject matter closely related to the task to be performed.

Functional Responsibility

- (a) Provides expert knowledge and in-depth analysis of highly specialized applications and operational environments, high level functional systems analysis, design, integration, and implementation advice on complex problems which require knowledge of specific subject matter.
- (b) Applies principles, methods and knowledge of the functional area of expertise to specific Task/Delivery Order requirements.
- (c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepares and delivers presentations and briefings as required by the Task/Delivery Order.
- (d) Provides expertise technical report development skills and conducts high level presentations for senior client personnel.

Minimum Education:

- (a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which either: (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the project to be supported, or (3) is a computer science, a physical science, or a mathematics-intensive discipline.
- (b) Substitution of experience for education may be made when four (4) years of specialized subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.
- (c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be performed may be substituted for one (1) year of general experience.
- (d) Specific functional area experience in the subject matter expertise required by the Task/Delivery Order.

104. Commercial Job Title: Subject Matter Specialist

Minimum/General Experience:

Six (6) years within the past eight (8) calendar years of intensive and progressive experience in the individual's field of study and specialization.

Specialized Experience:

Two (2) years within the past four (4) calendar years of intensive and progressive experience in functional information systems (IS) analysis of subject matter closely related to the task to be performed.

Functional Responsibility

(a) Provides technical knowledge and analysis of highly specialized applications and operational environments, high level functional systems analysis, design, integration, and implementation advice on complex problems which require knowledge of specific subject matter.

(b) Applies principles, methods and knowledge of the functional area of expertise to specific Task/Delivery Order requirements.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepares and delivers presentations and briefings as required by the Task/Delivery Order.

(d) Technical support may include technical advice on security requirements for highly specialized IS applications, technical report preparation and high level presentations.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which either: (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the project to be supported, or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be performed may be substituted for one (1) year of general experience.

(d) Specific functional area experience in the subject matter expertise required by the Task/Delivery Order.

105. Commercial Job Title: Senior Analyst

Minimum/General Experience:

Six (6) years within the past eight (8) calendar years of intensive and progressive experience in performing computer programming and systems analysis in broad-based information systems (IS) settings including contemporary computer hardware and programming languages.

Specialized Experience:

Two (2) years within the past four (4) calendar years of intensive and progressive experience in complex projects involving IS software development.

Specific Experience:

If proposed as a Task Leader/Supervisor, eighteen (18) months experience supervising Analysts or Programmers on a significant systems development activity.

Functional Responsibility

(a) Provides systems analysis, design, systems integration, and implementation support.

(b) Directs and participates in all phases of development with emphasis on the analysis, integration, documentation, and acceptance phases.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepares and delivers presentations and briefings as required by the Task/Delivery Order.

(d) Responsible for ensuring the quality and services delivered for particular jobs for which this skill is performing the Task Leader/Supervisor position.

Microcomputer Applications

(a) Analyzes requirements; creates, designs, and develops requirements in required media.

(b) May have responsibility for providing high level customer and assistance support.

(c) Provides and/or directs user training for hardware/software products and identifies and resolves system level problems with hardware/software/network malfunctions.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which: (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be automated may be substituted for one (1) year of experience.

106. Commercial Job Title: Analyst

Minimum/General Experience:

Three (3) years within the last five (5) calendar years of experience in an environment of significant information systems (IS) development activity.

Specialized Experience:

Two (2) years within the past four (4) calendar years of intensive and progressive IS experience which is clearly related to the work to be automated.

Specific Experience:

If proposed as a Task Leader/Supervisor, twelve (12) months experience supervising Analysts or Programmers on a significant systems development activity.

Functional Responsibility:

(a) Performs systems analysis, design, integration, and systems implementation support.

(b) Participates in all phases of software development with emphasis on the integration, documentation, and acceptance phases. Applies standard business and data manipulation principles and methods to technical problems to arrive at automated solutions.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results.

(d) May have responsibility for assisting in setting up microcomputers and installing software packages.

Microcomputer Applications

(a) Analyzes requirements; creates, designs, and develops requirements in required media.

(b) May have responsibility for providing customer assistance support in setting up microcomputers and/or installing software packages.

(c) Provides user training in use of hardware/software products; identifies and resolves problems and with hardware/software/network malfunctions.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be automated may be substituted for one (1) year of experience.

107. Commercial Job Title: Senior Software Engineer

Minimum/General Experience:

Three (3) years within the last five (5) calendar years of experience in an environment of significant information systems (IS) development activity for S/E related computer programming and analysis.

Specialized Experience:

Two (2) years within the past four (4) calendar years of intensive and progressive software engineering experience which is clearly related to the work to be automated.

Specific Experience:

If proposed as Task Leader/Supervisor, twelve (12) months prior experience supervising Analysts or Programmers in an environment of significant systems development activity.

Functional Responsibility:

Software Engineering

(a) Performs systems analysis, design, integration, programming, documentation, and implementation of applications.

(b) Participates in all phases of software development with emphasis on the integration, programming, testing, documentation, and acceptance phases. Applies standard software engineering and data manipulation principles/methods to technical problems.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results.

Microcomputer Applications

(a) Analyses requirements; creates, designs, and develops requirements in required media; and provides program support, tests, debugs, and writes documentation as required.

(b) May have responsibility for providing customer assistance support in setting up microcomputers and/or installing software packages.

(c) Provides user training in use of hardware/software products; identifies problems and effects resolution of hardware/software/network malfunctions; performs minor hardware/network

maintenance such as board replacement, cable switching, communications assistance, hardware installation/replacement, interfaces with mainframe, CAD/CAM, digitizers, LANs, WANs; and provides analysis support for such requirements.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be automated may be substituted for one (1) year of experience.

108. Commercial Job Title: Software Engineer

Minimum/General Experience:

Two (2) years within the last four (4) calendar years of experience in an environment of significant information systems (IS) development activity for S/E related computer programming and analysis.

Specialized Experience:

One (1) year within the past two (2) calendar years of intensive and progressive software engineering experience which is clearly related to the work to be automated.

Specific Experience:

If proposed as Task Leader/Supervisor, six (6) months prior experience supervising Analysts or Programmers in an environment of significant systems development activity.

Functional Responsibility:

Software Engineering

(a) Performs design, integration, programming, documentation, and implementation of applications.

(b) Participates in software development with emphasis on the programming, testing, documentation, and acceptance phases. Applies standard software engineering and data manipulation principles/methods to technical problems.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results.

Microcomputer Applications

(a) Analyses requirements; creates, designs, and develops requirements in required media; and provides program support, tests, debugs, and writes documentation as required.

(b) May have responsibility for providing customer assistance support in setting up microcomputers and/or installing software packages.

