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## A. PROGRAM MANAGER

a. **DUTIES.** Serves as the contractor's program manager, and shall be the contractor's authorized interface with the Government Contracting Officer (CO), the Contracting Officer's Representative (COR), government personnel and customer agency representatives. Responsible for formulating and enforcing work standards, assigning of contractor work schedules, and the review work discrepancies. Supervise contractor personnel, and communicate policies, purposes, and goals of the organization to subordinates. Responsible for the management of the entire project and the assigned staff, ensuring appropriately skilled and trained personnel. Responsible for maintaining technical currency of staff. Responsible for coordinating all project administrative matters with the Contracting Officer's Representative. Provides management for technical, engineering, and IA professional support. The Program Manager shall not serve in any other capacity under this contract.

b. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, Telecommunications, or other related scientific or technical discipline is required. Certified acquisition professional (e.g., CPCM, DAWIA). Eight (8) years general experience and six (6) years of IA specialized experience is required.

c. **EXPERIENCE:**

(1) **General Experience:** Eight (8) years of increasing responsibilities in information systems design and management. Experienced in streamlined acquisition methods, business analysis, and project management.

(2) **IA Specialized Experience:** Six (6) years experience in IA, Information Systems Security (IA), Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated ability to provide guidance and direction in the tasks areas identified in the statement of work. Demonstrated expertise in the management of funds and resources, and experience in managing complex multitask type contracts.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Master's Degree in Business Administration is equivalent to 3 years general experience and two years IA specialized experience. A Certificate in a nationally recognized Information Systems Security organization (CISSP, CISA, MSCE, etc.), Information Systems, Engineering, Networking, Business, or other related scientific/technical discipline may be considered equivalent to three (3) years general experience three (3) years IA specialized experience

## B. DEPUTY PROGRAM MANAGER.

a. **DUTIES:** Serves as the assistant Program Manager, and shall be the contractor's authorized representative as an interface with the Government Contracting Officer (CO), the Contracting Officer's Representative (COR), government personnel and customer agency representatives in the absence of the Program Manager. Responsible for formulating and enforcing work standards, assigning contractor schedules, and reviewing work discrepancies. Responsible for supervising contractor personnel, and communicating policies, purposes, and goals of the organization to subordinates. The Deputy Program Manager may perform other technical responsibilities under this contract upon meeting the required experience and educational requirements.

b. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. Four (4) years general experience and three (3) years of IA specialized experience. Certified acquisition professional (e.g., CPCM, DAWIA).

c. **EXPERIENCE:**

(1) **General Experience:** Includes two (2) years of increasing responsibilities in formation systems design and management.

(2) **IA Specialized Experience:** Four (4) years experience in an IA discipline (e.g., Information Systems Security (IA), Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated ability to provide guidance and direction in the tasks similar to the sample tasks provided in the statement of work, proven expertise in the management and control of funds and resources, demonstrated capability in managing multi-task contracts of this type and complexity.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** Certificate from a nationally recognized Information Systems Security organization (CISSP, CISA, etc.), Information Systems, Engineering, Networking, Business, or other related scientific/technical discipline may be considered equivalent to three (3) years general experience three (3) years IA specialized experience.

## 1. TASK ORDER MANAGER.

a. **DUTIES.** Directs all financial management and contract/subcontract administrative activities, such as budgeting, manpower and resource planning and financial reporting. May perform complex evaluations of existing procedures, processes, techniques, models, and/or systems related to management problems or contractual issues that would require a report and recommend solutions. Prepare charts, tables, graphs, and diagrams to assist in analyzing problems. Manages the day-to-day activities of the Task Orders. Responsible for formulating and enforcing work standards, assigning of task order work schedules, and the review work discrepancies. Responsible for the management of the task order and the assigned staff, ensuring appropriately skilled and trained personnel. Demonstrated ability to

provide guidance and direction in the tasks similar to the representative scenarios provided with proven expertise in the management and control of funds and resources.

b. **QUALIFICATIONS.** A Bachelor's degree in Information Systems, Business, or other related scientific or technical discipline is required. Four (4) years general experience and three (3) years of IA Specialized Experience:

c. **EXPERIENCE**

(1) General Experience: Includes Four (4) years experience in the management of financial management, contract administration, and fiscal reporting and accounting. Demonstrated ability of increasing responsibilities in general accounting and management activities.

(2) IA Specialized Experience: Three (3) years in demonstrated increase in responsibility in the development, assessment, support, or maintenance of secure information technology baselines.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** Six years Military experience in business and information technology and two years in IA may be considered equivalent. Certification from a nationally recognized information systems security organization (CISSP, CISA, etc.,) or other related scientific or technical discipline may be considered equivalent to three years (3) years general experience and three (3) years IA specialized experience.

## 2. CONTRACTS MANAGER.

a. **DUTIES.** Negotiates and administers assigned contracts and subcontracts and required changes, providing technical assistance and information to management on basic contracting procedures. Acts as senior administrator on major proposal activities with respect to terms and conditions of cost and technical proposals. Provides initial work authorization and directs actions on contract award, delivery order awards, and contract correspondence, and contract/delivery order modifications. Maintains control documents on active contracts, funding status, contract and delivery order modifications and ensures appropriate actions are taken to maintain required contract performance levels. May provide work guidance to lower level employees.

b. **QUALIFICATIONS:** A Bachelor's Degree in Financial Management, Business, or Accounting and six (6) years general.

c. **EXPERIENCE:**

(1) General Experience: Experience in the management of contracts, including negotiation, award, contract administration; management of a business or business office. Experience should demonstrate an increase of business management responsibilities.

(2) IA Specialized Experience: None

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's Degree in Accounting or a Certified Public Accountant (CPA) certificate may be substituted for three (3) years general experience.

### 3. CONFIGURATION MANAGEMENT MANAGER.

a. DUTIES: Provides technical support in documenting IA solutions to information systems to the Program Manager. Establishes and maintains a process for tracking the life cycle development of all hardware implementation and software development efforts. Maintains continuity of products while ensuring conformity to commercial/industry or DoD directives and regulations, as applicable to the task order. Oversees formal and informal documentation reviews and makes recommendations consistent with program direction. This may include management of hardware and/or software baselines, change control, baseline audits, pre-release testing and IV&V functions.

b. QUALIFICATIONS: A Bachelor's degree in Computer Science, Information Systems, Business, or other related scientific or technical discipline is required. Six (6) years general experience and two (2) years of IA Specialized Experience:

c. EXPERIENCE:

(1) General Experience: Six (6) years in development of computer and communication systems development, including physical and functional audits and software evaluation, testing and integration.

(2) IA Specialized Experience: Two (2) years in demonstrated increase in responsibility in the support and maintenance of secure information technology baselines.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's degree in Computer Science, Information Systems, Business, Certification from a nationally recognized information systems security organization (CISSP, CISA, etc.) or other related scientific or technical discipline may be considered equivalent to three years (3) years general experience and two (2) years IA specialized experience.

### 4. SENIOR DATA BASE MANAGER.

a. DUTIES. Manages the development of data base projects. Plans and budgets staff and data base resources. As necessary, reallocates resources to maximize benefits. Prepares and delivers presentations on Data Base Management Systems (DBMS) concepts, data warehousing, and data mining capabilities. Provides daily supervision and direction to support staff. Evaluates and designs existing or proposed systems to structure and access data bases. Analyzes data base requirements of the user department, applications programming and operations for IA requirements. Submits recommendations for solutions which require definition of the physical structure and functional capabilities of data bases and require data security and data backup/recovery specifications. Proposes

detailed specifications and flowcharts and coordinates installation of revised or new systems when incorporating IA.

b. **QUALIFICATIONS:** A Bachelor's degree in Computer Science, Business, Information Systems, Engineering, or other related scientific or technical discipline is required. Six (6) years general experience and two (2) years of IA specialized experience.

c. **EXPERIENCE:**

(1) **General Experience:** Six (6) years of data base management experience with information systems.

(2) **IA Specialized Experience:** Two (2) years experience in an IA discipline (e.g., Information Systems Security (IA), Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated ability in evaluation of data bases as related to IA requirements, and experiences with data base management systems design and system analysis, current operating systems software internals and data manipulation languages. Experience with securing distributed databases, data locking, multi-level access within the database, user accountability with respect to accessing remote data repositories, and database transaction logging and auditing. Experience with data warehousing and data mining.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Master's Degree in Computer Science, Engineering, Business, or other related scientific or technical discipline may be considered equivalent to two (2) years general experience, and one (1) year IA specialized experience.

## 5. INTERMEDIATE DATA BASE MANAGER.

a. **DUTIES.** Evaluates and designs existing or proposed systems to structure and access databases. Analyzes data base requirements of the user department, applications programming and operations for IA requirements. Submits recommendations for solutions that require definition of the physical structure and functional capabilities of databases and require data security and data backup/recovery specifications. Proposes detailed specifications and flowcharts and coordinates installation of revised or new systems when incorporating IA. Coordinate IA data administration, including data archival, data recovery, anomaly detection, data entry, data warehousing and data mining.

b. **QUALIFICATIONS:** A Bachelor's degree in Computer Science, Business, Information Systems, Engineering, or other related scientific or technical discipline is required. Four (4) years general experience and two (2) years of IA specialized experience.

c. **EXPERIENCE:**

(1) **General Experience:** Four (4) years of IA database management experience with information systems.

(2) IA Specialized Experience: Two (2) years experience in an IA discipline (e.g., Information Systems Security (IA), Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated ability in evaluation of databases as related to IA requirements. Demonstrated ability in evaluation of databases as related to IA requirements, and experiences with data base management systems design and system analysis, current operating systems software internals and data manipulation languages.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's Degree in Computer Science, Engineering, Business, or other related scientific or technical discipline may be considered equivalent to (2) years general experience, and one (1) year IA specialized experience.

