

IT LABOR CATEGORY REQUIREMENTS AND DESCRIPTIONS

1QUALIFICATION REQUIREMENTS. To perform on this schedule, contractor personnel must meet the minimum requirement for the skill categories described herein. In addition to the total and specialized experience defined in the skill categories, specific areas of required expertise may be further defined in a Government task request.

2TASK LEADER. Where the size of a task order warrants, a task leader shall be named for the task order by FNS to manage FNS's efforts.

3SUBSTITUTION OF EDUCATION FOR EXPERIENCE. A Bachelor's degree or higher may be substituted for the general and specialized experience for those labor categories requiring a high school diploma. Substitution shall be approved by the COTR.

4SUBSTITUTION OF EXPERIENCE FOR EDUCATION. Substitution of experience for education is not allowed for some of the categories. The restriction has been identified within the category descriptions where it applies. The substitution rate for categories with no restriction will be two(2) years of experience for one(1) year of education unless otherwise specified. Substitution shall be approved by the COTR.

5. MINIMUM/GENERAL EXPERIENCE & EDUCATION FORMAT. The minimum experience and educational requirements for each skill category are as follows:

(1) Experience Requirements.

(a) Total Experience. Minimum years of general experience in information systems technology.

(b) Specialized Experience. Minimum specific experience required directly relates to the particular skill category and level. The experience is not in addition to but is a part of the general experience required in paragraph a. Required experience may be further defined in the task order.

(c) Task Leader. Indicates this category may serve as a task leader on one or more task orders. Management experience will be required since the category qualifications do not require managerial experience. Task leaders must have supervisory or project leader experience. This experience is not in addition to the experience requirements for the skill category. Project leader experience is experience that demonstrates an individual's ability to accomplish projects/tasks through others.

(2) Functional Responsibility. This section will contain a description of duties representative of the position.

(3) Education and Other Requirements. Minimum educational requirements needed to qualify for the position. The COTR may approve substitutions of experience for education if the COTR determines the experience is superior in nature and provides the skills at a level necessary to

successfully perform the duties of the position.

(a) Substitution. Permitted substitutions or a statement that substitutions not allowed for this category.

A. MANAGEMENT (A1-A3)

These positions provide contractor management, senior level managers, and technical support for complex analysis tasks in the area of information technology. Such personnel will interface directly with Government personnel in day-to-day management.

A1. PROGRAM MANAGER

(1) Experience requirements:

(a) Total Experience. Fifteen (15) years of progressive experience in the development of systems in broad-based information technology (IT) settings involving the use of contemporary tools and techniques for information systems development.

(b) Specialized Experience. Ten (10) years of specific experience in project development from inception to deployment, demonstrated ability to provide guidance and direction in tasks of varying levels of size and scope of effort, proven expertise in the management and control of funds and resources, demonstrated capability in managing multi-task contracts of this type and complexity envisioned for this schedule

(2) Functional Responsibility. Serves as the contractor's single program manager for a large, complex task order (or a group of task orders affecting the same common/standard/migration system), and shall be the contractor's authorized interface with the Government authorized representative, government management personnel and customer agency representatives. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel and communicating policies, purposes, and goals of the organization to subordinates. Shall be responsible for the overall contractor's performance. Plans and supervises multiple projects and/or task orders involving complex information systems software development.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business or other related scientific or technical discipline

(a) Substitution:

– With a Master of Sciences degree (in the fields described in section b above): thirteen (13) years general experience of which at least nine (9) years specialized experience is required

– With a Ph.D. (in the fields described in b above) twelve (12) years general experience

of which at least eight (8) years must be specialized experience

A2. PROJECT MANAGER

(1) Experience requirements:

(a) Total Experience. Twelve (12) years of progressive experience in the development of systems in broad-based information technology (IT) settings involving the use of contemporary tools and techniques for information systems development; may work under the guidance of a Program Manager

(b) Specialized Experience. Nine (9) years of specific experience in project development from inception to deployment, demonstrated ability to provide guidance and direction in tasks of varying levels of size and scope of effort, proven expertise in the management and control of funds and resources, demonstrated capability in managing multi-task contracts of this type and complexity envisioned for this schedule

(2) Functional Responsibility. Serves as the project manager for a large, complex task order (or a group of task orders affecting the same common/standard/migration system) and shall assist the Program Manager in working with the Government's authorized representative, the task order-level COTR(s), government management personnel and customer agency representatives. Under the guidance of the Program Manager, responsible for the overall management of the specific task order(s) and insuring that the technical solutions and schedules in the task order are implemented in a timely manner. Performs enterprise wide horizontal integration planning and interfaces to other functional systems. Plans and supervises multiple projects and/or task orders involving complex information systems software development

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business or other related scientific or technical discipline

(a) Substitution:

– With a Masters degree (in the fields described in section b above): ten (10) years general experience of which at least seven (7) years specialized experience is required

– With a Ph.D. (in the fields described in b above) eight (8) years general experience of which at least six (6) years must be specialized experience

A3. PROJECT ADMINISTRATOR

(1) Experience Requirements:

Four (4) or more years experience, preferably in finance, contract administration, database management or administration of technical projects

(2) Functional Responsibility. Maintains computer and manual files regarding program costs and schedules, and other administrative matters. Analyzes program cost/schedule performance, and prepares reports for Program Managers. Alerts Program Managers to

significant variances or other extraordinary items. Reviews reports submitted by technical staff, and initiates corrective procedures when errors are suspected. Provides data needed for estimating expenses, budgets, contractual deliverables

(3) Education Requirements. BS/BA or equivalent experience

TECHNOLOGY SERIES (A15-A22)

A15. CHIEF TECHNOLOGIST

(1) Experience requirements:

(a) Total Experience. Seventeen (17) years of experience in providing expert, independent services and leadership in specialized technical areas. Provides expertise on an as needed basis to all task assignments while coordinating with team members to ensure the problem has been properly defined and that the solution satisfied requirements. Possesses requisite knowledge and expertise so recognized in the professional community that the Government is able to qualify the individual as an expert in the field for a specific Task Assignment. Demonstrates exceptional oral and written communications skills

(b) Specialized Experience. Thirteen (13) years of specific experience is required while demonstrating progressive accomplishments as an expert in large and complex information technology systems implementations. Expertise is applied across multiple information technology platforms and the integration of diverse architectures. Must demonstrate the ability to work independently and lead large technologically oriented teams focused on a specific problem or requirements set. Demonstrates exceptional oral and written communications skills

(2) Functional Responsibility. Serves as a technology expert in the architecture and development of large systems requiring state-of-art technology that is based on complex engineering techniques and/or processes. Establishes system requirements using analysis of enterprise-wide or large scale information systems to determine critical features and establishing performance models to ensure the viability of the required tasks, the interrelationships of the tasks, and that a recommended solution will meet all requirements in an effective manner. Designs systems architectures that include software, hardware, and communications to support the total set of system requirements as well as provide for present and future cross-functional requirements and interfaces. Ensures these systems are compatible and in compliance with the standards for open systems architectures, the Open Systems Interconnection (OSI) and International Standards Organization (ISO) reference models, and profiles of standards - such as Institute of Electrical and Electronic Engineers (IEEE) Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of Information Management (IM) solution of the application platform, across the application program interface (API), and the external environment/software application. Ensures that the common operating environment is compliant with agency standards. Evaluates analytically and systematically problems of work flows, organization, and planning and develops appropriate corrective action.