(c) Provides user training in use of hardware/software products; identifies problems and effects resolution of hardware/software/network malfunctions; performs minor hardware/network maintenance such as board replacement, cable switching, communications assistance, hardware installation/replacement, interfaces with mainframe, CAD/CAM, digitizers, LANs, WANs; and provides analysis support for such requirements.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be automated may be substituted for one (1) year of experience.

109. Commercial Job Title: Junior Software Engineer

Minimum/General Experience:

Six (6) months experience in a related environment is desired.

Functional Responsibility:

Software Engineering

(a) Performs assigned portions of systems analysis, design, integration, programming, documentation, and implementation of applications.

(b) Participates in software development with emphasis on the programming, testing and documentation. Applies standard software engineering practices and data manipulation principles/methods to technical problems to arrive at automated solutions.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results.

Microcomputer Applications

(a) Analyzes requirements; creates, designs, and develops requirements in required media; and provides program support, tests, debugs, and writes documentation as required.

(b) May provide customer assistance support in setting up microcomputers and/or installing software packages.

(c) May assist with several of the following duties: provide user training for hardware/software products; identify and resolve problems with hardware/software/network malfunctions; perform minor hardware/network maintenance such as board replacement, cable switching, communications assistance, hardware installation/replacement, interface with mainframe, CAD/CAM, digitizers, LANs, WANs; and provide analysis support for such requirements.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

110. Commercial Job Title: Senior Enterprise Engineer

Minimum/General Experience:

Eight (8) years within the past twelve (12) calendar years of intensive and progressive experience in performing computer programming and systems analysis in broad-based information systems (IS) settings including contemporary computer hardware, programming languages and internet development systems.

Specialized Experience:

Four (4) years within the past six (6) calendar years of intensive and progressive experience in complex projects involving enterprise software development in a lead engineering position.

Specific Experience:

If proposed as Task Leader/Supervisor, three (3) years experience supervising Enterprise Engineers, Analysts or Programmers on a significant systems development activity.

Functional Responsibility:

Software Engineering

(a) Performs lead design management for enterprise applications typically using Internet resources.

(b) Performs high level systems analysis, design, integration, programming, documentation, and implementation of applications.

(c) Directs and participates in all phases of software development with emphasis on the analysis, integration, programming, testing, documentation, and acceptances phases. Applies software engineering and data manipulation principles and methods to technical problems to arrive at automated solutions.

(d) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepares and delivers presentations and briefings as required by the Task/Delivery Order.

Microcomputer Applications

(a) Analyzes requirements; creates, designs, and develops requirements in required media; provides program support, tests, debugs; and writes documentation as required.

(b) May have responsibility for providing customer assistance support in setting up microcomputers and/or installing software packages.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which (1) provides substantial knowledge useful in managing large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be automated may be substituted for one (1) year of experience

111. Commercial Job Title: Enterprise Engineer

Minimum/General Experience:

Six (6) years within the past eight (8) calendar years of intensive and progressive experience in performing computer programming and systems analysis in broad-based information systems (IS) settings including contemporary computer hardware and programming languages.

Specialized Experience:

Two (2) years within the past four (4) calendar years of intensive and progressive experience in complex projects involving enterprise software development in a lead engineering position.

Specific Experience:

If proposed as Task Leader/Supervisor, eighteen (18) months experience supervising Analysts, Junior Enterprise Engineers or Programmers on a significant systems development activity.

Functional Responsibility:

Software Engineering

(a) Performs high level systems analysis, design, integration, programming, documentation, and implementation of applications.

(b) Directs and participates in all phases of software development with emphasis on the analysis, integration, programming, testing, documentation, and acceptances phases. Applies software engineering and data manipulation principles and methods to technical problems to arrive at automated solutions.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepares and delivers presentations and briefings as required by the Task/Delivery Order.

Microcomputer Applications

(a) Analyzes requirements; creates, designs, and develops requirements in required media; provides program support, tests, debugs; and writes documentation as required.

(b) May have responsibility for providing customer assistance support in setting up microcomputers and/or installing software packages.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which (1) provides substantial knowledge useful in managing large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be automated may be substituted for one (1) year of experience.

112. Commercial Job Title: Junior Enterprise Engineer

Minimum/General Experience:

Two (2) within the past five (5) calendar years of intensive and progressive experience in performing computer programming and systems analysis in broad-based information systems (IS) settings including contemporary computer hardware and programming languages.

Specialized Experience:

One (1) year within the past three (3) calendar years of intensive and progressive experience in complex projects involving enterprise software development in a lead engineering position.

Specific Experience:

If proposed as Task Leader/Supervisor, six (6) months experience supervising Programmers on a systems development activity.

Functional Responsibility:

Software Engineering

(a) Performs high level systems analysis, design, integration, programming, documentation, and implementation of applications.

(b) Directs and participates in all phases of software development with emphasis on the analysis, integration, programming, testing, documentation, and acceptance phases. Applies software engineering and data manipulation principles and methods to technical problems to arrive at automated solutions.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepares and delivers presentations and briefings as required by the Task/Delivery Order.

(d) Responsible for ensuring the quality and services delivered for particular task(s) for which this skill is performing the Task Leader/Supervisor position.

Microcomputer Applications

(a) Analyzes requirements; creates, designs, and develops requirements in required media; and provides program support, tests, debugs, and writes documentation as required.

(b) May have responsibility for providing customer assistance support in setting up microcomputers and/or installing software packages.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which (1) provides substantial knowledge useful in managing large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be automated may be substituted for one (1) year of experience.

113. Commercial Job Title: Senior Engineer (Electrical)

Minimum/General Experience:

Six (6) years within the last ten (10) calendar years of intensive and progressive experience in the individual's field of study and specialization.

Specialized Experience:

Four (4) years within the last six (6) calendar years of intensive and progressive experience in applying electrical engineering practices on project activities closely related to the work to be performed.

Functional Responsibility:

(a) Provides high level functional engineering support and implementation assistance on problems that require a thorough knowledge of the related technical subject matter for effective implementation.

(b) Participates in all phases of development with emphasis on the planning, configuration management, verification, and acceptance phases. Applies principles and methods of the functional area to difficult problems to arrive at appropriate solutions.

(c) Develops and prepares technical reports and related documentation, and develops metrics to support report findings. Prepares and delivers presentations and briefings as required to support senior client personnel.

(d) Provides engineering guidance and direction to Electrical Engineers and others in complimentary disciplines.

Minimum Education:

Bachelor's degree in Electrical Engineering or Electrical Engineering Technology from an accredited college or university.

114. Commercial Job Title: Engineer (Electrical)

Minimum/General Experience:

Four (4) years within the last seven (7) calendar years of intensive and progressive experience in the individual's field of study and specialization.

Specialized Experience:

Two (2) years within the last four (4) calendar years of intensive and progressive experience in applying electrical engineering practices on project activities closely related to the work to be performed.