#### 6. JUNIOR DATABASE MANAGER/ADMINISTRATOR.

a. DUTIES. Evaluates and designs existing or proposed systems to structure and access databases. Analyzes data base requirements of the user department, applications programming and operations for IA requirements. Submits recommendations for solutions that require definition of the physical structure and functional capabilities of databases and require data security and data backup/recovery specifications. Proposes detailed specifications and flowcharts and coordinates installation of revised or new systems when incorporating IA. Performs data administration to include data archival, data recover, anomaly detection, and data entry.

b. QUALIFICATIONS: A Bachelor's degree in Computer Science, Business, Information Systems, Engineering, or other related scientific or technical discipline is required.

c. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Certification from a nationally recognized technical authority (Oracle, Sybase) with two (2) years experience may substitute Bachelor's Degree.

#### 7. CHIEF SCIENTIST.

a. Provide security and software engineering and technical direction and leadership for personnel performing IA task(s) and projects. Recommends solutions to the most difficult information security problems in existing systems and systems development. Leads and participates in system evaluations, penetration, forensics, and vulnerability studies and experiments. Applies or assists with application of formal methods in IA system design and evaluation. Responsible for overseeing and directing complex tasks. Makes recommendations as an authoritative leader in the IA, Networks, and Networks Operations arena.

b. QUALIFICATIONS: A Master's degree in Computer Science, Mathematics, Physics, Engineering, Business, or other related scientific or technical disciplines is required. Twelve (12) years general experience and ten (10) years of IA specialized experience is required. Educational qualifications must be, and remain, current.

c. EXPERIENCE:

(1) General Experience: Twelve (12) years or more of involvement in general information assurance projects and other projects related to information assurance/critical infrastructure protection is required.

(2) Ten (10) years experience in Information Assurance Technical and Engineering, Information Systems Security Engineering (ISSE), developing and/or integrating Information Assurance products or capabilities, Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated ability to provide IA guidance at the authoritative level.

(3) Technical and engineering education must be current (within 2 years) and remain current throughout the life of the contract.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: None

8. SENIOR IA FUNCTIONAL ANALYST.

a. DUTIES: Works on complex application problems involving all phases of systems analysis to provide IA solutions. Provides technical support for **secure** software development and integration tasks, including the review of work products for correctness, adherence to the design concept and to user standards. Expert knowledge of IA products and IA-enabling products such as PKI, VPN, Firewalls, Intrusion Detection Systems, etc. Based on a review of current IA policy, doctrine and regulations, provide recommendations for consolidating or developing IA policy and procedures at the DoD level. Applies knowledge of current IA policy at the national IA structure, roles of major organizations how they interrelate and interact, and shortcomings in this structure. Reviews and recommends IA solutions to customer problems based on an understanding of how products and services interrelate and support the IA mission and the viewpoints of the consumers of those products and services. Analyzes and recommends resolution of IA problems based on knowledge of the major IA products and services, an understanding of their limitations, and a expert knowledge of the disciplines of IA.

b. QUALIFICATIONS: A Bachelor's degree in Computer Science, Information Systems, Engineering, or other related scientific or technical disciplines is required, including eight (8) years of general experience and four (4) years of current IA specialized experience.

c. EXPERIENCE:

(1) General experience. Eight (8) years experience in applications programming and functional analysis on large systems using data base management systems.

(2) IA Specialized Experience: Four (4) years experience in an IA discipline (e.g., Information Systems Security (IA), Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC) and in developing functional requirements for complex integrated ADP systems using IA products or

processes. Knowledge of computer hardware such as Sun Work Stations, IBM, DEC, HP, NCR, AT&T, and Macintosh and high-level computer languages. Current knowledge of IA and IA-enabling products, regulations, standards and guidelines.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's in Computer Science, Information Systems, Engineering, or other related scientific or technical disciplines may be considered equivalent to three (3) years general experience and three (3) years IA specialized experience.

#### 9. INTERMEDIATE IA FUNCTIONAL ANALYST.

a. DUTIES. Under general supervision, analyzes user needs and current security regulations and guidelines to determine IA functional requirements. Accomplishes functional allocation to identify tasks to be done and interrelationships. Identifies resource(s) required.

b. QUALIFICATIONS. A Bachelor's degree in Computer Science, Information Systems, Engineering, or other related scientific or technical disciplines is required, including six (6) years general experience and two (2) years of IA specialized experience.

c. EXPERIENCE:

(1) General experience. Six (6) years experience in applications programming and functional analysis on large systems using data base management systems.

(2) IA Specialized Experience: Two (2) experience in an IA discipline (e.g., Information Systems Security (IA), Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC) and in developing functional requirements for complex integrated ADP systems and information technology using IA products or processes. Knowledge of computer hardware such as Sun Work Stations, IBM, DEC, HP, NCR, AT&T, and Macintosh and high-level computer languages. Knowledge of information assurance and IA-enabling products, regulations, standards and guidelines.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's in Computer Science, Information Systems, Engineering, or other related scientific or technical disciplines, or a Certificate from a nationally recognized information systems security organization (CISSP, CISA, etc) may be considered equivalent to three (3) years general experience and two (2) years IA specialized experience.

#### 10. JUNIOR IA FUNCTIONAL ANALYST

a. DUTIES. Under general supervision, analyzes user needs and current security regulations and guidelines to determine IA functional requirements. Accomplishes functional allocation to identify tasks to be done and interrelationships. Identifies resource(s) required.

b. QUALIFICATIONS. A Bachelor's degree in Computer Science, Information Systems, Engineering, or other related scientific or technical disciplines is required and two years generalized experience or one year IA specialized experience.

c. EXPERIENCE

(1) General experience. Two (2) years experience in applications programming and functional analysis on large systems using data base management systems.

(2) IA Specialized Experience: One (1) year experience in an IA (e.g., Information Systems Security (IA), Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC) and in developing functional requirements for complex integrated ADP systems and information technology using IA products or processes. Knowledge of computer hardware such as Sun Work Stations, IBM, DEC, HP, NCR, AT&T, and Macintosh and high-level computer languages. Knowledge of information assurance and IA-enabling products, regulations, standards and guidelines.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Certificate from a nationally recognized information systems security organization (e.g., CISSP, CISA, Oracle Database Administrator, etc) may be considered equivalent.

11. IA FUNCTIONAL ANALYST.

a. DUTIES. Under general supervision, analyzes user needs and current security regulations and guidelines to determine IA functional requirements. Accomplishes functional allocation to identify tasks to be done and interrelationships. Identifies resource(s) required.

b. QUALIFICATIONS. A Bachelor's degree in Computer Science, Information Systems, Engineering, or other related scientific or technical disciplines is required, including four (4) years of general experience and two (2) years of IA specialized experience.

c. EXPERIENCE:

(1) General experience. Four (4) years experience in applications programming and functional analysis on large systems using data base management systems.

(2) IA Specialized Experience: Two (2) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC) and in developing functional requirements for complex integrated ADP systems using IA products or processes. Knowledge of computer hardware such as Sun SPARC Stations, IBM, DEC, HP, NCR, AT&T, and Macintosh and high-level computer languages. Knowledge of information security products, regulations, standards and guidelines.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's degree in Computer Science, Information Systems, Engineering, or other related scientific or technical disciplines may be considered equivalent to two (2) years general experience and one (1) year IA specialized experience.

## 12. SENIOR IA ANALYST.

a. DUTIES: Works on complex IA projects involving all phases information assurance and network operations to include: assess, address, correlate, analyze, and provide IA course of action decision support. Develops high quality assessments that provides an understanding and resolution to security related events as they occur. Develop and document vulnerabilities including solutions/countermeasures and exploits for the purpose of identifying signatures. Able to address problem area and recommend automated solutions. Assesses impact, determines probable damage and suggests methods of damage control, conducts computer forensics, and follow-on analysis to build historical and predictive capabilities. Analyzes and recommends resolution of IA problems based on knowledge of the major IA products and services, an understanding of their limitations, and a working knowledge of the disciplines of IA. Applies knowledge of current IA policy, tactics, techniques, policy, and doctrine, and relationship to IA reporting requirements and structure.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. Seven (7) years general experience and five (5) years of IA specialized experience is required.

### c. EXPERIENCE:

(1) General Experience: Includes 7 years of experience in system engineering, Windows/Windows NT, UNIX, VPN, PKI, Directory Services, Biometrics, Remote Access, development of software products and information systems. Experience in work of a technical nature at progressively increasing levels of responsibility.

(2) IA Specialized Experience: Five (5) years of experience in Information Assurance, Information Assurance Enabling Products, Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC) is required. Experience in systems engineering, design, development or applications of IA products and systems. Experience in the analysis and design of business applications on complex systems for large-scale computers, including experience in data base management concepts and the utilization of required programming languages. Knowledge of state-of-the-art storage and retrieval methods is required, as well as the ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer systems.

d. EDUCATION SUBSTITUTION. A Master's in Computer Science, Information Systems, Engineering, business, or other related scientific or technical discipline may be

considered equivalent to three (3) years generalized and two (2) years IA specialized experience.

### 13. INTERMEDIATE IA ANALYST.

a. DUTIES: Perform network vulnerability analysis and reporting. Perform network security monitoring and analysis, identifies suspicious and malicious activities, identifies and tracks malicious code (including worms, viruses, trojan horses, etc), enters and tracks events and incidents. Supports incident escalation and assesses probable impact and damages, identifies damage control, assists in developing course of action and recovery procedures. Knowledge of LANs, VPNs, Routers, firewalls, Applies knowledge of current IA policy at the national IA structure, roles of major organizations how they interrelate and interact, and shortcomings in this structure. Reviews and recommends IA solutions to customer problems based on an understanding of how products and services interrelate and support the IA mission and the viewpoints of the consumers of those products and services. Analyzes and recommends resolution of IA problems based on knowledge of the major IA products and services, an understanding of their limitations, and a working knowledge of the disciplines of IA.

b. QUALIFICATIONS: A Bachelor's Degree or equivalent in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. This position requires five (5) years in general experience two (2) years of IA specialized experience. CISSP is desired.

#### c. EXPERIENCE:

(1) General Experience: Includes five (5) years of experience LANs, WANs, VPNs, firewalls and other security and network devices. Capable of assessing and evaluating new IA and network technologies and IA-enabling products.