(3) Education and Other Requirements. A Master of Science degree from an accredited

university with a major in Engineering, Computer Science or other related scientific or technical discipline

(a) Substitution:

- With a Ph.D. (in the fields described in b above) fourteen (14) years general experience of which at least ten (10) years must be specialized experience
- With a Bachelor of Science degree in Engineering, Computer Science or other related scientific or technical discipline and twenty (20) years general experience of which at least fifteen (15) years must be specialized experience, a Masters degree is not required

A16. PRINCIPAL TECHNOLOGIST

(1) Experience requirements:

(a) Total Experience. Fifteen (15) years of experience in providing expert, independent services and leadership in specialized technical areas. Provides expertise on an as needed basis to all task assignments while coordinating with team members to ensure the problem has been properly defined and that the solution satisfied requirements. Possesses requisite knowledge and expertise so recognized in the professional community that the Government is able to qualify the individual as an expert in the field for a specific Task Assignment. Demonstrates exceptional oral and written communications skills

(b) Specialized Experience. Twelve (12) years of specific experience is required while demonstrating progressive accomplishments as an expert in large and complex information technology systems implementations. Expertise is applied across multiple information technology platforms and the integration of diverse architectures. Must demonstrate the ability to work independently or under only general direction

(2) Functional Responsibility. Serves as a technology expert in the architecture and development of large systems requiring state-of-art technology that is based on complex engineering techniques and/or processes. Establishes system requirements using analysis of enterprise-wide or large scale information systems to determine critical features and establishing performance models to ensure the viability of the required tasks, the interrelationships of the tasks, and that a recommended solution will meet all requirements in an effective manner. Designs systems architectures that include software, hardware, and communications to support the total set of system requirements as well as provide for present and future cross-functional requirements and interfaces. Ensures these systems are compatible and in compliance with the standards for open systems architectures, the Open Systems Interconnection (OSI) and International Standards Organization (ISO) reference models, and profiles of standards - such as Institute of Electrical and Electronic Engineers (IEEE) Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of Information Management (IM) solution of the application platform, across the application program interface (API), and the external environment/software application. Ensures that the common operating environment is compliant with agency standards. Evaluates analytically and systematically problems of work flows, organization, and planning and develops appropriate corrective action

(3) Education and Other Requirements. A Master of Science degree from an accredited university with a major in Engineering, Computer Science or other related scientific or technical discipline

(a) Substitution:

- With a Ph.D. (in the fields described in b above) twelve (12) years general experience of which at least nine (9) years must be specialized experience
- With a Bachelor of Science degree in Engineering, Computer Science or other related scientific or technical discipline and seventeen (17) years general experience of which at least thirteen (13) years must be specialized experience, a Masters degree is not required

A17. DIVISIONAL TECHNOLOGIST

(1) Experience requirements:

(a) Total Experience. Twelve (12) years of experience in providing expert, independent services and leadership in specialized technical areas. Provides expertise on an as needed basis to all task assignments while coordinating with team members to ensure the problem has been properly defined and that the solution satisfied requirements. Possesses requisite knowledge and expertise to be recognized as a specialist in the field for a specific Task Assignment

(b) Specialized Experience. Ten (10) years of specific experience is required while demonstrating a progressive accomplishment as an expert in large and implementing complex information technology systems. Expertise is applied across multiple information technology platforms and the integration of diverse architectures. Must demonstrate the ability to work independently or under only general direction

(2) Functional Responsibility. Serves as a technology expert in the architecture and development of large systems requiring state-of-art technology that is based on complex engineering techniques and/or processes. Establishes system requirements using analysis of enterprise-wide or large scale information systems to determine critical features and establishing performance models to ensure the viability of the required tasks, the interrelationships of the tasks, and that a recommended solution will meet all requirements in an effective manner. Designs systems architectures that include software, hardware, and communications to support the total set of system requirements as well as provide for present and future cross-functional requirements and interfaces. Ensures these systems are compatible and in compliance with the standards for open systems architectures, the Open Systems Interconnection (OSI) and International Standards Organization (ISO) reference models, and profiles of standards - such as Institute of Electrical and Electronic Engineers (IEEE) Open Systems Environment (OSE) reference model - as they apply to the implementation and specification of Information Management (IM) solution of the application platform, across the application program interface (API), and the external environment/software application. Ensures that the common operating environment is compliant with agency standards. Evaluates analytically and systematically problems of work flow, organization, and planning and develops appropriate corrective action

(3) Education and Other Requirements. A Master of Science degree from an accredited university with a major in Engineering, Computer Science or other related scientific or technical discipline

(a) Substitution:

- With a Ph.D. (in the fields described in b above) ten (10) years general experience of which at least nine (9) years must be specialized experience.
- With a Bachelor of Science degree in Engineering, Computer Science or other related scientific or technical discipline and fifteen (15) years general experience of which at least eleven (11) years must be specialized experience, a Masters degree is not required

A18. SENIOR TECHNICAL PROFESSIONAL

(1) Experience requirements:

(a) Total Experience. Twelve (12) years of progressive experience in the development of systems in broad-based information technology (IT) settings providing in-depth subject matter expertise and an ability to translate these into system requirements, systems architecture, and research, development, and test tasks. Possesses requisite knowledge and expertise to be recognized as a specialist in the field for a specific Task Assignment

(b) Specialized Experience. Ten (10) years of superior functional knowledge of task order specific requirements, or developing functional requirements for complex integrated ADP systems. Must demonstrate the ability to work independently or under only general direction

(2) Functional Responsibility. At a large-scale information system or enterprise-wide level, analyze user needs to determine functional and cross-functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Applies business process improvement practices to re-engineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques. Assist in establishing standards for information systems procedures. Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems. Constructs sound, logical business improvement opportunities consistent with corporate Information Management guiding principles, cost savings, and open system architecture objectives

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited university with a major in Computer Science, Engineering, or other related scientific or technical discipline

(a) Substitution:

- With a Ph.D. (in the fields described in b above) six (6) years general experience of which at least four (4) years must be specialized experience
- With a Master of Sciences degree (in the fields described in section b above): nine (9) years general experience of which at least six (6) years specialized experience is required

A19. TECHNICAL PROFESSIONAL

(1) Experience requirements.

(a) Total Experience. Ten (10) years of progressive experience in systems analysis and computer programming in highly complex and broad-based information technology (IT) settings providing in-depth subject matter expertise and an ability to translate these into system requirements, systems architecture, and research, development and test tasks. In depth experience in the use of contemporary communications systems, computer hardware, relational data base technologies, and high order programming languages

(b) Specialized Experience. Eight (8) years of superior functional knowledge of task order specific requirements, or developing functional requirements for complex integrated ADP systems. Should have proven expertise in the management and control of funds and resources and demonstrated capability in managing multi-task task orders. Must demonstrate the ability to work independently or under only general direction

(2) Functional Responsibility. At a large-scale complex information system or enterprise-wide level, analyze user needs to determine functional and cross-functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Applies business process improvement practices to re-engineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques. Assist in establishing standards for information systems procedures. Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems. Constructs sound and logical improvement opportunities consistent with corporate Information Management guiding principles, cost savings, and open system architecture objectives

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited university with a major in Computer Science, Engineering, or other related scientific or technical discipline

(a) Substitution:

- With a Ph.D. (in the fields described in b above) three (3) years specialized
- With a Master of Sciences degree (in the fields described in section b above): six (6) years general experience of which at least four (4) years specialized experience is required

A20. STAFF TECHNICAL PROFESSIONAL

(1) Experience requirements:

(a) Total Experience. Eight (8) years of progressive experience in systems analysis and computer programming in highly complex and broad-based information technology (IT) settings involving the use of contemporary communications systems, computer hardware, relational data base technologies, and high order programming languages

(b) Specialized Experience. Six (6) years of specific experience in large, complex information systems software development projects. Must have demonstrated expertise through effective use of state-of-the-art development tools and models. Must have proven expertise in the effective use of highly specialized personnel resources and a demonstrated capability in managing multi-task activities simultaneously

(2) Functional Responsibility. At a large-scale complex information system or enterprise-wide level, analyze user needs to determine functional and cross-functional requirements. Performs functional allocation to identify required tasks and their interrelationships. Applies business process improvement practices to re-engineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques. Assist in establishing standards for information systems procedures. Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems. Constructs sound and logical improvement opportunities consistent with corporate Information Management guiding principles, cost savings, and open system architecture objectives.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited university with a major in Computer Science, Engineering, or other related scientific or technical discipline.