Functional Responsibility:

(a) Provides high level functional engineering support and implementation assistance on problems that require a thorough knowledge of the related technical subject matter for effective implementation.

(b) Participates in all phases of development with emphasis on the planning, configuration management, verification, and acceptance phases. Applies principles and methods of the functional area to difficult problems to arrive at appropriate solutions.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepares and delivers presentations and briefings as required by the Task/Delivery Order.

Minimum Education:

Bachelor's degree in Electrical Engineering or Electrical Engineering Technology from an accredited college or university.

115. Commercial Job Title: Technical Writer

Minimum/General Experience:

Three (3) years or more of technical writing and documentation experience.

Specialized Experience:

One (1) year of specialized technical writing experience supporting information systems (IS) processes on projects closely related to the work to be performed.

Functional Responsibility:

(a) Develops, writes, and edits materials for IS related reports, manuals, briefs, proposals, instructional material, catalogs, technical publications, and software and hardware documentation.

(b) Interfaces with users, specialists, Analysts, Programmers, or operations personnel to obtain background information on IS technologies, methods, and standards. Organizes material and completes writing assignment according to set standards regarding order, clarity, conciseness, style, and terminology.

(c) Reviews technical material and recommends revisions or changes in scope, format, content and methods of reproduction and binding.

(d) May maintain records and files of technical documents.

- (e) May arrange for typing, duplication, and distribution of material.
- (f) May edit, standardize, or make changes to material prepared by other writers.
- (g) Must be capable of working independently but will normally be under the supervision of the Task Leader/Supervisor.

Minimum Education:

Must be a high school graduate or equivalent.

116. Commercial Job Title: Word Processor

Minimum/General Experience:

One (1) year within the last three (3) calendar years of intensive and progressive experience with word processing systems. Must be capable of entering the equivalent of sixty (60) words per minute. Must be capable of entering technical narrative and data. Must be capable of using various types of word processing equipment.

Functional Responsibility:

Will be used when the Task/Delivery Order identifies special formatting or documentation requirements.

- (a) Prepares draft and final form technical documents that become Task/Delivery Order deliverable items.
- (b) Responsible for spelling, grammar, proper format, and proofreading the finished documents.

Minimum Education:

Must be a high school graduate or equivalent.

117. Commercial Job Title: Senior Security Analyst

Minimum/General Experience:

Six (6) years in performing analyses and audits in broad-based information systems (IS) settings with “hands-on” involvement in the physical security of personnel, facilities and/or information.

Specialized Experience:

Five (5) years total experience, including two (2) years supervisory experience in security and experience in at least three (3) of the following areas:

- Computer facility security
- Security of computer center operations
- Risk assessment methods and procedures
- Personnel Security
- Security of computer hardware, operating system, utility/support software Disaster and contingency planning

- Preparation of security documentation
- Telecommunications security
- Sensitive/Critical application reviews
- Development of security policies and procedures

Specific Experience:

Experience in security applications in Department of Defense (DOD) environments is required for DOD Task/Delivery Orders. Independent development of at least five (5) Risk Analysis Reports, Reviews, or other products.

Functional Responsibility:

Independently performs or leads a team in performing risk analysis and security audit services. Independently develops or supervises the development of analytical reports and security.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which (1) provides substantial knowledge useful in managing large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study closely related to the work to be automated may be substituted for one (1) year of experience.

118. Commercial Job Title: Security Analyst

Minimum/General Experience:

Five (5) years in performing analyses and audits in broad-based information systems (IS) settings with "hands-on" involvement in the physical security of personnel, facilities and/or information.

Specialized Experience:

Three (3) years total experience, including one (1) years supervisory experience in security and experience in at least three (3) of the following areas:

- Computer facility security
- Security of computer center operations
- Risk assessment methods and procedures
- Personnel Security
- Security of computer hardware, operating system, utility/support software Disaster and contingency planning
- Preparation of security documentation

- Telecommunications security
- Sensitive/Critical application reviews
- Development of security policies and procedures

Specific Experience:

Experience in security applications in Department of Defense (DOD) environments is required for DOD Task/Delivery Orders. Independent development of at least three (3) Risk Analysis Reports, Reviews, or other products.

Functional Responsibility:

Independently performs or leads a team in performing risk analysis and security audit services. Independently develops or supervises the development of analytical reports and security .

Minimum Education:

Must be a high school graduate or equivalent with five (5) years specialty training in security techniques.

119. Commercial Job Title: Junior Security Analyst

Minimum/General Experience:

Two (2) years in performing analyses and audits in broad-based information systems (IS) settings with “hands-on” involvement in the physical security of personnel, facilities and/or information.

Specialized Experience:

One (1) year total experience in security and experience in at least two (2) of the following areas:

- Computer facility security
- Security of computer center operations
- Risk assessment methods and procedures
- Personnel Security
- Security of computer hardware, operating system, utility/support software Disaster and contingency planning
- Preparation of security documentation
- Telecommunications security
- Sensitive/Critical application reviews
- Development of security policies and procedures

Specific Experience:

Experience in security applications in Department of Defense (DOD) environments is required for DOD Task/Delivery Orders. Independent development of at least one (1) significant Risk Analysis Reports, Reviews, or other products.

Functional Responsibility:

Independently performs or leads a team in performing risk analysis and security audit services. Independently develops or supervises the development of analytical reports and security .

Minimum Education:

Must be a high school graduate or equivalent with three (3) years specialty training in security techniques.

120. Commercial Job Title: Senior DBMS Specialist

Minimum/General Experience:

Five (5) years within the past eight (8) calendar years of experience in an environment of significant information systems (IS) development activities.

Specialized Experience:

Three (3) years within the past four (4) calendar years of intensive and progressive RDBMS experience which is clearly related to the work to be automated.

Functional Responsibility:

(a) Performs systems analysis, design, integration, programming, documentation, and implementation of applications using one or more RDBMS as a development tools.

(b) Participates in all phases of software development with emphasis on the integration, programming, testing, documentation, and acceptance phases. Applies standard data manipulation principles and methods to technical problems to arrive at automated solutions involving use of the RDBMS.

(c) Performs functional and data requirements analyses, database and record design, and consults with user personnel and other technical specialists to clarify system issues and program intent.

(d) Designs and prepares technical reports and related documentation, develops applications software specifications, and makes charts and graphs to record results.

(e) Provides formal and informal user training and provides technical guidance to other technical specialists assigned to database and computer system tasks.

(f) May have responsibility for the installation and/or maintenance of RDBMS software applications.

(g) Participates as an independent consultant for senior client management as required.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which either: (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year

degree. Years of experience which are used to substitute for education cannot be used to qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be automated may be substituted for one (1) year of general experience.