(2) IA Specialized Experience: Two (2) years of experience network monitoring, intrusion detection, PKI, reactive measures and prevention, security assessment methodologies, security vulnerability analysis, PKI, data encryption, and key management. Knowledge of state-of-the-art storage and retrieval methods is required, as well as the ability to formulate specifications for computer programmers to use in coding, testing, and debugging of computer software. Systems analysis experience designing technical applications on computer systems. Experience in systems engineering, system design, system development or application development, intended for IA systems or products.

d. EDUCATION SUBSTITUTION. A Master's Degree in Computer Science, Information Systems, Engineering, business, or other related scientific or technical discipline may be considered equivalent to two (2) years generalized and two (2) years IA specialized experience. CISSP is desired.

### 14. JUNIOR IA ANALYST.

a. **DUTIES:** Works on application problems involving all phases of systems analysis to provide IA solutions. Provides technical support for secure software development tasks, including the review of work products for correctness, adherence to the design concept and to user standards. Based on a review of current IA policy, doctrine and regulations, provide recommendations for consolidating or developing IA policy and procedures at the DoD level. Applies knowledge of current IA policy at the national IA structure, roles of major organizations how they interrelate and interact, and shortcomings in this structure. Reviews and recommends IA solutions to customer problems based on an understanding of how products and services interrelate and support the IA mission and the viewpoints of the consumers of those products and services. Analyzes and recommends resolution of IA problems based on knowledge of the major IA products and services, an understanding of their limitations, and a working knowledge of the disciplines of IA.

b. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required

c. **EDUCATION SUBSTITUTION.** A Certificate from a nationally recognized information systems security organization in Networks, Information Systems, Engineering, business, or other related scientific or technical discipline plus two (2) may be considered equivalent. Eight years military or industry experience in IA related field may be considered equivalent.

#### **15. SENIOR SYSTEMS ENGINEER. (Key Personnel)**

a. **DUTIES:** Performs a variety of complex project tasks applied to specialized technology problems. Tasks involve integration of electronic processes or methodologies to resolve total system problems or technology problems. Applies analytical and systematic approaches in the resolution of problems of work flow, organization, and planning. Directs and assists system engineers in the application of system engineering principles to the solution of secure systems design problems. Expert knowledge of LANs, WANs, VPNs, routers, firewalls, network protocols, and other security and network operations and monitoring, vulnerability analysis, PKI, data encryption, key management, data warehousing, and data mining capabilities.

b. **QUALIFICATIONS:** A Master's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. Seven (7) years general experience and five (5) years of specialized experience is required.

c. **EXPERIENCE:**

(1) **General Experience:** Seven (7) years of experience in information systems engineering with a demonstration of increasing responsibilities within this technical field.

(2) **Specialized Experience:** Five (5) years experience in engineering large, complex systems or networks. Experienced in LANs, WANs, VPNs, routers, firewalls, network

protocols, and other security and network operations and monitoring, vulnerability analysis, PKI, data encryption, key management, data warehousing, and data mining capabilities. Demonstrated experience in analytical problem solving of work flows, organization and planning. Demonstrated experience with IA products and systems.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Ph.D. in Computer Science, Information Systems, and/or Engineering may be considered equivalent to three (3) years general experience and two (2) years IA specialized experience.

#### 16. INTERMEDIATE SYSTEMS ENGINEER.

a. DUTIES: Performs a variety of moderately complex project tasks applied to specialized technology problems. Tasks involve integration of electronic processes or methodologies to resolve total system problems or technology problems. Analyzes information security requirements. Applies analytical and systematic approaches in the resolution of problems of work flow, organization, and planning. Assists the Senior Engineer in directing and assisting other system engineers in the application of engineering principles to the solution of secure systems design problems.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. This position requires six (6) years general experience and three (3) years of IA specialized experience.

c. EXPERIENCE:

(1) General Experience: Six (6) years of experience in information systems engineering and with a demonstration of increasing responsibilities.

(2) IA Specialized Experience: Three (3) years experience in Information Assurance, Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in analytical problem solving of work flows, organization and planning. Demonstrated experience with IA products and systems.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master of Sciences degree in Computer Science, Information Systems, and/or Engineering may be considered equivalent to two (2) years general experience and one (1) year IA specialized experience. A Certificate from a nationally recognized information systems security organization (CISSP, CISA, etc) may be considered equivalent to three years generalized and three years specialized experience.

#### 17. JUNIOR SYSTEMS ENGINEER.

a. DUTIES: Performs a variety of relatively routine project tasks applied to specialized technology problems. Tasks involve integration of electronic processes or methodologies to resolve total system problems, or technology problems as the relate to IA

requirements. Analyzes information security requirements. Applies analytical and systematic approaches in the resolution of problems of work flow, organization, and planning.

b. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required.

c. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Certificate in a nationally recognized information systems security organization in Networks, Information Systems, Engineering, DBMS, or other related scientific or technical discipline may be considered equivalent.

#### 18. IA SYSTEMS SECURITY ENGINEER.

a. **DUTIES:** Performs a variety of routine project tasks applied to specialized technology problems. Tasks involve integration of electronic processes or methodologies to resolve total system problems, or technology problems as they relate to IA requirements. Conducts security assessments and security consulting services. Analyzes information security requirements. Applies operating system security configuration. Applies analytical and systematic approaches in the resolution of problems of work flow, organization, and planning. Conducts security certification and accreditation for information technologies. Provides Help Desk support.

b. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. Three (3) years general experience and one (1) year of IA specialized experience is required.

c. **EXPERIENCE:**

(1) **General Experience:** Three (3) years of experience in information systems engineering, security assessments (Vulnerability analysis, connection approvals, or security test and evaluations) and with a demonstration of increasing responsibilities.

(2) **IA Specialized Experience:** Vulnerability analysis and assessment using either government or commercial off the shelf technologies. Security Test and Evaluations performed in accordance with DODI 5200.40. Connection approvals performed in accordance with CJCSI 6211.02A. Demonstrated experience in risk management and risk mitigation. Demonstrated experience in analytical problem solving of work flows, organization and planning. Demonstrated experience with IA products and systems.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Certificate by a nationally recognized information systems security organization (e.g., CISSP, CISA, MSCE, CCNE, Oracle DMBS, etc.) will substitute for the generalized and IA specialized experience.

#### 19. SENIOR IA HARDWARE ENGINEER.

a. DUTIES: Provides functional and empirical analysis related to the design, development and implementation of hardware products including but not limited to the circuit design of components, development of structure specifications of a microprocessor. Participates in the development of applications to various hardware suites and requirements to secure operating systems. Responsible for reviewing computer systems in terms of machine capabilities and man-machine interface. Assists in identifying requirements of existing computer hardware and services such as Sun Stations; Sun Services; Web-based capabilities, E-commerce, PKI, VPN, etc. Prepares reports and studies concerning requirements and existing capabilities. Provides direction to junior hardware engineers.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Mathematics, Engineering, Business, or other scientific or technical related fields is required. Ten (10) years general experience and eight (8) years IA specialized experience is required.

c. EXPERIENCE:

(1) General experience. Ten (10) years experience including increasing responsibilities and complexity in ADP systems, including systems analysis and programming. Demonstrated ability to work independently, and supervisory experience.

(2) IA Specialized Experience: Eight (8) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Must demonstrate ability to understand the application of IA to hardware stated in paragraph above.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's Degree may be substituted for two (2) years general experience and one (1) year of IA specialized experience.

## 20. INTERMEDIATE IA HARDWARE ENGINEER.

a. DUTIES: Provides functional and empirical analysis related to the design, development and implementation of hardware products including but not limited to the circuit design of components, development of structure specifications of a microprocessor. Participates in the development of IA applications to various hardware suites and IA requirements to secure operating systems. Responsible for reviewing computer systems in terms of machine capabilities and man-machine interface. Assists in identifying IA requirements of existing computer hardware such as Sun SPARC STATIONS; Sun Services; IBM 386/486 Compatible; DEC VAX & MicroVAX; DEC VAX Stations; DEC Alpha Family; HP 9000 Family; NCR Tower Family; AT&T 3B2/600G and 600GR; IBM RS/6000; IBM AS/400; Unisys Mainframes; IBM Mainframes; Apple Macintosh; and X Terminals. Prepares reports and studies concerning IA requirements and existing capabilities. Assists the Senior Hardware Engineering in providing guidance and supervision to lower graded engineers.

b. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Mathematics, Business, or other scientific or technical related fields is required. Eight (8) years general experience and six (6) years IA specialized experience is required.

c. **EXPERIENCE:**

(1) General experience. Eight (8) years experience including increasing responsibilities and complexity in ADP systems, including systems analysis and programming. Demonstrated ability to work independently, and supervisory experience.

(2) IA Specialized Experience: Six (6) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Must demonstrate ability to understand the application of IA to hardware stated in paragraph Above.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Master's Degree may be substituted for two (2) years general experience and one (1) year of IA specialized experience.

## 21. JUNIOR IA HARDWARE ENGINEER.

a. **DUTIES:** Provides functional and empirical analysis related to the design, development and implementation of hardware products including but not limited to the circuit design of components, development of structure specifications of a microprocessor. Participates in the development of IA applications to various hardware suites and IA requirements to secure operating systems. Responsible for reviewing computer systems in terms of machine capabilities and man-machine interface. Assists in identifying IA requirements of existing computer hardware such as Sun Work Stations; Sun Services; IBM 386/486 Compatible; DEC VAX & MicroVAX; DEC VAX Stations; DEC Alpha Family; HP 9000 Family; NCR Tower Family; AT&T 3B2/600G and 600GR; IBM RS/6000; IBM AS/400; Unisys Mainframes; IBM Mainframes; Apple Macintosh; and X Terminals. Prepares reports and studies concerning IA requirements and existing capabilities.

b. **QUALIFICATIONS:** Bachelor's degree in Computer Science or related MIS field.

c. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** Military service or a certificate from a nationally recognized information systems/information technology organization may be substituted for the educational qualifications.