(a) Substitution

– With a Master of Sciences degree (in the fields described in section b above): five (5) years general experience of which at least four (4) years specialized experience is required

A21. SENIOR PROJECT ADMINISTRATOR

(1) Experience Requirements

(a) Total Experience. Six (6) years progressive experience in IS/ADP systems administration

(b) Specialized Experience. Three (3) years intensive and progressive specific experience in the administration of complex data systems

(2) Functional Responsibility. Specifies proper types of files organization, indexing methods, and security procedures. Advises project teams on the design of complex databases (e.g., schema and

subschema details). Defines specialized aspects of user's data base administrator documentation. Performs detailed comparisons of various data base systems. Performs duties in a complex, distributed, heterogeneous computing environment, which may involve different types of hardware platforms, operating systems applications, and network environments. Provides expertise in data storage systems. Performs administration tasks (installing, maintaining, monitoring, recovering, rebuilding, upgrading, patching and performance tuning). Implements software solutions for performance enhancement, operator interface, and increased user capability. Augments other skill categories by providing unique IS/ADP systems administration knowledge in areas that require in-depth current knowledge of a specialized IS discipline. Such specialized knowledge can only be achieved through intensive, extensive, and continuous application of the specialty at a level exceeding that of the more general and broad based IS requirements of the skill category series

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited university with a major in Computer Science, Engineering, or other related scientific or technical discipline

(a) Substitution:

– With a Master of Sciences degree (in the fields described in section b above): four (4) years general experience of which at least two (2) years specialized experience is required

A22. SENIOR DATA CONTROL SPECIALIST

(1) Experience requirements:

(a) Total Experience. Five (5) years progressive experience in the management Data Base Systems and their administration

(b) Specialized Experience. Three (3) years intensive and progressive specific experience in the administration of complex data systems

(2) Functional Responsibility. Performs assigned portions of managing the data input into complex information systems. Analyzes and administers data for both the developing team and the customer. Handles daily administrative tasks, produces and edits technical reports based on data system processing, monitors use of data and performs updates as required. Participates in all phases of system development with emphasis on the data collection, input, documentation, and acceptance phases. Designs and prepares technical reports and related documentation, and makes charts and graphs to record results.

(3) Education and Other Requirements. An Associate's degree from an accredited college or university in Computer Science, Engineering or other related scientific or technical discipline

(a) Substitution. Substitution not allowed for this category.

B. NETWORK SERIES (B1-B22)

These positions provide contractor management, senior level managers, and technical support for network engineering tasks in the area of information technology. Such personnel will interface directly with government personnel in day-to-day management.

B1. SENIOR NETWORK ENGINEER

(1) Experience Requirements:

(a) Total Experience. Five (5) years or more of progressive experience in planning, designing and analyzing data or telecommunications networks. This experience must demonstrate a working knowledge of Ethernet, FDDI, frame relay and ATM, and a working knowledge of operating systems and protocols such as Novell, NT, UNIX, SNA and TCP/IP. Must have experience with network analysis/management tools and techniques and be familiar with PCs in a client server environment. Must be familiar with IT and long distance and local carrier management. Knowledge of computer languages such as C, C++, SQL is a plus. Supervisory or project leader experience is also required.

(2) Functional Responsibility. Responsible for the design and implementation of data communications or telecommunications networks. Plans and monitors the installation of communication circuits and recommends enhancements. Manages and monitors LANs and associated equipment (e.g., bridges, routers, hubs, modem pools, gateways, etc.). Analyzes interface requirements between WANs and other computer networks. Analyzes network characteristics (e.g., traffic, connect time, transmission speeds, packet sizes and throughput). Conducts short and long term planning to meet communications system requirements.

3) Education and Other Requirements. A Bachelor of Science or Masters of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering other related scientific or technical discipline.

4) Substitution. Six (6) or more years direct network experience, Bachelor of Science or Bachelor of Arts degree from an accredited college or university with a major in a non-technical discipline. Demonstrated network aptitude and depth of overall network familiarity based upon experience.

B2. NETWORK ENGINEER

(1) Experience Requirements.

(a) Total Experience. Two (2) to five (5) years network experience

(2) Functional Responsibility. Duties are performed under the supervision of a senior engineer or technical project manager. Assists in the design and implementation of LAN/WANs using hub and router technology. Performs hardware/software analyses to provide comparative data of performance characteristics and suitability within the existing systems environment. Prepares trade-off studies and evaluations for vendor equipment. Assists in generating network monitoring and performance reports for LAN/WANs utilization studies. Recommends network

design changes/enhancements for improved system availability and performance. Knowledge includes demonstrated capability in at least one primary network element, such as operating systems, platforms or protocols

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering or other related scientific or technical discipline

a) Substitution. Three (3) to six (6) years direct network experience, Bachelor of Science or Bachelor of Arts degree from an accredited college or university with a major in a non-technical discipline. Demonstrated network aptitude based upon experience

B3. JUNIOR NETWORK ENGINEER

(1) Experience Requirements:

(a) Total Experience. Minimum required. Entry level position. Zero to two (2) years network experience.

(2) Functional Responsibility. Duties are performed under the direct guidance of a senior engineer. Assists in the design and implementation of LAN/WANs using hub and router technology. Performs hardware/software analyses to provide comparative data of performance characteristics and suitability within the existing systems environment. Assists in generating network monitoring and performance reports for LAN/WANs utilization studies. Provides input for network design changes/enhancements for improved system availability and performance.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering or other related scientific or technical discipline.

(a) Substitution. One (1) to three (3) years direct network experience, Bachelor of Science or Bachelor of Arts degree from an accredited college or university with a major in a non-technical discipline. Demonstrated network aptitude based upon experience.

B4. SENIOR SYSTEMS ENGINEER

(1) Experience Requirements:

a) Total Experience. Five (5) years or more of intensive and progressive specific experience in planning, designing and analyzing telecommunications networks. This experience must include demonstrated knowledge of Ethernet, FDDI, frame relay and ATM, and a working knowledge of operating systems and protocols such as Novell, NT, UNIX, SNA and TCP/IP. Must have experience with network analysis/management tools and techniques and be familiar with PCs in a client server environment. Must be familiar with IT and long distance and local carrier management. Demonstrated ability as a supervisor or project leader essential. Highest skills in written and oral

communications needed. Knowledge of computer languages such as C, C++, SQL, HTML, is a strong plus. Supervisory or project leader experience is also essential.

(2) Functional Responsibility. Assists in the design and implementation of LAN/WANs using hub and router technology. Performs hardware/software analyses to provide comparative data of performance characteristics and suitability within the existing systems environment. Prepares trade-off studies and evaluations for vendor equipment. Assists in generating network design changes/enhancements for improved system availability and performance.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering or other related scientific or technical discipline.

a) Substitution. Six (6) or more years direct network experience, Bachelor of Science or Bachelor of Arts degree from an accredited college or university with a major in a non-technical discipline. Demonstrated system-level network aptitude based upon experience. Demonstrated technical and project leadership ability.