Substitution:

Substitution of experience for college/university education may be made when four (4) years of specialized IT or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Six (6) months of experience using Lotus Notes as an application development tool may be substituted for specific Lotus Notes training. Years of experience which are used to substitute for education cannot be used to otherwise qualify under the skill category description.

121. Commercial Job Title: DBMS Specialist

Minimum/General Experience:

Three (3) years within the past five (5) calendar years of experience in an environment of significant information systems (IS) development activities.

Specialized Experience:

Two (2) years within the past four (4) calendar years of intensive and progressive RDBMS experience which is clearly related to the work to be automated.

Specific Experience:

If proposed as a Task Leader/Supervisor, twelve (12) months experience supervising Analysts or Programmers in an environment of significant systems development activity.

Functional Responsibility:

(a) Performs systems analysis, design, integration, programming, documentation, and implementation of applications using one or more RDBMS as a development tool.

(b) Participates in all phases of software development with emphasis on the integration, programming, testing, documentation, and acceptance phases. Applies standard data manipulation principles and methods to technical problems to arrive at automated solutions involving use of the RDBMS.

(c) Performs functional and data requirements analyses, database and record design, and consults with user personnel and other technical specialists to clarify system issues and program intent.

(d) Designs and prepares technical reports and related documentation, develops applications software specifications, and makes charts and graphs to record results.

(e) Provides formal and informal user training and provides technical guidance to other technical specialists assigned to database and computer system tasks.

(f) May have responsibility for assisting in installing RDBMS software packages.

(g) Participates as an independent consultant for senior client management as required.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which either: (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the work to be automated, and/or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Substitution of experience for education may be made when four (4) years of specialized IT or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for education cannot be used to qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be automated may be substituted for one (1) year of general experience.

Substitution:

Substitution of experience for college/university education may be made when four (4) years of specialized IT or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Six (6) months of experience using Lotus Notes as an application development tool may be substituted for specific Lotus Notes training. Years of experience which are used to substitute for education cannot be used to otherwise qualify under the skill category description.

122. Commercial Job Title: Management Requirements Analyst

Minimum/General Experience:

Ten (10) years within the past fifteen (15) calendar years of intensive and progressive experience in the analysis, review and development of information system requirements

Functional Responsibility

(a) Provides technical knowledge, experience and insights in the analysis and generation of requirements in highly specialized applications and operational environments requiring the unique understanding a clients subject matter.

(b) Applies principles, methods and knowledge of the functional area of expertise to specific Task/Delivery order requirements.

(c) Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepares and delivers presentations and briefings as required by the Task/Delivery Order.

(d) Technical support may include technical advice on highly specialized information systems applications, report preparation and high level presentations.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study which either: (1) provides substantial knowledge useful in the requirements analysis of large, complex IS projects or (2) is closely related to the project to be supported.

(b) Substitution of experience for education may be made when four (4) years of specialized IT or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience which are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

(c) A Master's or Doctorate degree from an accredited college or university with a major in a field of study which is closely related to the work to be performed may be substituted for one (1) year of general experience.

B. FPDS CODE D301 - IT FACILITY OPERATION AND MAINTENANCE

201. Commercial Job Title: Supervisory Systems Technician

Minimum/General Experience:

Five (5) years of progressive network experience with supervisory experience. At least three (3) years of additional experience in information systems and telecommunications operations.

Specialized Experience:

Three (3) years experience in implementing and maintaining complex telecommunication systems, including developing and testing communications software interface programs, developing specifications, and using protocol interfaces for multiple environments. Experience shall have included diagnostics and troubleshooting of related network components. Management and administration of a LAN for a period of one (1) year utilizing a current off-the-shelf Network Operating System (NOS) within the past four (4) years.

Supervisory Experience:

If proposed as a Task Leader/Supervisor, eighteen (18) months experience supervising activities similar to those included in the specific task to which assigned.

Functional Responsibility

Directs and manages network operation, maintenance analysts, technicians, and engineers.

(a) Responsible for the managerial and technical administration of a LAN to include security, communications, software applications, electronic mail, printing services, outside communication links, UPS service, scheduling services, license administration, file services, NOS service, backup services, and any other initial troubleshooting.

(b) Analyzes and communicates the corrective actions required to resolve network operation problems. Performs complex diagnostic testing, analysis, and optimization of all hardware elements of the network facilities (including power, communications machinery, lines, modems, and terminals), and systems testing and optimization of software components. Performs on-site engineering when required.

(c) Provides technical guidance pertaining to engineering efforts, front end devices, communications simulation, and queuing analysis.

(d) Other duties may include analysis and maintenance of complex LAN systems; planning, evaluation, and testing of system augmentations; operation of FIP and data communications equipment; performing component server and workstation connection, configuration, integration, and testing; the design and installation of cabling; and maintenance of system files.

Minimum Education:

A Bachelor's degree in Computer Science or related field; or a high school graduate with technical certification in electronic maintenance or communication networks.

202. Commercial Job Title: Senior Systems Technician

Minimum/General Experience:

Four (4) years of progressive information systems and/or network experience within the last five (5) years.

Specialized Experience:

Two (2) years of progressive specialized technical management experience on LAN systems is required. Experience shall include optimizing networks for performance and configuring and connecting workstations to a system. This experience shall have included diagnostics and troubleshooting of related network components. Management and administration of a LAN for a period of one (1) year utilizing a current off-the-shelf Network Operating System (NOS) within the past four (4) years.

Supervisory Experience:

If proposed as a Task Leader/Supervisor, twelve (12) months experience supervising computer or network operations personnel.

Functional Responsibility:

(a) Responsible for the managerial and technical administration of a LAN to include security, communications, software applications, electronic mail, printing services, outside communication links, UPS service, scheduling services, license administration, file services, NOS service, backup services, and any other initial troubleshooting.

(b) Performs all phases of LAN projects to provide maintenance and upgrading of networks and their related components. Analyzes vendor products to recommend those which best meet user needs. Installs network software. Maintains LAN management records and assists users.

(c) Performs routine diagnostic testing and optimization of all elements of the network facilities (including power, software, communications machinery, lines, modems, and terminals). Repairs and/or replaces network hardware components. Performs component server and workstation connection, configuration, integration, and testing.

(d) Performs preventive maintenance for hardware and software such as equipment cleaning and vacuuming, cable/connection inspection, software virus protection, and configuration integrity.

(e) Monitors and controls the performance, security, and status of network resources; identifies and diagnoses problems and factors affecting network performance. Other duties may include the design and installation of cabling changes; maintenance of system files; operation of FIP and data communications equipment; and upgrading of system components.

Minimum Education:

A Bachelor's degree in Computer Science or related field; or a high school graduate with 120 classroom hours of technical training in LAN administration and maintenance.

Substitutions:

Three (3) years of IT or network experience, in addition to the four (4) years required above, may be substituted for education (excluding high school). No substitution of education for experience is permitted.