## 22. SENIOR SOFTWARE ENGINEER. (Key Personnel)

a. **DUTIES:** Performs complex analysis, design, development, integration, testing and debugging of computer software. Activities range from operating system architecture integration and software design to recommendation of products. Expert knowledge of Operating Systems, LANs, WANs, VPNs, PKI, routers, firewalls, network protocols, data encryption, and key management. Provides functional and empirical analysis related to

the design, development and implementation of software operating systems for products including, but not limited to, IA utility software, IA development software, and IA diagnostic software. Expert knowledge of Common Operating Environment (COE). Develops system level scripts in various common languages (e.g., bourne shell on UNIX). Analyzes network and computer communications hardware characteristics for IA requirements. Assists and coordinates with communications network specialists in the area of communications hardware. Operating Systems being supported include UNIX: HP OS, Sun Solaris, DEC Ultrix, IBM AIX, HP AUX, SCO, Open Desktop; LINUX, X-windows Environment; MS-DOS; MS Windows Environment; MS Windows NT; IBM OS/2; DEC VMS; IBM MVS; IFB VS; Unisys OS 1100/2200.

b. QUALIFICATIONS: A Master's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline is required. Ten (10) years general experience and five (5) years IA specialized experience is required.

c. EXPERIENCE:

(1) General experience: Ten (10) experience in all aspects of network and computer communications software, and a mixture of experience of the operating systems listed in paragraph a. above. Demonstrated ability to work independently or under only general supervision.

(2) Specialized Experience: Five (5) years experience in software engineering of large, complex, interconnected/distributed systems environments. Demonstrated experience in developing, testing, installing, and operating network and computer (host) communications software (e.g. access method and protocol software, application interfaces, transaction processors, and emulators); using and implementing communications standards.

d. EDUCATIONAL SUBSTITUTION: A Ph.D. in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline will be considered equivalent to two (2) years general experience and one (1) year IA specialized experience. A Certificate from a nationally recognized information systems security organization (CISSP, CISA, etc) may be considered equivalent to three (3) years generalized experience and three (3) years specialized experience.

## 23. INTERMEDIATE SOFTWARE ENGINEER.

a. DUTIES: Performs moderately complex analysis, design, development, testing and debugging of computer software. Activities range from operating system architecture integration and software design to recommendation of products. Develops system level scripts in various common languages (e.g., bourne shell on UNIX). Provides functional and empirical analysis related to the design, development and implementation of software operating systems for products including, but not limited to, IA utility software, IA development software, and IA diagnostic software. Analyzes network and computer

communications hardware characteristics for IA requirements. Assists and coordinates with communications network specialists in the area of communications hardware. Operating Systems being supported include UNIX: Sun OS, Solaris, DEC Ultrix, IBM AIX, HP AUX, SCO, Open Desktop; X-windows Environment; MS-DOS; MS Windows Environment; MS Windows NT; IBM OS/2; DEC VMS; IBM MVS; IFB VS; Unisys OS 1100/2200.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline is required. Six (6) years general experience and four (4) years IA specialized experience is required.

c. EXPERIENCE:

(1) General experience: Six years (6) experience in all aspects of network and computer communications software, and a mixture of experience of the operating systems listed in paragraph a. above. Demonstrated ability to work independently or under only general supervision.

(2) Specialized Experience: Four (4) years experience in software engineering of large complex interconnected/distributed environments. Demonstrated experience in developing, testing, installing, and operating network and computer (host) communications software (e.g. access method and protocol software, application interfaces, transaction processors, and emulators); using and implementing communications standards.

d. EDUCATIONAL SUBSTITUTION: A Master's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline will be considered equivalent to two (2) years general experience and one (1) year IA specialized experience.

#### 24. JUNIOR SOFTWARE ENGINEER.

a. DUTIES: Performs relatively routine analysis, design, development, testing and debugging of computer software. Activities range from operating system architecture integration and software design to recommendation of products. Provides functional and empirical analysis related to the design, development and implementation of software operating systems for products including, but not limited to, utility software, development software, and diagnostic software. Analyzes network and computer communications hardware characteristics for IA requirements. Assists and coordinates with communications network specialists in the area of communications hardware. Operating Systems being supported include UNIX: Sun Solaris, DEC Ultrix, IBM AIX, HP AUX, SCO, Open Desktop; X-windows Environment; MS-DOS; MS Windows Environment; MS Windows NT; IBM OS/2; DEC VMS; IBM MVS; IFB VS; Unisys OS 1100/2200.

c. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline is required.

d. **EXPERIENCE:**

(1) General experience. Experience in all aspects of network and computer communications software, and a mixture of experience of the operating systems listed in paragraph a. above. Demonstrated ability to work independently or under only general supervision.

(2) Specialized Experience: Experience in developing, testing, installing, and operating network and computer (host) communications software (e.g. access method and protocol software, application interfaces, transaction processors,

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** Technical training, e.g., 4 years Military training or Vocational School and 2 years experience may be considered equivalent.

## 25. SENIOR SYSTEMS INTEGRATION ENGINEER.

a. **DUTIES:** Performs complex project tasks applied to specialized information system technological problems. Tasks involve integration of electronic processes or methodologies to resolve total system problems or technology problems. Main duties evolve around the integration of products and applications into existing systems or providing technical support in the integration of products or applications in the acquisition process for new systems. Analyze shortfalls in existing systems and proposed system acquisitions and provide proposed solutions to the integration or solutions within those system(s).

b. **QUALIFICATIONS.** A Master's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. Twelve (12) years general experience and eight (8) years of IA specialized experience is required.

c. **EXPERIENCE:**

(1) General Experience: Twelve (12) years of experience in information systems engineering with a demonstration of increasing responsibilities within systems integration.

(2) Specialized Experience: Eight (8) years experience in systems integration of large complex interconnected/distributed systems. Demonstrated experience in analytical problem solving of work flows, organization and planning. Demonstrated experience with IA products and systems. Demonstrated experience in IA integration.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Ph.D. in Computer Science, Information Systems, and/or Engineering may be considered equivalent to three (3) years general experience and two (2) years IA specialized experience.

## 26. INTERMEDIATE SYSTEMS INTEGRATION ENGINEER.

a. DUTIES: Performs moderately complex project tasks applied to specialized information system technological problems. Tasks involve integration of electronic processes or methodologies to resolve total system problems or technology problems. Main duties evolve around the integration solutions into existing systems or providing technical support in the integration of solutions in the acquisition process for new systems. Analyze shortfalls in existing systems and proposed system acquisitions and provide proposed solutions to the integration of solutions within those system(s).

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. Six (6) years general experience and four (4) years of specialized experience is required.

### c. EXPERIENCE:

(1) General Experience: Six (6) years of experience in information systems engineering and with a demonstration of increasing responsibilities.

(2) Specialized Experience: Four- (4) years integration of solutions into large complex interconnected/distributed environments. Demonstrated experience in analytical problem solving of work flows, organization and planning. Demonstrated experience with IA products and systems and IA integration.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master of Sciences degree in Computer Science, Information Systems, and/or Engineering may be considered equivalent to two (2) years general experience and one (1) year IA specialized experience. A Ph.D. in Computer Science, Information Systems, and/or Engineering may be considered equivalent to three (3) years general experience and two (2) years IA specialized experience.

## 27. JUNIOR SYSTEMS INTEGRATION ENGINEER.

a. DUTIES: Under guidance, performs moderately complex project tasks applied to specialized information system technological problems. Tasks involve integration of electronic processes or methodologies to resolve total system problems, or technology problems as they relate to IA integration. Main duties evolve around the integration of IA into existing systems or providing technical support in the integration of IA in the acquisition process for new systems. Analyze information security shortfalls in existing systems and proposed system acquisitions and provide proposed solutions to the integration of IA within those system(s).

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required.

c. EXPERIENCE:

(1) General Experience: None

(2) IA Specialized Experience: None

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Certificate from nationally recognized Information Systems or Information Systems Security Organization plus four (4) years experience may be considered equivalent.

## 28. SENIOR COMMUNICATIONS SECURITY ENGINEER.

a. DUTIES: Responsible for identifying IA requirements for information systems certification and accreditation. Analyzes the IA needs of the user and recommends solutions to the hardware and/or software systems to bring the system to accreditation.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline is required Twelve (12) years general experience and eight (8) years IA specialized experience is required.

c. EXPERIENCE:

(1) General experience: Twelve (12) experience in the security requirements and issues for communications systems. Demonstrated ability to work independently or under only general supervision.

(2) IA Specialized Experience: Eight (8) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in IA issues as they apply to achieving system accreditation.

d. EDUCATIONAL SUBSTITUTION: A Master's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline will be considered equivalent to two (2) years general experience and one (1) year IA specialized experience.

## 29. JUNIOR COMMUNICATIONS SECURITY ENGINEER.

a. DUTIES: Responsible for identifying IA requirements for information systems accreditation. Analyzes the IA needs of the user and recommends solutions to the hardware and/or software systems to bring the system to accreditation.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline is required

c. EXPERIENCE:

(1) General experience: None

(2) IA Specialized Experience: None

d. EDUCATIONAL SUBSTITUTION: A Certificate from a nationally recognized Information Systems Security Organization (CISSP, CISA) may be considered equivalent.

### 30. SENIOR OPERATING SYSTEMS ENGINEER.

a. DUTIES: Designs, debugs, documents and installs operating systems, compilers, monitors and other systems software. Maintains and modifies existing operating systems to maximum efficiency in IA. Provides technical support in the effective use of IA software to applications programmers. Deals analytically and systematically with problems of work flows, organization, planning, and application of IA solutions.

b. QUALIFICATIONS: A Master's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required. Three (3) years general experience and three (3) years of IA specialized experience is required. Education must be and remain current with technology.

c. EXPERIENCE:

(1) General Experience: Three (3) years of experience in information systems engineering with a demonstration of increasing responsibilities within this technical field.

(2) IA Specialized Experience: Three (3) years experience in UNIX, Windows 95/98, LINUX, operating systems. Expert knowledge of various operating systems, operating systems configuration, audit, security weaknesses and identifying countermeasures. Demonstrated experience in analytical problem solving of work flows, organization and planning. Demonstrated experience with IA products and systems. Demonstrated experience in IA issues as they apply to achieving system accreditation.

d. EDUCATIONAL SUBSTITUTION: A MCSE, CCNE, UNIX Certified Engineer will be considered equivalent to three (3) years general experience and one (1) year IA specialized experience. Recent military experience as System Administrator will be considered equivalent to two years (2) general and one year (1) year IA specialized experience.