B5. SYSTEMS ENGINEER

(1) Experience Requirements:

a) Total Experience. Three (3) to five (5) years of intensive and progressive specific experience in planning, designing and analyzing telecommunications networks. This experience must include demonstrated knowledge of Ethernet, FDDI, frame relay and ATM, and a working knowledge of operating systems and protocols such as Novell, NT, UNIX, SNA and TCP/IP. Must be familiar with network analysis / management tools and techniques and be familiar with PCs in a client server environment.

(2) Functional Responsibility. Assists in the design and implementation of LAN/WANs using hub and router technology. Performs hardware/software analyses to provide comparative data of performance characteristics and suitability within the existing systems environment. Prepares trade-off studies and evaluations for vendor equipment. Assists in generating network monitoring and performance reports for LAN/WANs utilization studies. Assists with network design changes/enhancements for improved system availability and performance.

(3) Education and Other Requirements. A Bachelor of Science or Masters of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering or other related scientific or technical discipline.

a) Substitution. Four (4) to seven (7) years direct network experience, Bachelor of Science or Bachelor of Arts degree from an accredited college or university with a major in a non-technical discipline. Demonstrated system-level network aptitude based upon experience.

B6. JUNIOR SYSTEMS ENGINEER

(1) Experience Requirements:

a) Total Experience. One (1) to three (3) years of progressive specific experience in planning, designing and analyzing telecommunications networks. This experience must include familiarity with Ethernet, FDDI, frame relay and ATM, and a working knowledge of operating systems and protocols such as Novell, NT, UNIX, SNA and TCP/IP. Must be familiar with PCs in a client server environment.

(2) Functional Responsibility. Assists in the design and implementation of LAN/WANs using hub and router technology. Performs hardware/software analyses to provide comparative data of performance characteristics and suitability within the existing systems environment. Assists with changes/enhancements for improved system availability and performance.

(3) Education and other requirement. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering or other related scientific or technical discipline.

(a) Substitution. Two (2) to four (4) years direct network experience, Bachelor of Science or Bachelor of Arts degree from an accredited college or university with a major in a non-technical discipline. Demonstrated system-level network aptitude based upon experience.

B7. SUSTAINING ENGINEER

(1) Experience Requirements:

(a) Total Experience. Three (3) or more years of intensive and progressive specific experience in planning, supporting and analyzing telecommunication networks. This experience must include demonstrated knowledge of network data transport protocols such as Ethernet, frame relay and ATM, and a working knowledge of operating systems and protocols such as Novell, NT, UNIX, SNA, and TCP/IP. Must have practical experience with network management tools.

(2) Functional Responsibility. Assists in the design and implementation of LAN/WANs using hub and router technology. Performs hardware/software analyses to provide comparative data of performance characteristics and suitability within the existing systems environment. Prepares trade-off studies and evaluations for vendor equipment. Directly involved with network monitoring and performance data collection and presentation for LAN/WANs utilization studies. Recommends network design changes/enhancements for improved system availability and performance.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering or other related scientific or technical discipline.

(a) Substitution. Four (4) or more years experience and less than a Bachelor of Science or Bachelor of Arts degree completed in a technical or non-technical discipline. Proven ability to work effectively individually or as part of a project team. Experience as a project leader is

a plus.

B8. JUNIOR SUSTAINING ENGINEER

(1) Experience Requirements: One (1) to three (3) years direct network experience.

(2) Functional Responsibility. Duties are performed under the direct guidance of a senior engineer, or project manager. Assists in the design and implementation of LAN/WANs using hub and router technology. Performs hardware/software analyses to provide comparative data of performance characteristics and suitability within the existing systems environment. Directly involved with network monitoring and performance data collection and presentation. Assists with network design changes/enhancements for improved system availability and performance. Generally involved with maintenance and control of a network, and its management center.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in a non-technical discipline

(a) Substitution. Two (2) to four (4) years experience and less than a Bachelor of Science or Bachelor of Arts degree completed in a technical or non-technical discipline

B9. SENIOR SALES ENGINEER

(1) Experience Requirements:

a) Total Experience. Seven (7) or more years of intensive and progressive specific experience in planning, designing and analyzing telecommunications networks. This experience must include demonstrated knowledge of legacy network protocols, as well as knowledge of Ethernet, FDDI, frame relay and ATM, and a working knowledge of operating systems and protocols such as NT, UNIX, SNA and TCP/IP. Must have experience with network analysis/management techniques and be familiar with PCs in a client server environment. Must be familiar with IT and long distance and local carrier management. Highest skills in written and oral communication. Experience as a supervisor or task leader essential. Knowledge of computer languages is a plus.

(b) Task Leader. Indicates this category may serve as a task leader on one or more task orders. Management experience will be required since the category qualifications do not require managerial experience. Task leaders must have supervisory or project leader experience. This experience is not in addition to the experience requirements for the skill category. Project leader experience is experience that demonstrated an individual's ability to accomplish projects/tasks through others.

(2) Functional Responsibility. Responsible for direct or indirect involvement in the design and implementation of LAN/WANs using hub and router technology. Performs hardware/software analyses to provide comparative data of performance characteristics and suitability within the existing systems environment. Prepares trade-off studies and evaluations for vendor equipment. Recommends network design changes/enhancements for improved system availability and performance.

(3) Education and Other Requirements. A Bachelor of Science or Masters of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering or other related scientific or technical discipline.

(a) Substitution. Ten (10) or more years direct network experience, minimum of Bachelor of Science or Bachelor of Arts degree from an accredited college or university with a major in a nontechnical discipline. Demonstrated system-level network aptitude based upon experience. Proven high aptitude for technical and project leadership. Proven ability to work effectively individually or as part of a project team.

B10. SALES ENGINEER

(1) Experience Requirements:

a) Total Experience. Five (5) to eight (8) years of intensive and progressive specific experience in planning, designing and analyzing telecommunications networks. This experience must include demonstrated knowledge of legacy network protocols, as well as knowledge of Ethernet, FDDI, frame relay and ATM, and a working knowledge of operating systems and protocols such as NT, UNIX, SNA and TCP/IP. Must be familiar with PCs in a client server environment. Highest demonstrated skills in written and oral communications. Experience as a supervisor or task leader essential. Knowledge of computer languages is a plus.

b) Task Leader. Indicates this category may serve as a task leader on one or more task orders. Management experience will be required since the category qualifications do not require managerial experience. Task leaders must have supervisory or project leader experience. This experience is not in addition to the experience requirements for the skill category. Project leader experience is experience that demonstrates an individual's ability to accomplish projects/tasks through others.

(2) Functional Responsibility. Responsible for direct or indirect involvement in the design and implementation of LAN/WANs using hub and router technology. Performs hardware/software analyses to provide comparative data of performance characteristics and suitability within the existing systems environment. Prepares trade-off studies and evaluations for vendor equipment. Recommends network design changes/enhancements for improved system availability and performance.

(3) Education and Other Requirements. A Bachelor of Science or Masters of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering or other related scientific or technical discipline.

a) Substitution. Eight (8) or more years direct network experience, Bachelor of Science or Bachelor of Arts degree from an accredited college or university with a major in a non-technical discipline. Demonstrated system-level network aptitude based upon experience. Proven high aptitude for technical and project leadership. Proven ability to work effectively individually or as part of a project team.

B11. NETWORK SECURITY PROJECT MANAGER

(1) Experience Requirements:

- a) Total Experience. Ten (10) years of technical management in the area of network security.
- b) Specialized Experience. Four (4) years of specialized experience in the area of designing and implementing network security architectures in support of both legacy and distributed topologies

(2) Functional Responsibility. Provides direct supervision and management to a team of network security engineers and analysts with respect to deliverable execution. Responsible for program management based on work break down structures to accomplish specific network security tasks. Must be familiar with Microsoft Project and Excel.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Business or other related disciplines

- a) Substitution. Education may be substituted by an additional two (2) years of experience for each year of education requirement

B12. NETWORK SECURITY SENIOR CONSULTANT

(1) Experience Requirements.