203. Commercial Job Title: Systems Technician

Minimum/General Experience:

Four (2) years of progressive IT and/or network experience within the last five (5) years.

Specialized Experience:

Two (2) years of progressive specialized technical experience on LAN systems and LAN system components such as workstations. Experience shall include configuring networks and installing and repairing workstations. Experience shall have included diagnostics and troubleshooting of related network components utilizing a current off-the-shelf Network Operating System (NOS) within the past four (4) years.

Functional Responsibility:

Works independently to install and provide maintenance of LAN and LAN related components. Performs diagnostic testing and system troubleshooting of LAN equipment. Repairs and replaces LAN components and maintains hardware performance as required. Performs server and workstation connection, configuration, integration, and testing. Schedules and performs preventive maintenance on all hardware systems as outlined in OEM specifications and maintains maintenance log of all repairs and replacements required. Upgrades system components as required.

Minimum Education:

Must be a high school graduate or equivalent and have at least 80 classroom hours of technical instruction in LAN administration/maintenance.

Substitutions:

No substitution of education for experience is permitted.

204. Commercial Job Title: Supervisory Network Engineer

Minimum/General Experience:

Ten (10) years of progressive LAN or network engineering experience. Experience shall include comprehensive end user support in network design, hardware/software selection, integration, inter/intranetwork data communications, troubleshooting, and problem resolution. Five (5) of the ten (10) years must reflect current technologies and have occurred within the last seven (7) calendar years.

Specialized Experience:

Experience shall include LAN engineering support to a minimum of six (6) complex networks over the last ten (1) years.

Supervisory Experience:

If proposed as a Task Leader/Supervisor, five (5) years experience supervising Network Engineers and/or Network Technicians in a complex network engineering environment.

Functional Responsibility:

Provides functional guidance and direction in LAN administration, hardware and software technical support analysis, operating system programming, communications and network systems analysis, configuration management, general end user support and training, Microsystems analysis, data security analysis, software quality analysis, office automation, and network operations.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study that either (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the work to be automated, or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Must be a Certified Network Engineer (Banyan, Novell or NT).

Substitutions:

Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience that are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

205. Commercial Job Title: Senior Network Engineer

Minimum/General Experience:

Ten (10) years of progressive LAN or network engineering experience. Experience shall include comprehensive end user support in network design, hardware/software selection, integration, inter/intranetwork data communications, troubleshooting, and problem resolution. Four (4) of the ten (10) years must reflect current technologies and have occurred within the last five (5) calendar years.

Specialized Experience:

Experience shall include LAN engineering support to a minimum of six (6) complex networks over the last ten (10) years.

Supervisory Experience:

If proposed as a Task Leader/Supervisor, twenty-four (24) months experience supervising systems technicians or network analysts in an environment of significant network engineering activity.

Functional Responsibility:

Provides functional guidance and direction in LAN administration, hardware and software technical support analysis, operating system programming, communications and network

systems analysis, configuration management, general end user support and training, Microsystems analysis, data security analysis, software quality analysis, office automation, and network operations.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study that either (1) provides substantial knowledge useful for performance on large, complex IS projects, (2) is closely related to the work to be automated, or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Must be a Certified Network Engineer (Banyan, Novell or NT).

Substitutions:

Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience that are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

206. Commercial Job Title: Network Engineer

Minimum/General Experience:

Seven (7) years of progressive LAN or network engineering experience. Experience shall include comprehensive end user support in network design, hardware/software selection, integration, inter/intranetwork data communications, troubleshooting, and problem resolution. Three (3) of the seven (7) years must reflect current technologies and have occurred within the last five (5) calendar years.

Specialized Experience:

Experience shall include LAN engineering support to a minimum of five (5) complex networks over the last seven (7) years.

Supervisory Experience:

If proposed as a Task Leader/Supervisor, twenty-four (24) months experience supervising systems technicians or network analysts in an environment of significant network engineering activity.

Functional Responsibility:

Provides functional guidance and direction in LAN administration, hardware and software technical support analysis, operating system programming, communications and network systems analysis, configuration management, general end user support and training, Microsystems analysis, data security analysis, software quality analysis, office automation, and network operations.

Minimum Education:

(a) Bachelor's degree from an accredited college or university with a curriculum or major field of study that either (1) provides substantial knowledge useful for performance on large, complex

IS projects, (2) is closely related to the work to be automated, or (3) is a computer science, a physical science, or a mathematics-intensive discipline.

(b) Must be a Certified Network Engineer (Banyan, Novell or NT).

Substitutions:

Substitution of experience for education may be made when four (4) years of specialized IS or applications subject matter knowledge and experience will be equivalent to a four (4) year degree. Years of experience that are used to substitute for a college degree cannot be used to otherwise qualify under the skill category description.

207. Commercial Job Title: Supervisory Network Administrator

Minimum/General Experience:

Three (3) years of progressive technical experience in the administration of network based systems. Experience may include the administration of systems using cable (fiber, coax, twisted-pair), workstation component (Interface Cards, floppy and hard disks, drivers); (Multiple Access Units [MAUs], Attachment Unit Interfaces [AUIs], hubs, gateways, routers, bridges); and network software (operating systems, office automation applications).

Specialized Experience:

Experience shall include performance as a LAN Administrator a minimum of three (3) years during the last five (5) years.

Functional Responsibility:

Works independently to administer LAN based operating environments. Performs first level diagnostic testing and system troubleshooting of LAN equipment. Identifies network problems and works with System Technician personnel to correct problems and restore network normal operations. May schedule and perform preventive maintenance on all hardware systems as outlined in OEM specifications and maintains maintenance log of all repairs and replacements required while working with System Technician personnel. Upgrades and installs workstation software as required. Works independently to install and provide maintenance of LAN and LAN related components. Performs diagnostic testing and system troubleshooting of LAN equipment. Repairs and replaces LAN components and maintains hardware performance as required. Performs server and workstation connection, configuration, integration, and testing. Schedules and performs preventive maintenance on all hardware systems as outlined in OEM specifications and maintains maintenance log of all repairs and replacements required. Upgrades system components as required.

Minimum Education:

A Bachelor's degree in Computer Science or related field; or a high school graduate with technical certification in network administration or communication networks.

Substitutions:

No substitution of education for experience is permitted.

208. Commercial Job Title: Senior Network Administrator

Minimum/General Experience:

Five (5) years of progressive technical experience in the administration of network based systems. Experience may include the administration of systems using cable (fiber, coax, twisted-pair), workstation component (Interface Cards, floppy and hard disks, drivers); Multiple Access Units (MAUs), Attachment Unit Interfaces (AUIs), hubs, gateways, routers, bridges; and network software (operating systems, office automation applications).

Specialized Experience:

Experience shall include performance as a LAN Administrator a minimum of five (5) years during the last eight (8) years.