### 31. JUNIOR OPERATING SYSTEMS ENGINEER.

a. DUTIES: Designs, debugs, documents and installs operating systems, compilers, monitors and other systems software. Maintains and modifies existing operating systems to comply with IA policy. Provides technical support in the effective use of IA software to applications programming. Deals analytically and systematically with problems of work flows, organization, planning, and application of IA solutions.

d. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required.

c. EXPERIENCE:

(1) General Experience: None

(2) IA Specialized Experience: None

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: Recent Military experience as System Administrator may be considered equivalent.

### 32. SENIOR NETWORK ENGINEER. (Key Personnel)

a. DUTIES: Applies knowledge of network protocols, architectures, equipment, services, standards and technology to various system engineering activities. Performs threat and vulnerability analyses of various network architectures, access configurations and hardware/software components. Develop appropriate security requirements and impact operations plans for existing and emerging technologies and services.

b. QUALIFICATIONS: A Master's degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline is required Twelve (12) years general experience and eight (8) years of IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Twelve (12) years of experience in information systems engineering with a demonstration of increasing responsibilities within this technical field.

(2) IA Specialized Experience: Eight (8) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in analytical problem solving of work flows, organization and planning. Demonstrated experience with IA products and systems. Demonstrated experience in network protocols, architectures, equipment, services, standards and technology to various system engineering activities.

e. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Bachelor's degree in Computer Science, Information Systems, and/or Engineering, with either current CCNE, MSCE, and four (4) years experience is considered equivalent to the

Generalized Experience. Certification in a nationally recognized Security Program, such as CISSP, CISA, is considered equivalent to four (4) years in the IA Specialized Experience.

### 33. JUNIOR NETWORK ENGINEER

a. DUTIES: Applies knowledge of network protocols, architectures, equipment, services, standards and technology to various system engineering activities. Performs threat and vulnerability analyses of various network architectures, access configurations and hardware/software components. Develop appropriate security requirements and impact operations plans for existing and emerging technologies and services.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required.

c. EXPERIENCE:

(1) General Experience: None

(2) IA Specialized Experience: None

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: Certifications such as, CCNE, Novelle, MSCE will be considered equivalent.

### 34. QUALITY ASSURANCE SPECIALIST.

a. DUTIES: Establishes and maintains a process for evaluating software and associated documentation. Determines the resources required for quality control. Maintains the level of quality throughout the software life cycle. Conducts formal and informal reviews at pre-determined points throughout the development life cycle.

b. QUALIFICATIONS: A Bachelor's degree in Computer Science, Business, Finance, Information Systems, or other technical related field is required. Six (6) years general experience and two (2) years IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Experience in quality control and quality assurance positions. Demonstrated experience in a more responsible position within quality assurance and quality control.

(2) IA Specialized Experience: Experience in Quality Control verification and validation, and IA software testing, validation, and integration.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's degree in Computer Science, Business, Finance, Information Systems, or other technical related field may be substituted for two (2) years general experience and one (1) year IA specialized experience.

### 35. SENIOR TRAINING SPECIALIST.

a. DUTIES: Conducts the research necessary to develop and revise training courses in Information Engineering (IE) methodology. Develops and revises these courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops and seminars.

b. QUALIFICATIONS: A Master's degree in Business Management, Education, Information Systems, or other related technical career fields. Ten (10) years general experience, and four (4) years IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Ten (10) years of experience in business, or involvement in information system management with a demonstration of increasing responsibilities. Two (2) years of general experience must be in the training field in a related field.

(2) IA Specialized Experience: Four (4) years specialized experience is required in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in the education or training of IA is required. Demonstrated experience in IA Information Engineering (IE) methodology, teaching specific phases of IE, and using automated support tools. Demonstrated ability to communicate orally and in writing.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Ph.D. in Computer Science, Business management, Education, Information Systems, or related study may be considered equivalent to three (3) years general experience and one (1) year IA specialized experience. .

### 36. JUNIOR TRAINING SPECIALIST.

a. DUTIES: Conducts the research necessary to develop and revise training courses in Information Engineering (IE) methodology. Develops and revises these courses and prepares appropriate training catalogs. Prepares all instructor materials (course outline, background material, and training aids). Prepares all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops and seminars.

b. QUALIFICATIONS: A Bachelor's degree in Business Management, Education, Information Systems, or other related technical career fields. Five (5) years general experience, and two (2) years specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Five (5) years of experience in business, or involvement in information system management with a demonstration of increasing responsibilities. Two (2) years of general experience must be in training .

(2) IA Specialized Experience: Two (2) years IA specialized experience is required in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in the education or training of IA is required. Demonstrated experience in IA Information Engineering (IE) methodology, teaching specific phases of IE, and using automated support tools. Demonstrated ability to communicate orally and in writing.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's degree in Computer Science, Business Management, Education, Information Systems, or related study may be considered equivalent to three (3) years general experience and one (1) year IA specialized experience.

### 37. SENIOR COMMUNICATIONS SOFTWARE SPECIALIST.

a. DUTIES: Analyzes network and computer communications software characteristics and recommends equipment procurement, removals, and modifications. Adds, deletes, and modifies, as required, host, terminal, and network devices. Assists and coordinates with communications network specialists in the area of communications hardware.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline is required Ten (10) years general experience and Eight (8) years IA specialized experience is required.

c. EXPERIENCE:

(1) General experience: Ten (10) experience in all aspects of network and computer communications software. Demonstrated experience to work independently or under only general supervision.

(2) IA Specialized Experience: Eight (8) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in developing, testing, installing, and operating network and computer (host) communications software (e.g. access method and protocol software, application interfaces, transaction processors, and emulators); using and implementing communications standards.

d. EDUCATIONAL SUBSTITUTION: A Master's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline may be considered equivalent to two (2) years general experience and one (1) year IA specialized experience.

### 38. INTERMEDIATE COMMUNICATIONS SOFTWARE SPECIALIST.

a. DUTIES: Analyzes network and computer communications software characteristics and recommends equipment procurement, removals, and modifications. Adds, deletes, and modifies, as required, host, terminal, and network devices. Assists and coordinates with communications network specialists in the area of communications hardware.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline is required Eight (8) years general experience and six (6) years IA specialized experience is required.

c. EXPERIENCE:

(1) General experience: Eight years (8) experience in all aspects of network and computer communications software. Demonstrated ability to work independently or under only general supervision. Demonstrated ability in network and computer-communications software analysis.

(2) IA Specialized Experience: Six (6) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in developing, testing, installing, and operating network and computer (host) communications software (e.g. access method and protocol software, application interfaces, transaction processors, and emulators). Demonstrated experience in using and implementing communications standards.

d. EDUCATIONAL SUBSTITUTION: A Master's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline may be considered equivalent to two (2) years general experience and one (1) year IA specialized experience.

### 39. JUNIOR COMMUNICATIONS SOFTWARE SPECIALIST.

a. DUTIES: Analyzes network and computer communications software characteristics and recommends equipment procurement, removals, and modifications. Adds, deletes, and modifies, as required, host, terminal, and network devices. Assists and coordinates with communications network specialists in the area of communications hardware.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics, or other related scientific or technical discipline is required Six (6) years general experience and three (3) years IA specialized experience is required.

c. EXPERIENCE:

(1) General experience. Six (6) years experience in all aspects of network and computer communications software. Demonstrated ability to work independently or under only general supervision.

(2) IA Specialized Experience: Three (3) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in developing, testing, installing, and operating network and computer (host) communications software (e.g. access method and protocol software, application interfaces, transaction processors, and emulators). Demonstrated experience in using and implementing commercial standards.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: None

#### 40. SENIOR COMMUNICATIONS HARDWARE SPECIALIST.

a. DUTIES: Analyzes network and computer communications hardware characteristics and recommends equipment procurement, removals, and modifications. Adds, deletes, and modifies, as required, host, terminal, and network devices. Assists and coordinates with communications network specialists in the area of communications software. Analyzes and implements communications standards and protocols according to site requirements.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Mathematics, Engineering, Business, or other scientific or technical related fields is required. Ten (10) years general experience and eight (8) years IA specialized experience is required.

c. EXPERIENCE:

(1) General experience. Ten (10) years experience including increasing responsibilities and experience in complex ADP systems, systems analysis and programming. Demonstrated ability to work independently. Supervisory experience required.

(2) IA Specialized Experience: Eight (8) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated ability in Sun SPARC Stations; Sun Services; IBM 386/486 Compatible; DEC VAX & MicroVAX; DEC VAX Stations; DEC Alpha Family; HP 9000 Family; NCR Tower Family; AT&T 3B2/600G and 600GR; IBM RS/6000; IBM AS/400; Unisys Mainframes; IBM Mainframes; Apple Macintosh; and X Terminals.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's Degree Computer Science, Mathematics, Engineering, Business, or other scientific field may be substituted for two (2) years general experience and one (1) year of IA specialized experience.

#### 41. INTERMEDIATE COMMUNICATIONS HARDWARE SPECIALIST.

a. DUTIES: Analyzes network and computer communications hardware characteristics and recommends equipment procurement, removals, and modifications. Adds, deletes, and modifies, as required, host, terminal, and network devices. Assists and coordinates with communications network specialists in the area of communications software.

Analyzes and implements communications standards and protocols according to site requirements.

b. **QUALIFICATIONS:** An Associates Degree in Computer Science, Mathematics, Business, or other scientific or technical related fields is required. Eight (8) years general experience and six (6) years IA specialized experience is required.

c. **EXPERIENCE:**

(1) General experience. Eight (8) years experience including increasing responsibilities and experience in complex ADP systems, systems analysis and programming.

Demonstrated ability to work independently.

(2) IA Specialized Experience: Six (6) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated ability in Sun SPARC STATIONS; Sun Services; IBM 386/486 Compatible; DEC VAX & MicroVAX; DEC VAX Stations; DEC Alpha Family; HP 9000 Family; NCR Tower Family; AT&T 3B2/600G and 600GR; IBM RS/6000; IBM AS/400; Unisys Mainframes; IBM Mainframes; Apple Macintosh; and X Terminals.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Bachelor's Degree Computer Science, Mathematics, Business, or other scientific or technical related field may be substituted for two (2) years general experience and one (1) year of IA specialized experience.