- a) Total Experience. Six (6) years of network security consulting
- b) Specialized Experience. Four (4) years of specialized network security experience in the areas of PKI, VPN and firewall engineering

(2) Functional Responsibility. Advises customer on procedures and processes on PKI and VPN related issues in support of distributed architectures based on customer's network security requirements. Familiar with firewall installations, configurations, and implementations in support of the customer. Assists customer with design and implementation of secure network architectures. Familiar with network security COTS based products.

(3) Education and Other Requirements. A Masters of Science degree from an accredited college or university with a major in Computer Science, Business or other related disciplines.

- a) Substitution. Substitution not allowed for this category.

B13. SENIOR NETWORK SECURITY ENGINEER

(1) Experience Requirements:

(a) Total Experience. Six (6) years of network security experience.

(b) Specialized Experience. Four (4) years of specialized in the area of PKI, VPN and firewall engineering

(2) Functional Responsibility. Serves as a senior engineer on a team that is responsible for providing secure solutions in both legacy and distributed environments. Must have hands-on experience with developing and implementing VPNs using PKI COTS based products. Experienced with conducting network security test and evaluation processes leading up to certification and accreditation on distributed networks. Understands and is familiar with the installation, configuration and implementation of various COTS based firewalls.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Business, or other related disciplines

(a) Substitution. Substitution not allowed for this category

B14. NETWORK SECURITY ENGINEER

(1) Experience Requirements:

(a) Total Experience. Four (4) years of network security experience

(b) Specialized Experience. Two (2) years of specialized in the area of firewall engineering and PKI

(2) Functional Responsibility. Serves as an engineer on a team that is responsible for providing secure solutions in both legacy and distributed environments. Must have hands-on experience with developing and implementing firewalls using COTS based products. Experienced with conducting network security test and evaluation processes leading up to certification and accreditation on distributed networks. Understands and is familiar with the installation, configuration and implementation of various PKI encryption products.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Business, or other related disciplines.

(a) Substitution. Substitution not allowed for this category.

B15. JUNIOR NETWORK SECURITY ENGINEER

(1) Experience Requirements:

(a) Total Experience. Two (2) years of network security experience.

(2) Functional Responsibility. Serves as a junior engineer on a network security team that is responsible for providing secure solutions in both legacy and distributed environments. Must have hands-on experience with developing and implementing firewalls and access control applications, including MLS, using COTS based products. Some experience with conducting network security test and evaluation processes leading up to certification and accreditation on distributed networks.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Business, or other related disciplines

(a) Substitution. Education may be substituted by an additional 2 years of experience for each year of education requirement

B16. SENIOR NETWORK SECURITY ANALYST

(1) Experience Requirements:

(a) Total Experience. Six (6) years of network security experience

(b) Specialized Experience. Four (4) years of specialized in the area of Network Security Policy, including certification and accreditation processes

(2) Functional Responsibility. Serves as a senior analyst on a team that is responsible for providing secure solutions in both legacy and distributed environments. Must have hands-on experience with developing and implementing network security policy and procedure. Working knowledge of certification and accreditation processes of critical applications in support of both legacy and distributed network architectures. Familiar with OMB A-130 and DITSCAP requirements

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Business, or other related disciplines.

(a) Substitution. Substitution not allowed for this category

B17. NETWORK SECURITY ANALYST

(1) Experience Requirements:

(a) Total Experience. Four (4) years of network security experience.

(b) Specialized Experience. Two (2) years of specialized in the area of Network Security Policy, including certification and accreditation processes.

(2) Functional Responsibility: Serves as an analyst on a network security team that is responsible for providing secure solutions in both legacy and distributed environments. Must have hands-on experience with developing and implementing network security policy and procedure. Working knowledge of certification and accreditation processes of critical applications in support of both legacy and distributed network architectures. Familiar with OMB A-130 and DITSCAP requirements

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Business or other related disciplines.

(a) Substitution. Substitution not allowed for this category

B18. JUNIOR NETWORK SECURITY ANALYST

(1) Experience Requirements:

(a) Total Experience. Two (2) years of network security experience.

(2) Functional Responsibility. Serves as an analyst on a network security team that is responsible for providing secure solutions in both legacy and distributed environments. Some hands-on experience with developing and implementing network security policy and procedure

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Business or other related disciplines.

(a) Substitution. Education may be substituted by an additional 2 years of experience for each year of education requirement

B19. SENIOR TECHNICAL WRITER (NETWORK SECURITY)

(1) Experience Requirements:

(a) Total Experience. Five (5) years of technical writing or documentation experience

(b) Specialized Experience. Three (3) years of specialized network security oriented technical documentation experience.

(2) Functional Responsibility. Prepares and edits network security IT/ADP documentation

incorporating information provided by user, specialist, analyst, programmer, and operations personnel. Must have a substantial knowledge of the capabilities of network security. Duties include writing, editing, and graphic presentation of technical information for both technical and non-technical personnel. Interprets technical documentation standards and prepares documentation according to standards. Must be capable of working independently. Plans and supervises multiple projects and/or tasks involving a wide wide-range of IT network security related tasks.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in English, Computer Science, Business or other related disciplines.

(a) Substitution. Substitution not allowed for this category

B20. TECHNICAL WRITER (NETWORK SECURITY)

(1) Experience Requirements:

(a) Total Experience. Three (3) years of network security technical writing or documentation experience

(b) Specialized Experience. One (1) year of specialized network security technical documentation experience

(2) Functional Responsibility. Prepares and edits network security IT/ADP documentation incorporating information provided by user, specialist, analyst, programmer, and operations personnel. Must have a substantial knowledge of the capabilities of network security in support of information systems. Duties include writing, editing, and graphic presentation of technical information for both technical and non-technical personnel. Interprets technical network security documentation standards and prepares documentation according to standards. Must be capable of working independently. This category provides incidental support for other approved requirements.

(3) Education and Other Requirements. An Associate's degree from an accredited college or university or two (2) years of college or university study in English, Computer Science or related discipline.

(a) Substitution. Substitution not allowed for this category

B21. NETWORK MANAGER

(1) Experience Requirements:

(a) Total Experience. Five (5) years experience in one or more of the following areas: data communications engineering, data communications hardware or software analysis, network administration or management, or data communication equipment installation and maintenance.

(b) Task Leader. Indicates this category may serve as a task leader on one or more task orders. Management experience will be required since the category qualifications do not require managerial experience. Task leaders must have supervisory or project leader experience. This experience is not in addition to the experience requirements for the skill category. Project leader experience is experience that demonstrates an individual's ability to accomplish projects/tasks through others.

(2) Functional Responsibility. Performs a variety of network management functions in support of MIS services related to the operation, performance or availability of data communications networks. Modifies command language programs, network start up files, assigns/re-assigns network device logicals, analyzes network performance and recommends adjustments to wide variety of complex network management functions with responsibility for overall performance and availability of networks. LAN/WAN consultant skilled in network analysis, integration and tuning. Experience with cable/LAN meters, protocol analyzers, SNMP and RMON based software products. Knowledge of Ethernet, FDDI and high speed WAN's and routers. Analyze client LAN's/WAN's, isolate source of problems, recommend reconfiguration and implementation of new network hardware to increase performance. Working knowledge of network operating systems. Modifies command language programs, network start up files, assigns/re-assigns network device logicals. Conducts load balancing efforts to achieve optimum device utilization and network performance. Manages network E-mail functions. Establishes mail boxes and monitors mail performance on the network. Coordinates with engineering groups to resolve hardware problems. Works with customer and operations staff in scheduling preventative and emergency maintenance activities. May serve as task leader on one or more task orders.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Technology, Engineering, or a related discipline. If applicable, shall be certified as a network engineer for the specific network operating system as defined in the Government task request. The certification criteria are determined by the network operating system vendor.