Functional Responsibility:

Works independently to administer LAN based operating environments. Performs first level diagnostic testing and system troubleshooting of LAN equipment. Identifies network problems and works with System Technician personnel to correct problems and restore network normal operations. May schedule and perform preventive maintenance on all hardware systems as outlined in OEM specifications and maintains maintenance log of all repairs and replacements required while working with System Technician personnel. Upgrades and installs workstation software as required. Works independently to install and provide maintenance of LAN and LAN related components. Performs diagnostic testing and system troubleshooting of LAN equipment. Repairs and replaces LAN components and maintains hardware performance as required. Performs server and workstation connection, configuration, integration, and testing. Schedules and performs preventive maintenance on all hardware systems as outlined in OEM specifications and maintains maintenance log of all repairs and replacements required. Upgrades system components as required.

Minimum Education:

Must be a high school graduate or equivalent and have completed at least 120 hours training in LAN administration.

Substitutions:

No substitution of education for experience is permitted.

209. Commercial Job Title: Network Administrator

Minimum/General Experience:

Three (3) years of progressive technical experience in the administration of network based systems. Experience may include the administration of systems using cable (fiber, coax, twisted-pair), workstation component (Interface Cards, floppy and hard disks, drivers); Multiple Access Units (MAUs), Attachment Unit Interfaces AUIs, hubs, gateways, routers, bridges; and network software (operating systems, office automation applications).

Specialized Experience:

Experience shall include performance as a LAN Administrator a minimum of three (3) years during the last five (5) years.

Functional Responsibility:

Works independently to administer LAN based operating environments. Performs first level diagnostic testing and system troubleshooting of LAN equipment. Identifies network problems and works with System Technician personnel to correct problems and restore network normal operations. May schedule and perform preventive maintenance on all hardware systems as outlined in OEM specifications and maintains maintenance log of all repairs and replacements required while working with System Technician personnel. Upgrades and installs workstation software as required. Works independently to install and provide maintenance of LAN and LAN related components. Performs diagnostic testing and system troubleshooting of LAN equipment. Repairs and replaces LAN components and maintains hardware performance as required. Performs server and workstation connection, configuration, integration, and testing. Schedules and performs preventive maintenance on all hardware systems as outlined in OEM specifications and maintains maintenance log of all repairs and replacements required. Upgrades system components as required.

Minimum Education:

Must be a high school graduate or equivalent and have completed at least 80 hours training in LAN administration.

Substitutions:

No substitution of education for experience is permitted.

210. Commercial Job Title: Supervisory Help Desk Specialist

Minimum/General Experience:

Six (6) years of progressive technical network experience within the last eight (8) years.

Specialized Experience:

Two (2) years of progressive specialized technical experience on LAN systems is required. Experience shall include help desk operations experience, optimizing networks for performance and configuring workstations in the system. Experience shall have included diagnostics and troubleshooting of related network components. Help desk management responsibilities of a LAN configuration for a period of eighteen (18) and utilization of current off-the-shelf Network Operating System (NOS) within the past three (3) years.

Supervisory Experience:

If proposed as a Task Leader/Supervisor, three (3) years experience supervising computer or network help operations personnel.

Functional Responsibility:

(a) Managerial or lead technical role of help desk operations and/or administration of a LAN environment to include communications, software applications, electronic mail, printing services, outside communication links, UPS service, scheduling services, license administration, file services, NOS service, backup services, and assignment and direction of on-site maintenance personnel to problem locations.

(b) Maintains help desk records and develops statistics on network and end user problems.

(c) Schedules hardware and software installations and upgrades.

(d) Monitors and controls the performance, security, and status of network resources; identifies and diagnoses problems and factors affecting network performance.

(e) Provides the focal point for user problem reporting and solution.

Minimum Education:

A Bachelor's degree in Computer Science or related field; or a high school graduate with 120 classroom hours of technical training in LAN administration and maintenance.

Substitutions:

Three (3) years of IT or network experience, in addition to the four (4) years required above, may be substituted for education (excluding high school). No substitution of education for experience is permitted.

211. Commercial Job Title: Senior Help Desk Specialist

Minimum/General Experience:

Four (4) years of progressive technical network experience within the last five (5) years.

Specialized Experience:

Two (2) years of progressive specialized technical experience on LAN systems is required. Experience shall include help desk operations experience, optimizing networks for performance and configuring workstations in the system. Experience shall have included diagnostics and troubleshooting of related network components. Help desk management responsibilities of a LAN configuration for a period of one (1) year and utilization of current off-the-shelf Network Operating System (NOS) within the past two (2) years.

Supervisory Experience:

If proposed as a Task Leader/Supervisor, twelve (12) months experience supervising computer or network help operations personnel.

Functional Responsibility:

(a) Managerial or lead technical role of help desk operations and/or administration of a LAN environment to include communications, software applications, electronic mail, printing services, outside communication links, UPS service, scheduling services, license administration,

file services, NOS service, backup services, and assignment and direction of on-site maintenance personnel to problem locations.

(b) Maintains help desk records and develops statistics on network and end user problems.

(c) Schedules hardware and software installations and upgrades.

(d) Monitors and controls the performance, security, and status of network resources; identifies and diagnoses problems and factors affecting network performance.

(e) Provides the focal point for user problem reporting and solution.

Minimum Education:

A Bachelor's degree in Computer Science or related field; or a high school graduate with 120 classroom hours of technical training in LAN administration and maintenance.

Substitutions:

Three (3) years of IT or network experience, in addition to the four (4) years required above, may be substituted for education (excluding high school). No substitution of education for experience is permitted.

212. Commercial Job Title: Help Desk Specialist

Minimum/General Experience:

Two (2) years of progressive technical network experience within the last four (4) years.

Specialized Experience:

Eighteen (18) months of progressive specialized technical experience on LAN systems is required. Experience shall include help desk operations experience, optimizing networks for performance and configuring workstations in the system. Experience shall have included diagnostics and troubleshooting of related network components. Help desk responsibilities of a LAN configuration for a period of one (1) year utilizing a current off-the-shelf Network Operating System (NOS) within the past two (2) years.

Functional Responsibility:

(a) Technical Supporting role of help desk operations and/or administration of a LAN environment to include communications, software applications, electronic mail, printing services, outside communication links, UPS service, scheduling services, license administration, file services, NOS service, backup services, and assignment and direction of on-site maintenance personnel to problem locations.

(b) Assists in maintaining help desk records and develops statistics on network and end user problems.

(c) Assists in scheduling hardware and software installations and upgrades.

(d) Monitors and controls the performance, security, and status of network resources; identifies and diagnoses problems and factors affecting network performance.

(e) Provides the focal point for user problem reporting and solution.

Minimum Education:

Bachelor's degree in Computer Science or related field, or a high school graduate with 120 classroom hours of technical training in LAN administration and maintenance.