#### 42. JUNIOR COMMUNICATIONS HARDWARE SPECIALIST.

a. **DUTIES:** Analyzes network and computer communications hardware characteristics and recommends equipment procurement, removals, and modifications. Adds, deletes, and modifies, as required, host, terminal, and network devices. Assists and coordinates with communications network specialists in the area of communications software. Analyzes and implements communications standards and protocols according to site requirements.

b. **QUALIFICATIONS:** Four (4) years general experience and six (6) years IA specialized experience required.

c. **EXPERIENCE:**

(1) General experience. Four (4) years general experience including increasing responsibilities and experience in complex ADP systems, including systems analysis and programming. Demonstrated ability to work independently with minimum guidance.

(2) IA Specialized Experience: None.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** None.

#### 43. SENIOR GRAPHICS SPECIALIST.

a. DUTIES: Develop and update graphics presentations to improve the quality and enhance the use-ability of documents and web pages. Support the development of all contract deliverables requiring graphic presentation support. Responsible for integrating the graphics generated with automated tools and the deliverable documents. Analysis of all emerging automated graphics software applications for incorporation into use in support of deliverable documents, web-pages, and online training.

b. QUALIFICATIONS: An Associates degree in Art, Graphic Illustration, Information Systems, Business, or related undergraduate computer related field is required. Three (3) years general experience.

c. EXPERIENCE:

(1) General Experience: Progressive responsibility in general graphics and artistic presentation. Demonstrated ability to work independently or under only general direction. Two (2) years of experience using commercial automated graphics (e.g, PhotoShop, Powerpoint, CorelDraw, and Quark), commercial automated word processing (e.g., WordPerfect, Word), and desktop publishing systems (MicroSoft Publisher, Adobe Pagemaker).

e. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Bachelor's degree in Art, Graphic Illustration, Information Systems, Business, or related field may be considered equivalent to the education qualifications and two (2) years general experience.

#### 44. JUNIOR GRAPHICS SPECIALIST.

a. DUTIES: Assists in the development and update graphics presentations to improve the quality and enhance the useability of documents and web pages. Supports the development of all contract deliverables requiring graphic presentation support. Responsible for integrating the graphics generated with automated tools and the deliverable documents. Analysis of all emerging automated graphics software applications for incorporation into use in support of deliverable documents, web-pages, and online training.

b. QUALIFICATIONS: A high school diploma or GED equivalent is required.

c. EXPERIENCE:

(1) General Experience: Two (2) years experience using commercial automated graphics (e.g, PhotoShop, Powerpoint, CorelDraw, and Quark), commercial automated word processing (e.g., WordPerfect, Word), and desktop publishing systems (MicroSoft Publisher, Adobe Pagemaker).

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: An Associate's degree in Art, Graphic Illustration, Information Systems, Business, or related field may be considered equivalent to two (2) years general experience.

#### 45. SENIOR COMPUTER SECURITY SYSTEMS SPECIALIST.

a. DUTIES: Analyzes and defines IA security requirements for Multiple Security Levels (MSL) systems and non-MLS systems. Designs, develops, engineers, and implements solutions to MLS and non-MLS requirements. Gathers and organizes technical information about an organization's missions, goals, and requirements, existing security products, and ongoing programs in the IA arena.

b. QUALIFICATIONS: A Master of Science degree in Engineering, Electrical Engineering, Information Science, Information Systems, Computer Science, Physics, Mathematics, or other Technical/Scientific discipline is required Twelve (12) years general experience and eight (8) years IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Twelve (12) years of progressive responsibility and experience in analyzing requirements, designing, specifying, integrating and implementing computer networks. Demonstrated supervisory experience over engineers performing this type of work.

(2) IA Specialized Experience: Eight (8) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in defining computer security requirements and designing or integrating MLS products. Demonstrated significant and direct experience with the certification and accreditation process for IA and MLS systems. Demonstrated expert knowledge of DoD Computer security instructions is required. Demonstrated knowledge on current MLS products and the NSA evaluation process is required..

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Ph.D. in Computer Science, Systems Engineering or related study may be considered equivalent to two (2) years general experience one (1) year IA specialized experience. There is no substitution for supervisory experience. A Bachelor's degree and a combination of 10 years general and IA specialized experience may be substituted for the education requirement of a Master's degree.

#### 46. INTERMEDIATE COMPUTER SECURITY SYSTEMS SPECIALIST

a. DUTIES: Analyzes and defines IA security requirements for Multilevel Security (MLS) systems and non-MLS systems. Designs, develops, engineers, and implements solutions to MLS and non-MLS requirements. Gathers and organizes technical

information about an organization's missions, goals, and requirements, existing security products, and ongoing programs in the IA arena.

b. **QUALIFICATIONS:** A Bachelor's degree in Engineering, Electrical Engineering, Information Science, Information Systems, Computer Science, Physics, Mathematics, or other Technical/Scientific discipline is required Ten (10) years general experience and four (4) years IA specialized experience is required.

c. **EXPERIENCE:**

(1) **General Experience:** Ten (10) years of progressive responsibility and experience in analyzing requirements, designing, specifying, integrating and implementing computer networks.

(2) **IA Specialized Experience:** Four (4) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in defining computer security requirements and designing or integrating MLS products. Demonstrated significant and direct experience with the certification and accreditation process for IA and MLS systems. Demonstrated expert knowledge of DoD Computer security instructions and directives are required. Demonstrated knowledge on current MLS products and the NSA evaluation process is required..

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Master's degree in Computer Science, Systems Engineering or related study may be considered equivalent to two (2) years general experience one (1) year IA specialized experience.

#### 47. JUNIOR COMPUTER SECURITY SYSTEMS SPECIALIST.

a. **DUTIES:** Analyzes and defines IA security requirements for Multilevel Security (MLS) systems and non-MLS systems. Designs, develops, engineers, and implements solutions to MLS and non-MLS requirements. Gathers and organizes technical information about an organization's missions, goals, and requirements, existing security products, and ongoing programs in the IA arena.

b. **QUALIFICATIONS:** A Bachelor's degree in Engineering, Information Science, Information Systems, Computer Science, Mathematics, or other Technical/Scientific discipline is required Six (6) years general experience and three (3) years IA specialized experience is required.

c. **EXPERIENCE:**

(1) **General Experience:** Six (6) years of progressive responsibility and experience in analyzing requirements, designing, specifying, integrating and implementing computer networks.

(2) IA Specialized Experience: Three (3) years experience in Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in defining computer security requirements and designing or integrating MLS products. Demonstrated significant and direct experience with the certification and accreditation process for IA and MLS systems. Demonstrated expert knowledge of DoD Computer security instructions and directives are required. Demonstrated knowledge on current MLS products and the NSA evaluation process is required.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's degree in Computer Science, Systems Engineering or related study may be considered equivalent to two (2) years general experience one (1) year IA specialized experience. Certification from a nationally recognized Security program such as CISSP or CISA is considered equivalent to the IA specialized experience.

#### 48. COMPUTER SPECIALIST.

a. DUTIES: Performs a wide variety of assignments, typically concentrating on specific phases of programming within a particular systems while expanding overall technical proficiency and knowledge of the system. Assist a diverse population of microcomputer users with a wide variety of questions and problems. Configure and installs microcomputer hardware and software. Troubleshoot and diagnose failures to determine causes.

b. QUALIFICATIONS: A Bachelor's degree in Computer Science, Engineering, Information Systems, Mathematics, or other scientific or technical related field is required. Five (5) years general experience is required.

c. EXPERIENCE:

(1) General Experience: Five (5) years experience in computer systems and various programming languages such as ADA, Oracle DBMS, Informix DBMS, and Sybase DBMS.

(2) IA Specialized Experience: None.

#### 49. SENIOR EDUCATION/TRAINING/DEVELOPMENT SPECIALIST.

a. DUTIES: Performs research necessary to develop, implement, and maintain IA training curricula to include preparation of course catalogs. Develops relationships and works with Government and academic learning institutions for the implementation of defined curriculum. Provide guidance to IA course developer(s) to prepare courseware to meet requirements in formal classrooms, mobile training teams, and non-tradition modalities. Additionally, prepares for and conduct IA workshops, seminars, and symposia. Works with multi-media designers, graphic artists, videographers, and other multi-media

specialists to design, develop, and test, distributive and advanced distance learning products.

b. **QUALIFICATIONS:** A Master's Degree in Instructional Systems Design, Education, Information System, Computer Science, or other related technical fields is required. Six (6) years of general experience and two years specialized experience.

c. **EXPERIENCE:**

(1) **General Experience:** Six (6) years experience in a Instructional Systems Design, training discipline, education, teaching, or program design. Demonstrated experience in developing and implementing training programs.

(2) **Specialized Experience:** Instructional Systems Design training development experience to include Job and Task Analysis, Training Program Design using a proven Instructional System Design (ISD) model, Training Program Evaluation, Analyzing and Developing Human Resource Systems, Job Performance Aids, Test Creation, Computerized Scoring and Statistical Analysis, Human Resource Research, and Technical Documentation Design and Development. Demonstrated ability in verbal and written communications skills.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Master's. in Instructional Systems Design, or Education disciplines may be considered equivalent to three (3) years general experience and one (2) years specialized experience is required.

#### 50. JUNIOR EDUCATION/TRAINING/DEVELOPMENT SPECIALIST.

a. **DUTIES:** Performs research necessary to develop, implement, and maintain IA training curricula to include preparation of course catalogs. Develops relationships and works with Government and academic learning institutions for the implementation of defined curriculum. Provide guidance to IA course developer(s) to prepare courseware to meet requirements in formal classrooms, mobile training teams, and non-tradition modalities. Additionally, prepares for and conduct IA workshops, seminars, and symposia.

b. **QUALIFICATIONS:** A Bachelor's Degree in Instructional Systems Design, Education, Information System, Computer Science, or other related technical fields is required. Three (3) years of general experience and two (2) years of specialized experience is required.

c. **EXPERIENCE:**

(1) **General Experience:** Three (3) years experience in a Instructional Systems Design, training discipline, education, teaching, or program design. Demonstrated experience in developing and implementing training programs.