(a) Substitution. Substitution not allowed for this category.

B22. NETWORK ADMINISTRATOR

(1) Experience Requirements.

(a) Total Experience. Three (3) years experience in one or more of the following areas: data communications engineering, data communications hardware or software analysis, network administration or management, data communication equipment installation and maintenance, or computer systems administration and management.

(2) Functional Responsibility. Performs a variety of network management functions related to the operation, performance or availability of data communications networks. Experience with cable/LAN meters, protocol analyzers, SNMP and RMON based software products. Knowledge of Ethernet, FDDI and high speed WAN's and routers. Analyze client LAN's/WAN's, isolate source of problems, recommend reconfiguration and implementation of new network hardware

to increase performance. Working knowledge of network operating systems. Modifies command language programs, network start up files, assigns/re-assigns network device logicals, participates in load balancing efforts throughout the network to achieve optimum device utilization and performance. Establishes new user accounts on the network granting access to required network files and programs. Manages network E-mail functions. Establishes mail boxes and monitors mail performance on the network. Troubleshoots network/user problems, presents resolutions for implementation. Prepares a variety of network resource reports.

(3) Education and Other Requirements. An Associate's degree from an accredited college or university in a related field, or two (2) years of college or university study in a related field. If applicable, should be certified as a network administrator for a specific network operating system as defined in the Government task request. Certification criteria are determined by the network operating system vendor.

(a) Substitution. Substitution not allowed for this category

C. RESERVED

D. COMPUTER OPERATIONS SERIES (D1-D6)

D1. RESERVED

D2. COMPUTER SYSTEMS ANALYST

(1) Experience requirements.

(a) Total Experience. Three (3) years progressive experience in the analysis and design of business or scientific applications using database management systems or high-order programming languages.

(2) Functional Responsibility. Performs systems analysis, design, programming, documentation, or implementation of complex system applications and related IT/ADP systems concepts for effective implementation. Participates in all phases of the software development life cycle with emphasis on the planning, analysis, programming, testing and acceptance phases. Designs and prepares technical reports and related documentation, and makes charts and graphs to record results. Prepares and delivers presentations and briefings as required.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, or other related scientific or technical discipline.

(a) Substitution. Substitution not allowed for this category

D3. APPLICATIONS ENGINEER

(1) Experience requirements.

(a) Total Experience. Eight (8) years of progressive in managing or performing software engineering activities.

(b) Specialized Experience. Six (6) years of specific experience working with C++, SQL, and third/fourth generation languages in the design and implementation of systems and using database management systems. General experience includes increasing responsibilities in software engineering activities. Knowledgeable of applicable standards.

(2) Functional Responsibility. Analyzes and studies complex system requirements. Designs software tools and subsystems to support software reuse and domain analyses and manages their implementation. Manages software development and support using formal specifications, data flow diagrams, other accepted design techniques and Computer Aided Software Engineering (CASE) tools. Estimates software development costs and schedule. Reviews existing programs and assists in making refinements, reducing operating time, and improving current techniques. Supervises software configuration management.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in Computer Science, Information Systems, Engineering, Business or other related scientific or technical discipline.

(a) Substitution:

- With a Master degree (in the fields described in section b above): six (6) years general experience of which at least four (4) years specialized experience is required
- With eleven (11) years of general experience of which at least nine (9) years of specialized experience, a degree is not required

D4. OPERATIONS MANAGER

(1) Experience: Seven years experience, of which at least five years must be specialized. Specialized experience includes: supervision and operation experience on a large-scale computer system, knowledge of hardware, software and operating systems. General experience includes operations experience on a large scale computer system or a multi-server local area network.

(2) Functional Responsibility: Manages computer operations. Ensures production schedules are met. Ensures computer system resources are used effectively. Coordinates the resolution of production related problems. Ensures proper relationships are established between customers, teaming partners, and vendors to facilitate the delivery of information technology services. Provides users with computer output. Supervises staff operations.

(3) Educational Requirement(s): A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline.

-With a Master's degree (in the fields described in above): five (5) years general experience of which at least three (3) years must be specialized experience is required

-With ten years of general experience of which at least eight (8) years must be specialized experience, a degree is not required

D5. RESERVED

D6. SYSTEMS OPERATOR

(1) Experience: Minimum of three years experience, of which at least two years must be specialized experience operating a large-scale computer system or a multi-server local area network. Must demonstrate sufficient knowledge of programming to understand how programs use computer hardware.

(2) Functional Responsibility: Monitors and supports computer processing. Coordinates input, output, and file media. Distributes output and controls computer operation which may be mainframe, mini, or client/server based.

(3) Educational Requirement(s): An Associate's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required.

-- With a Bachelor's degree (in the fields described above): two (2) years general experience of which at least one (1) year must be specialized experience is required

-- With seven (7) years general experience of which at least five (5) years is specialized, a degree is not required.

E. TECHNICIAN SERIES (E1-E3)

E1. RESERVED

E2. COMMUNICATIONS TECHNICIAN

(1) Experience Requirements:

(a) Total Experience. Three (3) years experience installing and maintaining communications and cable systems. Experience should include termination of voice and data circuits including copper and fiber house wiring.

(2) Functional Responsibility. Responds to help calls referred by the Help Desk or Customer Support. Implements, installs, and repairs voice and data cable systems. Creates and maintains records on cable assignments, terminations and directory headings, telephone, circuit, and other communication equipment types.

(3) Education and Other Requirements.

- (a) A high school diploma
- (b) Two (2) years technical school training related field
- (c) Substitution. Substitution not allowed for this category

E3. TELEPHONY TECHNICAL SPECIALIST

(1) Experience: Three (3) to five (5) years of experience providing installation and maintenance support to various Private Branch Exchange (PBX) systems.

(2) Functional Responsibility: Performs installation, moves, adds, changes and repairs to various telecom systems. Work may include installing wiring, running jumpers and performing quality assurance testing.

(3) Education and Other Requirements: Associates degree. A high school diploma or equivalent, and seven (7) years experience may be substituted for an AA degree.

F. SUPPORT SERIES (F1-F6)

F1. SENIOR TECHNICAL WRITER

(1) Experience Requirements.

- (a) Total Experience. Five (5) years of technical writing or documentation experience
- (b) Specialized Experience. Three (3) years of specialized IT oriented technical documentation experience

(2) Functional Responsibility. Prepares and edits IT/ADP documentation incorporating information provided by user, specialist, analyst, programmer, and operations personnel. Must have a substantial knowledge of the capabilities of computer systems. Duties include writing, editing, and graphic presentation of technical information for both technical and non-technical personnel. Interprets technical documentation standards and prepares documentation according to standards. Must be capable of working independently. Plans and supervises multiple projects and/or tasks involving a wide range of IT related tasks.

(3) Education and Other Requirements. A Bachelor of Science degree from an accredited college or university with a major in English, Computer Science, Business, or other related disciplines.

- (a) Substitution. Substitution not allowed for this category.

F2. TECH WRITER

(1) Experience Requirements:

(a) Total Experience. Three (3) years of technical writing or documentation experience

(b) Specialized Experience. One (1) year of specialized ADP technical documentation experience

(2) Functional Responsibility. Prepares and edits IT/ADP documentation incorporating information provided by user, specialist, analyst, programmer, and operations personnel. Must have a substantial knowledge of the capabilities of computer systems. Duties include writing, editing, and graphic presentation of technical information for both technical and non-technical personnel. Interprets technical documentation standards and prepares documentation according to standards. Must be capable of working independently. This category provides incidental support for other approved requirements.