Substitutions:

Three (3) years of IT or network experience, in addition to the four (4) years required above, may be substituted for education (excluding high school). No substitution of education for experience is permitted.

213. Commercial Job Title: Supervisory Data Technician

Minimum/General/Specialized Experience:

Five (5) years experience in data entry and verification via various input devices including the latest scanning technologies.

Supervisory Experience:

Must have at least three (3) years of experience supervising data entry personnel.

Functional Responsibility:

(a) Works independently as a Task Leader or as a supervisor of other Task Leaders in the performance of data entry activities. Work requires the application of experience and judgment in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be input from a variety of complex source documents.

(b) Designs, sets up, and implements special screen formats for specific input requirements. Inputs data from numerous types of source documents requiring various complex formats. Identifies data preparation procedures and distribution of data entry tasks, especially those requiring the use of scanning techniques.

Minimum Education:

Must be a high school graduate or equivalent.

Substitutions:

Directly related technical education/training may be substituted on the basis of one (1) month of training for one (1) month of experience not to exceed twelve (12) months. No further substitution of education for experience is permitted.

214. Commercial Job Title: Senior Data Technician

Minimum/General/Specialized Experience:

Three (3) years experience in data entry and verification via various input devices including the latest keyboard and scanning technologies.

Supervisory Experience:

Must have at least twelve (12) months of experience supervising data entry personnel.

Functional Responsibility:

(a) Works independently or as a Task Leader in the performance of data entry activities. Work requires the application of experience and judgment in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be input from a variety of complex source documents.

(b) Designs, sets up, and implements special screen formats for specific input requirements. Inputs data from numerous types of source documents requiring various complex formats. Identifies data preparation procedures and distribution of data entry tasks, especially those requiring the use of scanning techniques.

Minimum Education:

Must be a high school graduate or equivalent.

Substitutions:

Directly related technical education/training may be substituted on the basis of one (1) month of training for one (1) month of experience not to exceed twelve (12) months. No further substitution of education for experience is permitted.

215. Commercial Job Title: Data Technician

Minimum/General/Specialized Experience:

This position requires twelve (12) months of data entry and verification experience utilizing various input devices such as keyboard and scanning devices.

Functional Responsibility:

Performs data entry and verification of data where applicable. Data is input from numerous types of source documents requiring various formats. Work requires the application of experience and judgment in following procedures and in searching for, interpreting, selecting, or coding items to be input from a variety of source documents. Performs routine data preparation and distribution when incidental to data entry tasks.

Minimum Education:

Must be a high school graduate or equivalent.

Substitutions:

No further substitution is allowed.

216. Commercial Job Title: Supervisory Help Desk Analyst

Minimum/General Experience:

Ten (10) years specialized Level 2 and Level 3 help desk and call center experience including the use of the Remedy and/or Magic applications suites. Must have hands-on experience and applicable certifications on customer- and contract-specific applications, software, infrastructure, and hardware. Significant help desk/call center management experience and Remedy/Magic application maintenance experience is also beneficial.

Functional Responsibility

As a principal help desk staff member, provides specialized subject matter expertise and telephonic and on-site support to users in the areas of standard windows desktop applications, agency and contract specific applications, email and network functionality, and customer-specific hardware and infrastructure. Maintains expertise in the use of call center/help desk support applications to facilitate customer services. May also provide oversight or direct management of a call center or help desk enterprise. May be required to provide highly specialized support of unique customer requirements.

Minimum Education:

A Bachelor's degree in Computer Science or related field, or a high school graduate with specialized and/or application specific certifications and training.

Substitutions:

Three (3) years of IT or help desk experience, in addition to the ten (10) years required above, may be substituted for education (excluding high school). No substitution of education for experience is permitted

217. Commercial Job Title: Senior Help Desk Analyst

Minimum/General Experience:

Seven (7) years specialized Level 2 and Level 3 help desk and call center experience including the use of the Remedy and/or Magic applications suites. Must have hands-on experience and applicable certifications on customer- and contract-specific applications, software, infrastructure, and hardware. Some help desk/call center management experience and Remedy/Magic application maintenance experience is also beneficial.

Functional Responsibility

As a Level 2 help desk staff member, provides specialized subject matter expertise and telephonic and on-site support to users in the areas of standard windows desktop applications, agency and contract-specific applications, email and network functionality, and customer-specific hardware and infrastructure. Maintains expertise in the use of call center/help desk support applications to facilitate customer services. May also provide oversight or direct management of a small to medium call center or help desk operation or provide shift supervision of a large call center or help desk enterprise.

Minimum Education:

A Bachelor's degree in Computer Science or related field, or a high school graduate with specialized and/or application specific certifications and training.

Substitutions:

Three (3) years of IT or help desk experience, in addition to the seven (7) years required above, may be substituted for education (excluding high school). No substitution of education for experience is permitted.

218. Commercial Job Title: Help Desk Analyst

Minimum/General Experience:

Four (4) specialized Level 2 and Level 3 help desk and call center experience including the use of the Remedy and/or Magic applications suites. Must have hands-on experience and applicable certifications on customer and contract-specific applications, software, infrastructure, and hardware.

Functional Responsibility

Primarily as a Level 2 help desk staff member, provides specialized subject matter expertise and telephonic and on-site support to users in the areas of standard windows desktop applications, agency and contract-specific applications, email and network functionality, and customer-specific hardware and infrastructure. Maintains expertise in the use of call center/help desk support applications to facilitate customer services.

Minimum Education:

A Bachelor's degree in Computer Science or related field, or a high school graduate with specialized and/or application specific certifications and training.

Substitutions:

Three (3) years of IT or help desk experience, in addition to the four (4) years required above, may be substituted for education (excluding high school). No substitution of education for experience is permitted.

219. Commercial Job Title: Supervisory Enterprise Administrator

Minimum/General Experience:

Three (3) years of progressive technical experience in the administration of network-based systems. Experience may include the administration of systems using cable (fiber, coax, twisted-pair), workstation component (Interface Cards, floppy and hard disks, drivers); (Multiple Access Units [MAUs], Attachment Unit Interfaces [AUIs], hubs, gateways, routers, bridges); and network software (operating systems, office automation applications).

Specialized Experience:

Experience shall include performance as a LAN or Enterprise Administrator a minimum of three (3) years during the last five (5) years.

Specific Experience:

If proposed as a Task Leader/Supervisor, twelve (12) months experience supervising Administrators, Analysts or Engineers in an environment of significant systems operations, maintenance or development activity.