(2) **IA Specialized Experience:** Two (2) years experience in Instructional Systems Design, Training development to include Job and Task Analysis, Training Program

Design using a proven Instructional System Design (ISD) model, Training Program Evaluation, Analyzing and Developing Human Resource Systems, Job Performance Aids, Test Creation, Computerized Scoring and Statistical Analysis, Human Resource Research, and Technical Documentation Design and Development. Demonstrated ability in verbal and written communications skills.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's degree in Computer Science, Engineering, or Education disciplines may be considered equivalent to two (2) years general experience and two (2) years specialized experience.

#### 51. SENIOR INSTRUCTIONAL SYSTEM DESIGNER.

a. DUTIES: Prepares course analysis, course outlines and storyboards for production of distributive and advanced distance learning, interactive training, and classroom instruction. Assesses various types of new technologies to enhance various learning styles (visual, audio). Provides guidance to IA course developers of various multi-media capabilities to support training requirements.

b. QUALIFICATIONS. A Master's degree in Computer Science, Information Systems Design, or other related professional discipline is required Four (4) years general experience.

c. EXPERIENCE:

(1) General Experience is required. Four (4) years experience in the design and development of interactive multimedia distributive training products.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Bachelor's degree in Education and Training Development and eight (8) years generalized experience may be considered equivalent to the qualifications and experience.

#### 52. JUNIOR INSTRUCTIONAL SYSTEM DESIGNER

a. DUTIES: Under guidance, prepares course analysis, course outlines and storyboards for production of distributive and advanced distance learning, interactive training, and classroom instruction. Assesses various types of new technologies to enhance various learning styles (visual, audio). Provides guidance to IA course developers of various multi-media capabilities to support training requirements..

b. QUALIFICATIONS: A Bachelor's degree in Education and Training Development or Information Systems Design , or other related professional discipline is required. Four (4) years general experience.

c. EXPERIENCE:

(1) General Experience is required. Four (4) years design and development of interactive multi-media distributive training products. Demonstrated ability to work independently with minimum direction.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's degree in Education and Training Development, Instructional System Design, or other related professional field, with no general experience may be considered equivalent.

### 53. SECURITY ADMINISTRATOR.

a. DUTIES: Performs administration functions related to operating a secured facility, including classified document control, publication distribution, classification management and processing, coordination with Government Task Manger's and the Contractor's Program Manager. Provides audit support during the development of software and hardware. Conducts preliminary reviews of computer use and makes recommendations to management personnel regarding security needs for effective operations. Monitor physical security for conformance to government requirements.

b. QUALIFICATIONS: A Bachelor's degree in Computer Science, Information Systems, Business, Mathematics, or other related technical field is required. Four (4) years general experience and Four (4) years of IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Four (4) years of computer related security experience is required. Demonstrated increase in more responsible experience related to the data processing industry.

(2) IA Specialized Experience: Four (4) years of Information Assurance experience in Operations Security, Information Systems Security Officer/Manager, Communications Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Experience with monitoring computer or communication systems for compliance to security regulations. Demonstrated ability for performing system audits and writing preliminary reports.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: Twelve (12) years of general and IA specialized experience may be substituted for educational requirements. A Certificate from a nationally recognized Information Systems Security Organization (e.g., CISSP, CISA) may be considered equivalent to three years (3) general experience and three (3) years IA specialized experience.

### 54. SYSTEM ADMINISTRATOR.

a. DUTIES: Oversees and manages day to day configuration and operation of Information Systems. Optimize system operation and resource utilization, and performs

system capacity planning/analysis while maintaining the security posture. Provides assistance to users in accessing and using support systems.

b. **QUALIFICATIONS:** A Bachelor's degree in Computer Science, Information Systems, Business, Mathematics, or other related technical field is required. NSTISSC Certified Level III System Administrator (3) years general experience. Two (2) years of IA specialized experience is required. Currency in education is required.

c. **EXPERIENCE:**

(1) **General Experience:** Commensurate to the level of System Administration, demonstrate increasing responsibilities in the management of information systems.

(2) **IA Specialized Experience:** Two (2) years of experience in Information Assurance and Information Operations. Demonstrated experience in administrating UNIX, Windows, Windows NT, LINUX, or open systems-compliant systems.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** Eight years of general and IA specialized experience in the management of information systems may be substituted for educational requirements.

#### 55. INTERMEDIATE ADMINISTRATIVE ASSISTANT

a. **DUTIES:** This professional level includes clerical personnel, administrative services personnel, illustrator/graphics personnel, technical editors, and technical publications personnel. Performs administrative duties in a staff activity. Performs specialized assignments relating to typing, word processing, graphics illustration using computers with very little direction. Performs a variety of support services such as operation of reproduction equipment to produce large volumes of documents, courier service and mail service, etc.

b. **QUALIFICATIONS:** An Associates Degree in Business or Information Systems or a Business School graduation or business related courses in Word Processing, Computer Graphics, Graphics Illustration or Administration. Two (2) years of general experience and one (1) year of IA specialized experience is required.

c. **EXPERIENCE:**

(1) **General Experience:** Two (2) years experience in filing techniques, general clerical field activities, and demonstrated experience in use of information systems and word processing software applications.

(2) **IA Specialized Experience:** One (1) year experience in administrative typing, technical typing, using computers and word processing equipment. Demonstrated working knowledge of various computer software applications for graphics, spreadsheets, and word processing.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Bachelor's Degree in Business, Information Systems, or other business related field may be equivalent to general and IA specialized requirements.

#### 56. JUNIOR ADMINISTRATIVE ASSISTANT

a. DUTIES: This professional level includes clerical personnel, administrative services personnel, illustrator/graphics personnel, technical editors, and technical publications personnel. Performs administrative duties in a staff activity. Performs specialized assignments relating to typing, word processing, graphics illustration using computers with very little direction. Performs a variety of support services such as operation of reproduction equipment to produce large volumes of documents, courier service and mail service, etc. Experience in MicroSoft Office suite of word processing, spreadsheet, and presentation applications.

b. QUALIFICATIONS: Business School graduate or vocational courses in Word Processing, Computer Graphics, Graphics Illustration or Administration.

c. EXPERIENCE:

(1) General Experience: Experience in filing techniques, general clerical field activities, and demonstrated experience in use of information systems and word processing software applications.

(2) IA Specialized Experience: Experience in administrative typing, technical typing, using computers and word processing equipment. Demonstrated working knowledge of various computer software applications for graphics, spreadsheets, and word processing.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: None

#### 57. SENIOR SYSTEMS OPERATOR.

a. DUTIES: Ensures efficient operation of a multi-computer site that supports database analysis, data base report production, and system development, by local and remote users. Coordinates system resource availability with database analysts, system and application programmers, and other users. Provides advice and assistance to users on equipment operation, to include data communications. Ensures site compliance with electronic and physical security procedures and standards.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, or other related scientific or technical discipline is required Eight (8) years general experience, and two (2) years IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Eight (8) years experience in the operation of a multi-computer site that supports database analysis, data base report production, and system development, by local and remote users.

(2) IA Specialized Experience: Two (2) years experience Information Assurance Information Operations, Network Operations, and multi-user applications. Demonstrated ability to manage the operation of a multi-computer site.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: Ten years of combined general and IA specialized experience may be substituted for the educational requirements.

#### 58. INTERMEDIATE SYSTEMS OPERATOR.

a. DUTIES: Ensures efficient operation of a multi-computer site that supports database analysis, data base report production, and system development, by local and remote users. Coordinates system resource availability with database analysts, system and application programmers, and other users. Provides advice and assistance to users on equipment operation, to include data communications. Ensures site compliance with electronic and physical security procedures and standards.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, or other related scientific or technical discipline is required Four (4) years general experience, and two (2) years IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Four (4) years experience in the operation of a multi-computer site that supports database analysis, data base report production, and system development, by local and remote users.

(2) IA Specialized Experience: Two (2) years experience in Information Assurance, Information Operations, Network Operations, and multi-user applications. Demonstrated ability to manage the operation of a multi-computer site.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: Eight years of combined general and IA specialized experience may be substituted for the educational requirements.

#### 59. JUNIOR SYSTEMS OPERATOR.

a. DUTIES: Ensures efficient operation of a multi-computer site that supports database analysis, data base report production, and system development, by local and remote users. Coordinates system resource availability with database analysts, system and application programmers, and other users. Provides advice and assistance to users on equipment operation, to include data communications. Ensures site compliance with electronic and physical security procedures and standards.

b. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Information Systems, Engineering, or other related scientific or technical discipline is required.

c. **EXPERIENCE:**

(1) **General Experience:** Experience in the operation of a multi-computer site that supports database analysis, data base report production, and system development, by local and remote users.

(2) **IA Specialized Experience:** Experience in Information Assurance, Information Operations, Network Operations, and multi-user applications. Demonstrated ability to manage the operation of a multi-computer site.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** Four years of combined general and IA specialized experience may be substituted for the educational requirements.

#### 60. IA SYSTEM INSTALLER.

a. **DUTIES:** Analyze IA communications and computer systems designs and layouts for hardware requirements, characteristics and determines feasibility of installation of IA capabilities and IA-enabling products. Develops detailed equipment list for installation of required systems. Installs network components, intrusion detection systems, firewalls, and computer equipment and systems according to installation design plans and guidance from project leader in accordance with standards and protocols of the site requirements.

b. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Electrical Engineering, or related study is required. Four (4) years general experience and four (4) years IA specialized experience is required.

c. **EXPERIENCE:**

(1) **General Experience:** Four (4) years experience in using and managing computer/communications networks made up of multiple types of communication equipment.

(2) **IA Specialized Experience:** Four (4) years experience in installation, operations, or maintenance of Information Assurance capabilities and IA-enabling products. Demonstrated ability in communications and computer systems designs and layouts for hardware requirements.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTIONS:** A Master's Degree in Computer Science, Electrical Engineering, related technical discipline may be considered equivalent to three (3) years general experience and two (2) years IA specialized experience.