(3) Education and Other Requirements. An Associate's degree from an accredited college or university or two (2) years of college or university study in English, Computer Science or related discipline

(a) Substitution. Substitution not allowed for this category

F3. ADMINISTRATIVE SUPPORT/GRAPHICS SPECIALIST

(1) Experience: At a minimum, one years of specialized experience using commercial automated word processing (e.g. MS Word, WordPerfect), graphics systems (Harvard, Freelance, PowerPoint, etc.) and desktop publishing systems. Demonstrated ability to work independently or under only general direction.

(2) Functional Responsibility: Directly supports Program Manager or Project Manager by maintaining personnel and other files; prepares correspondence, schedules and coordinates travel. Assists in the preparation of presentation graphics and supports the development of contract deliverables and reports by developing and updating graphic presentations to improve the quality and enhance the usability of these documents. Responsible for integrating the graphics generated with automated tools and the deliverable documents.

(3) Education: High school diploma and a minimum of two years experience in office administration and developing graphic/artistic presentations for publications and documents (preferably technical documentation).

F4. HELP DESK MANAGER

(1) Experience: Minimum of seven years experience. Of which at least five years must be specialized. Specialized experience includes: management of help desks in a multi-server environment, comprehensive knowledge of PC operating systems, E.g. DOS, Windows, NT, as well as networking and mail standards and supervision of help desk employees. General experience includes information systems development, network and other work in the client/server field, or related fields. Demonstrated ability to communicate orally in writing and a positive customer service attitude.

(2) Functional Responsibility: Provides daily supervision and direction to staff that are responsible for phone and in-person support to users in the areas of e-mail, directories, standard Windows desktop applications, and applications developed or deployed under a particular contract. These personnel serve at the second point of contact for trouble shooting hardware/software, PC, printer and network problems

(3) Education: Bachelor's degree in Computer Science, Information Systems, Engineering, Business or other related discipline

-- With a Master's degree (in the fields described above): five years general experience of which at least three years must be specialized experience is required

-- With ten years general experience of which at least eight years is specialized, a degree is not required

F5. HELP DESK SPECIALIST

(1) Experience: Minimum of five years experience, of which at least three years must be specialized. Specialized experience includes; knowledge of PC operating systems, e.g., DOS, Windows, NT, as well as networking and mail standards and work on a help desk. General experience includes information systems development and other work in the client/server field, or related fields. Demonstrated ability to communicate orally and in writing and a positive customer service attitude.

(2) Functional Responsibility: Provides phone and in-person support to users in the areas of e-mail, directories, standard Windows desktop application, and applications developed under this contract or predecessors. Serves as the initial point of contact for troubleshooting hardware/software, PC, printer, and network problems.

(3) Education: An Associate's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline is required.

-- With a Bachelor's degree (in the fields described above): four years general experience of which at least two years must be specialized experience is required

-- With eight years general experience of which at least six years is specialized, a degree is not required

F6. TECHNICAL TYPIST

(1) Experience Requirements:

(a) Total Experience. One (1) year of technical typing

(2) Functional Responsibility. Prepares draft and final form technical documents. Must be capable of typing at average or above average speed. Must be capable of typing technical narratives and data. Responsible for spelling, grammar, and proper format, and for proofreading finished documents. Must be capable of using various word processing equipment. This category provides incidental support for other approved requirements.

(3) Education and Other Requirements. High School diploma

(a) Substitution. Substitution not allowed for this category

G. INSTALLATION AND MAINTENANCE SERIES (G1-G10)

FNS participates substantially in the performance of classified contracts for the United States Government. Staff cleared to the TS/SCI security clearance level may be proposed by FNS under this Group 70 schedule, contingent on individual solicitation work scope requirements; and personnel availability.

G1. SENIOR INSTALLATION TECHNICIAN

(1) Experience: Five (5) to seven (7) years of experience with installation of voice or data networks. Experienced in word processing and use of spreadsheet software packages. Trained in copper and fiber termination and testing, working knowledge of crypto gear, routers, and Asynchronous Transfer Mode (ATM) or Internet Protocol (IP) based networks.

(2) Functional Responsibility: Integration management, planning and installing new systems, and conducting ad hoc modifications to existing systems. Individual will be responsible for adhering to project and work schedules.

(3) Education and Other Requirements: A high school diploma or equivalent.

G2. INSTALLATION TECHNICIAN

(1) Experience: Two (2) to four (4) years of experience with network installations, including the physical placement of conduit, Category 5 and fiber optic cable, wall jacks, hardware, racks and communications equipment.

(2) Functional Responsibilities: Routine network installations; may include surveys, installing other conveyances, pulling and terminating cable, determining and implementing required pin outs, installing and configuring equipment., testing and documenting installations, dressing and labeling cables, racks, patch panels.

(3) Educations and Other Requirements: A high school diploma or equivalent.

G3. SENIOR VIDEO TECHNICIAN

(1) Experience: Three (3) to five (5) years of experience integrating video into existing infrastructure, including data or voice systems. Has knowledge of ANSI/IEEE formats for analog and digital systems, Broadband cable, NTSC/HDTV and ISDN.

(2) Functional Responsibilities: The Senior Video Technician will be required to support both Video distribution systems and Video teleconferencing systems.

(3) Education and Other Requirements: A high school diploma or equivalent.

G4. VIDEO TECHNICIAN

(1) Experience: Two (2) to four (4) years of experience in first tier (preliminary) trouble shooting and maintenance of VTC equipment.

(2) Functional Responsibilities: Duties include VTC scheduling, as well as first tier technical support, maintaining VTC schedules and conference room reservations, training on the VTC equipment, first tier trouble shooting, acting as a facilitator of test calls, acting as a facilitator of second tier call-out and trouble ticket input, installing and operating of video teleconference equipment, trouble shooting LAN-based and ISDN-based video equipment, proving customer training on new installations, acting as on-site technical support, and providing assistance to project management and project engineering.

(3) Education and Other Requirements: A high school diploma or equivalent.

G5. LAN TECHNICIAN

(1) Experience: Two (2) to four (4) years experience with specifications of LAN components, system integration techniques, and routing protocols such as EIGRP, OSPF, RIP, and BGP.

(2) Functional Responsibilities: The LAN Technician will analyze customer problems and determine the best technical solution, with specifications of LAN components and system integration techniques. Individual will assess bandwidth requirements to support numerous offsite facilities. Individual will also implement connectivity to function with crypto equipment at each site while ensuring high availability of critical data. Duties also include operations and maintenance of Cisco systems equipment.

(3) Education and Other Requirements: A high school diploma or equivalent, and one of the following Cisco certifications: CCNA, CCNP, CCIE, CCDA, CCDP. A high school diploma or equivalent and seven (7) years of total experience may be substituted for the Cisco-specific certification.

G6. WAN TECHNICIAN

- (1) Experience: Two (2) to four (4) years experience with specifications of WAN components, system integration techniques, and routing protocols such as EIGRP, OSPF, RIP, and BGP.
- (2) Functional Responsibilities: The WAN Technician will analyze customer problems and determine the best technical solution, with specifications of WAN components and system integration techniques. Individual will assess bandwidth requirements to support numerous offsite facilities. Individual will also implement connectivity to function with crypto equipment while ensuring high availability of critical data. Duties also include operations and maintenance of Cisco systems equipment.
- (3) Education and Other Requirements: A high school diploma or equivalent, and one of the following Cisco certifications: CCNA, CCNP, CCIE, CCDA, CCDP. A high school diploma or equivalent and seven (7) years of total experience may be substituted for the Cisco-specific certification.