Functional Responsibility:

Works independently to administer Enterprise-based operating environments. Performs Enterprise-level diagnostic testing and system troubleshooting of network equipment. Identifies Enterprise problems and works with System Technician personnel to correct problems and restore the Enterprise to normal operations. May schedule and perform preventive maintenance, or coordinate preventive maintenance with remote sites, on all hardware systems connected to the Enterprise as outlined in OEM specifications and maintain maintenance logs of all repairs and replacements required while working with System Technician personnel. Works independently to install and provide maintenance of Enterprise and Enterprise related components. Performs diagnostic testing and system troubleshooting of Enterprise equipment. Repairs and replaces Enterprise components and maintains hardware performance as required. Develops and ensures compliance with Enterprise Policies regarding server and workstation connection, configuration, integration, and testing. Upgrades system components as required.

Minimum Education:

A Bachelor's degree in Computer Science or related field; or a high school graduate with technical certification in network administration or communication networks.

Substitutions:

No substitution of education for experience is permitted.

220. Commercial Job Title: Senior Enterprise Administrator

Minimum/General Experience:

Five (5) years of progressive technical experience in the administration of network-based systems. Experience may include the administration of systems using cable (fiber, coax, twisted-pair), workstation component (Interface Cards, floppy and hard disks, drivers); Multiple Access Units (MAUs), Attachment Unit Interfaces (AUIs), hubs, gateways, routers, bridges; and network software (operating systems, office automation applications).

Specialized Experience:

Experience shall include performance as a LAN or Enterprise Administrator a minimum of five (5) years during the last eight (8) years.

Functional Responsibility:

Works independently to administer Enterprise-based operating environments. Performs Enterprise-level diagnostic testing and system troubleshooting of network equipment. Identifies Enterprise problems and works with System Technician personnel to correct problems and restore the Enterprise to normal operations. May schedule and perform preventive maintenance, or coordinate preventive maintenance with remote sites, on all hardware systems connected to the Enterprise as outlined in OEM specifications and maintain maintenance logs of all repairs

and replacements required while working with System Technician personnel. Works independently to install and provide maintenance of Enterprise and Enterprise related components. Performs diagnostic testing and system troubleshooting of Enterprise equipment. Repairs and replaces Enterprise components and maintains hardware performance as required. Develops and ensures compliance with Enterprise Policies regarding server and workstation connection, configuration, integration, and testing. Upgrades system components as required.

Minimum Education:

Must be a high school graduate or equivalent and have completed at least 120 hours training in LAN administration.

Substitutions:

No substitution of education for experience is permitted.

221. Commercial Job Title: Enterprise Administrator

Minimum/General Experience:

Three (3) years of progressive technical experience in the administration of network-based systems. Experience may include the administration of systems using cable (fiber, coax, twisted-pair), workstation component (Interface Cards, floppy and hard disks, drivers); Multiple Access Units (MAUs), Attachment Unit Interfaces AUIs, hubs, gateways, routers, bridges; and network software (operating systems, office automation applications).

Specialized Experience:

Experience shall include performance as a LAN or Enterprise Administrator a minimum of three (3) years during the last five (5) years.

Functional Responsibility:

Works independently to administer Enterprise-based operating environments. Performs Enterprise-level diagnostic testing and system troubleshooting of network equipment. Identifies Enterprise problems and works with System Technician personnel to correct problems and restore the Enterprise to normal operations. May schedule and perform preventive maintenance, or coordinate preventive maintenance with remote sites, on all hardware systems connected to the Enterprise as outlined in OEM specifications and maintain maintenance logs of all repairs and replacements required while working with System Technician personnel. Works independently to install and provide maintenance of Enterprise and Enterprise related components. Performs diagnostic testing and system troubleshooting of Enterprise equipment. Repairs and replaces Enterprise components and maintains hardware performance as required. Develops and ensures compliance with Enterprise Policies regarding server and workstation connection, configuration, integration, and testing. Upgrades system components as required.

Minimum Education:

Must be a high school graduate or equivalent and have completed at least 80 hours training in LAN administration.

Substitutions:

No substitution of education for experience is permitted.

222. Commercial Job Title: Supervisory Asset Control Specialist

Minimum/General Experience:

Five (5) years of progressive asset control experience with supervisory experience. At least three (3) years of additional experience in the control of information technology (IT) and telecommunications assets.

Specialized Experience:

Three (3) years experience in the control of IT assets implementing and maintaining asset control systems, including data entry, data verification, and data reconciliation with stringent guidelines and rules for accuracy. Some experience with an automated tracking system.

Supervisory Experience:

If proposed as a Task Leader/Supervisor, eighteen (18) months experience supervising activities similar to those included in the specific task to which assigned.

Functional Responsibility

Directs and manages overall control of assets and asset control specialists.

(a) Responsible for the managerial and technical administration of the asset tracking system.

(b) Analyzes and communicates the corrective actions required to resolve any issues related to asset status. Performs frequent checks to assure a high level of accuracy.

Minimum Education:

A Bachelor's degree; or a high school graduate with additional applicable experience.

223. Commercial Job Title: Senior Asset Control Specialist

Minimum/General Experience:

Four (4) years of progressive asset control experience within the last five (5) years.

Specialized Experience:

Two (2) years of experience in the control of IT assets implementing and maintaining asset control systems, including data entry, data verification, and data reconciliation with stringent guidelines and rules for accuracy. Some experience with an automated tracking system.

Supervisory Experience:

If proposed as a Task Leader/Supervisor, twelve (12) months experience supervising activities similar to those included in the specific task to which assigned.

Functional Responsibility:

Directs, manages, and performs overall control of assets and asset control specialists.

(a) Responsible for the managerial and technical administration of the asset tracking system.

(b) Analyzes, communicates, and implements the corrective actions required to resolve any issues related to asset status. Performs frequent checks to assure a high level of accuracy.

(c) Performs certifications to verify accuracy of asset reports.

(d) Analyzes, communicates, and implements the corrective actions required to resolve any issues related to asset status. Performs frequent checks to assure a high level of accuracy.

Minimum Education:

A Bachelor's degree; or a high school graduate with substitute years of experience.

Substitutions:

Three (3) years of asset control experience, in addition to the four (4) years required above, may be substituted for education (excluding high school).

224. Commercial Job Title: Asset Control Specialist

Minimum/General Experience:

Two (2) years of progressive asset control experience within the last five (5) years.

Specialized Experience:

Two (2) years of experience in the control of IT assets implementing and maintaining asset control systems, including data entry, data verification, and data reconciliation with stringent guidelines and rules for accuracy. Some experience with an automated tracking system.

Functional Responsibility:

Works independently to perform overall control of assets. Performs data entry functions as necessary to ensure proper tracking of assets in automated system. Implements corrective actions required to resolve any issues related to asset status. Performs frequent checks to assure a high level of accuracy of the data. Performs routine scheduled certifications to verify accuracy of system data.

Minimum Education:

Must be a high school graduate or equivalent.

Substitutions:

No substitution of education for experience is permitted.