61. DATA ENTRY CLERK.

a. DUTIES: Performs data entry via on-line data terminal, key-to-tape, key-to-disk, or similar devices. Verifies data entered, where applicable.

b. QUALIFICATIONS: A High School Diploma or GED equivalent is required.

c. EXPERIENCE: Entry position.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: None.

62. EDITOR/ANALYST.

a. DUTIES: Edits functional descriptions, system specifications, user manuals, special reports, or any other customer deliverables/documents. Assists in performing financial and administrative functions.

b. QUALIFICATIONS: A Bachelor's degree in English, Literature, or other related discipline is required. Two (2) years of experience and two (2) years of IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Two (2) years experience in all aspects of editing and analyzing written documents. Demonstrated skill in general clerical profession.

(2) IA Specialized Experience: Two (2) years familiarity in Information Assurance.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's degree in Literature or related study may be considered equivalent to two (2) years general experience and one (1) year IA specialized experience.

63. LIBRARIAN.

a. DUTIES: Directs the classification, indexing, cataloging, storage and circulation of books, periodicals, papers, microfiche, classified reports and documents stored on various electronic media. Requisitions purchase of new books. Reviews current literature to determine if specific items or data may be of value. Conducts research and investigations as to sources of obtaining special data which may or may not be available in the library and takes the necessary steps to secure such information. Provides assistance to technical personnel by conducting library research and preparing bibliographies.

b. QUALIFICATIONS: A Bachelor's Degree in Library Science is required. Six (6) years general experience.

c. EXPERIENCE:

(1) General Experience: Six (6) years experience as a general librarian.

(2) IA Specialized Experience: None

c. EDUCATION/WORK EXPERIENCE SUBSTITUTIONS: A Master's Degree in Library Science may be considered equivalent to two (2) years general experience.

#### 64. IA EDUCATOR.

a. Duties: Designs curricula and courses to support the professionalization needs of the DOD IA work force. Identifies IA educational requirements and develops training courses to meet those needs. Evaluates student qualifications and knowledge levels and focuses course presentations and training material to student needs. Develops new techniques for presenting complex IA concepts and principles. Integrates COMSEC, COMPUSEC, TEMPEST, and other IA component technologies into comprehensive IA courses. Provides technical expertise to DoD committees and organizations developing IA education and training plans and curriculum. Knowledgeable of IA COTS products and methods that can be acquired to provide secure interoperability, portability, and scalable information technology solutions.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Mathematics, Physics, Business, Engineering, Systems Engineering or other related technical/scientific field is required. Seven (7) years general experience and four (4) years IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Seven (7) years experience in defining IA requirements, and designing, specifying, integrating and implementing secure systems solutions. Demonstrated experience in the design, implementation and presentation of technical education efforts. Demonstrated increased responsibility in developing higher level schema in the IA subject area.

(2) IA Specialized Experience: Four (4) years of experience in various aspects of Information Assurance. Ability to articulate IA and risk management. Demonstrated experience in designing and integrating IA solutions and providing training in those solutions. Demonstrated expert knowledge of DoD computer security instructions and NCSC publications including the rainbow series.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's Degree in Computer Science, Mathematics, Physics, Business, Engineering, Systems Engineering or related technical/scientific field may be considered equivalent to two (2) years general experience and one (1) year IA specialized experience. Certification from a nationally recognized security program, such as CISSP or CISA, is considered equivalent for the IA specialized experience.

#### 65. SENIOR APPLICATIONS PROGRAMMER.

a. DUTIES: Analyzes IA systems requirements and design specifications. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Interfaces applications with system security features and services. Develops mission unique security functions (e.g. guards, downgrades, information fusion capability, etc.). Prototypes new secure system applications to demonstrate feasibility. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program- and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to less experienced programmers.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Computer Programming, Business, Engineering, is required. Seven (7) years general experience and three (3) years IA specialized experience is required.

c. EXPERIENCE:

(1) General Experience: Seven (7) years experience in applications programming and/or integrating applications on mid-tier and/or large scale computing systems.

(2) IA specialized experience: Three (3) years experience in Information Assurance, Communications and Networks, Computer Security (COMPUSEC); Communications Security (COMSEC); TEMPEST; or Operations Security (OPSEC). Demonstrated experience in developing IA software applications for secure systems. Demonstrated knowledge of state-of-the-art secure computer equipment, secure operating systems, and high-level computer languages.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: A Master's in Computer Science, Computer Programming, Business, Engineering may be considered equivalent to two (2) years general experience and one (1) year experience in IA specialized experience. A Certificate from a nationally recognized information systems security organization may be considered equivalent to three (3) years general experience and three (3) years IA specialized experience.

#### 66. JUNIOR APPLICATIONS PROGRAMMER.

a. DUTIES: Analyzes IA systems requirements and design specifications. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Interfaces applications with system security features and services. Develops mission unique security functions (e.g. guards, downgrades, information fusion capability, etc.). Prototypes new secure system applications to demonstrate feasibility. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program- and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to less experienced programmers.

b. **QUALIFICATIONS:** A Bachelor's Degree in Computer Science, Computer Programming, Business, Engineering, is required.

c. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Certificate from a nationally recognized computer programming or information systems security organization/vocational school may be considered as a substitute for the Bachelor's Degree.

#### 67. SENIOR IA SYSTEM PROGRAMMER.

a. **DUTIES:** Develop, integrate, and/or maintain operating systems, communications software, relational database design, data management, object oriented programming, compilers, assemblers, utility programs, Web development and architectures. Modify existing and create special-purpose software or prototypes and ensure systems security, availability, and integrity.

b. **QUALIFICATIONS:** A Bachelor's degree in Computer Science, Information Systems, Engineering, Mathematics, Business, or other related computer or technical disciplines is required. Twelve (12) years general experience and eight (8) years IA specialized experience is required. Educational currency and ability to remain current on evolving technologies is required.

c. **EXPERIENCE:**

(1) **General Experience:** Twelve (12) years experience in applications programming and functional analysis on large systems. Demonstrated experience in communications programming and functional analysis on large systems.

(2) **IA Specialized Experience:** Eight (8) years experience in Information Assurance. Demonstrated experience in system analysis and programming of trusted operating systems, trusted data base management systems, and trusted applications.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Master's in Computer Science, Information Systems, Engineering, Mathematics, Business, or other related computer or technical disciplines may be considered equivalent to three (3) years general experience and one (1) year IA specialized experience. A Certificate from a nationally recognized information systems security organization may be considered equivalent to three (3) years general experience and three (3) years IA specialized experience.

#### 68. JUNIOR IA SYSTEM PROGRAMMER.

a. **DUTIES:** Create and/or maintain trusted operating systems, trusted communications software, data base packages, trusted Data Base Management Systems, compilers, assemblers, and utility programs. Develop Web-based applications. Experience with PERL, C++, JAVA, Visual Basic and API. Modify existing and create special-purpose trusted software or prototypes and ensure systems security, efficiency and integrity.

b. **QUALIFICATIONS:** A Bachelor's degree in Computer Science, Information Systems, Engineering, Mathematics, Business, or other related computer or technical disciplines is required.

c. **EXPERIENCE:**

(1) **General Experience:** Hands on experience in applications programming and functional analysis in degree program or technical/vocational school. Some experience in communications programming and functional analysis.

(2) **Demonstrated ADP experience** in system analysis and programming of trusted operating systems, trusted data base management systems, or trusted applications.

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** A Master's Degree in Computer Science, Information Systems, Engineering, Mathematics, Business, or other related computer or technical disciplines may be considered equivalent to two (2) years general experience and one (1) year IA specialized experience.

#### 69. STUDENT IA ANALYST

a. **DUTIES:** Analyzes IA requirements. Participates in the analysis and design of IA requirements and recommended system solutions. Possesses the ability to interpret IA requirements, perform analysis and research based on those requirements, and provide solutions to medium to complex IA problems. Possesses the ability to integrate solution into overall system structure and to provide testing support in the determination of the viability of suggested solution.

b. **QUALIFICATIONS:** No formal degree required, however, some college level (currently enrolled or past experience) course participation in Computer Science, Distributed Communications Environments, Electronic Business, or Public Key Infrastructure/Key Management preferred.

c. **EXPERIENCE:** One year of general experience and one year of IA specific experience required.

(1) **General Experience:** One year or more of involvement in general information systems security projects and other projects related to information systems security is required..

(2) **Specific Experience.** One year of IA related experience dealing with medium to complex information systems

d. **EDUCATION/WORK EXPERIENCE SUBSTITUTION:** Four years (4) Military or DOD experience in IA field may be considered equivalent.

#### 70. ENTRY LEVEL SYSTEMS ENGINEER.

a. DUTIES: Performs a variety of basic project tasks applied to specialized technology problems. Tasks involve the development and execution of test plans under the guidance of senior staff; installation and configuration of COTS IA software and hardware packages; configures and installs small computer networks. Develops understanding of information security requirements through on the job training. Applies analytical and systematic approaches in the resolution of problems of work flow, organization, and planning.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline is required.

c. EXPERIENCE:

(1) General Experience: None required.

(2) IA Specialized Experience: None required.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: Four years experience in Systems Engineering or Four (4) years Military or DOD experience in IA field may be substituted for a Bachelor's Degree.

#### 71. ENTRY LEVEL SOFTWARE ENGINEER.

a. DUTIES: Under the direction of more senior personnel, performs routine analysis, design, development, testing and debugging of computer software. Activities range from operating system architecture integration and software design to recommendations of commercial-off-the-shelf (COTS) products. Analyzes network and computer communications hardware characteristics for interface requirements. Assists and coordinates with communications network specialists in the area of communications hardware.

b. QUALIFICATIONS: A Bachelor's Degree in Computer Science, Information Systems, Engineering, Business, Mathematics or other related scientific or technical discipline is required.

c. EXPERIENCE:

(2) IA Specialized Experience: None required.

d. EDUCATION/WORK EXPERIENCE SUBSTITUTION: Four (4) years general experience in network and computer communications software may be substituted for the Bachelor's Degree educational requirement.