G7. PC REPAIR TECHNICIAN

- (1) Experience: Two (2) years of training and experience in the field of computer repair. Familiarity with the operation, maintenance, and repair PC's, Disk Drives, CD Rom's, Floppy Drives, Tape Devices, Video Displays,, and software applications including Microsoft NT, Office (Word, Excel, Access), Lotus Notes.
- (2) Functional Responsibilities: Depot level component diagnostics and repair for a variety of computer equipment. Technician is required to be competent in the performance of standard shop practices such as soldering, use of power and hand tools as well as all standard safety practices associated with the repair and maintenance of electronic equipment. Will communicate via e-mail with customers in assisting with troubleshooting.
- (3) Education and Other Requirements: Associates degree. A high school diploma or equivalent and certification from a bonafide technical school, or two years technical training gained as a result of military service or professional experience may be substituted for an Associates degree.

G8. SITE SURVEY TECHNICIAN (NETWORK SURVEYOR)

- (1) Experience: Two (2) to four (4) years experience with site surveys for complex projects, reading architectural drawings, determine materials needed for a requirement based on engineering designs, estimate man-hours needed for requirements based on materials needed.
- (2) Functional Responsibilities: Conduct site surveys for complex projects and provide the material lists, labor estimates and roll up pricing information to the Project Manager in the form of a Bill of Materials (BOM). Assist with the preparation of bids and proposals. Work within project and work schedules, demonstrate the ability to meet scheduled milestones (including the

identification of changes in the work scope.

(3) Educations and Other Requirements: A high school diploma or equivalent.

G9. SYSTEM INTEGRATOR

(1) Experience: Ten (10) years of experience in systems analysis and engineering in highly complex and broad-base information technology (IT) settings or developing functional requirements for complex integrated communications systems.

(2) Functional Responsibilities: Oversee/conduct the analysis of user requirements and cross-functional group requirements. Apply business process improvement practices to re-engineer methodologies/principles and business process modernization projects. Apply, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance management techniques. Assist customer in establishing standards for information systems procedures. Develop and apply established standards for information systems procedures. Develop and apply organization-wide information models for use in designing and building integrated, shared, highly reliable, and secure network centric computing infrastructures. Construct sound and logical improvement opportunities consistent with the corporate information management guiding principles, cost savings and open system architecture objectives.

(3) Educational and Other Requirements: Bachelors degree. A high school diploma or equivalent and fourteen (14) years of total experience may be substituted for a Bachelors degree.

G10. WAREHOUSE OPERATIONS SUPERVISOR

(1) Experience: Seven (7) to ten (10) years of logistics experience supporting field locations.

(2) Functional Responsibilities: Oversees employees responsible for supporting field locations. Supervises the repairing and maintaining field equipment as well as a group responsible for managing inventories and providing warehouse services.

(3) Education and Other Requirements: HS Diploma required.

H. ENGINEERING AND DESIGN SERIES (H1-H5)

FNS participates substantially in the performance of classified contracts for the United States Government. Staff cleared to the TS/SCI security clearance level may be proposed by FNS under this Group 70 schedule, contingent on individual solicitation work scope requirements; and personnel availability.

H1. ASYNCHRONOUS TRANSFER MODE (ATM) NETWORK ENGINEER

(1) Experience: Five (5) years of experience with modern, complex and large-scale communications networks with a focus on ATM switches and technology. Ability to develop detailed communication system architectures, design communication network solutions, and apply engineering expertise to implementation activities.

(2) Functional Responsibility: Analyzes Communication networks and emerging requirements to determine viability of current architecture and needed improvements/changes with a focus on ATM networks. Assesses complex operational network characteristics and identifies potential problem areas and proposes corrective solutions. Provides practical guidance on deployment planning for new/revised capabilities and transition from existing networks. Develops specifications, plans, and other technical documentation

(3) Education and Other Requirements: Bachelors Degree. A high school diploma or equivalent and nine (9) years of total experience may be substituted for a Bachelors degree.

H2. VIDEO ENGINEER

(1) Experience: five (5) years of engineering experience with video components and system integration techniques.

(2) Functional Responsibilities: Analyze customer requirements and determines the best technical solution with specifications of video components and system integration techniques to satisfy the requirements for complex design and technology activities. These activities consist of video distribution and teleconferencing design and test efforts.

(3) Educational and other requirements: Bachelors degree. A high school diploma or equivalent and nine (9) years of total experience may be substituted for a Bachelors degree.

H3. CIRCUIT DESIGN & DOCUMENTATION TECHNICIAN

(1) Experience: Two (2) to four (4) years experience with design and documentation for telecommunication circuits for voice or data premises distribution systems. Candidate must have knowledge of multiplexers, modems, cable and connector types, and common data interface standards.

(2) Functional Responsibilities: Document telecommunication circuits for voice and data premises distribution systems. Modify plans of building wiring and wiring interconnections to satisfy requirements for new circuits and changes to existing circuits. Uses computer added design tools to prepare engineering drawings of telecommunications circuits for voice and data premises distribution systems. Modify drawings of building wiring and wiring interconnections to satisfy requirements for new circuits and changes to existing circuits.

(3) Educational and Other Requirements: A high school diploma or equivalent.

H4. CONFIGURATION MANAGEMENT (CM) ANALYST

(1) Experience: Six (6) years of experience with CM plans for networking telecommunications documentation in support of active programs.

(2) Functional Responsibilities: Collaborates with management and engineers to develop and implement a CM plan for network/telecommunications documentation in support of active programs. Provide support to CM boards such as engineering review boards, configuration control boards, and schedule meetings. Must be able to process requests for change (RFC) and interface with engineers and project managers. Must have applied knowledge in the basic principles of CM to include configuration identification, change control, release management, status accounting and reporting, and configuration auditing and process improvement.

(3) Educational and Other Requirements: Bachelors degree. A high school diploma or equivalent and ten (10) years of total experience may be substituted for a Bachelors degree.

H5. UNIX SECURITY ENGINEER

(1) Experience: Twelve (12) years of experience in the design, implementation, and administration of secure local and wide area networks involving the use of firewalls, routers, switches, cryptographic equipment and other components used in secure environments.

(2) Functional Responsibilities: Serves as the network firewall engineer for a large, complex networks The candidate is also responsible for the overall management and administration of the customers UNIX environment and firewall components while ensuring that the engineering solutions and schedules in the task order are technically sound. Candidate also performs enterprise wide horizontal integration planning and interfaces with the customer.

(3) Educational and Other Requirements: Bachelors degree. A high school diploma or equivalent and sixteen (16) years of total experience may be substituted for a Bachelors degree

I. NETWORK OPERATIONS SERIES (I1)

FNS participates substantially in the performance of classified contracts for the United States Government. Staff cleared to the TS/SCI security clearance level may be proposed by FNS under this Group 70 schedule, contingent on individual solicitation work scope requirements; and personnel availability.

II. NETWORK OPERATIONS

(1) Experience: Three (3) to five (5) years experience using Network Operation Center components such as trouble-ticket systems e. g. Remedy), client databases, and routing protocols in WAN environment and such as EIGRP, OSPF, RIP, and BGP.

(2) Functional Responsibilities: Duties include: first-level network operations; use of automated network management tools to perform daily monitoring and control of network managed elements in accordance with established procedures; update and close required trouble

tickets; perform dial-up testing on network managed elements.

(3) Educational and Other Requirements: Bachelors degree. A high school diploma or equivalent and nine (9) years of total experience may be substituted for a Bachelors degree.