Military Branch: Air Force

Military Occupation: COMPUTER SYSTEMS PROGRAMMING

Military Code: AFSC 3D1X2

Training Levels: All Air Force occupations have up to 5 different training levels: Helper, Apprentice, Journeyman, Craftsman and Superintendent.

Below are training levels with Occupation codes:

AFSC 3D172, Craftsman	**AFSC 3D132, Apprentice**
AFSC 3D152, Journeyman	**AFSC 3D112, Helper**

Go To: Occupation Details   **Civilian Competencies**

 (Changed 31 Oct 13, Effective 28 Feb 13)

1. Specialty Summary. Deploys, sustains, troubleshoots and repairs standard voice, data and video network infrastructure systems, IP detection systems and cryptographic equipment. Performs, coordinates, integrates and supervises network design, configuration, operation, defense, restoration, and improvements. Analyzes capabilities and performance, identifies problems, and takes corrective action. Fabricates, terminates, and interconnects wiring and associated network infrastructure devices. Related DoD Occupational Subgroups: 115000 and 162200.

2. Duties and Responsibilities:

2.1. Provides mission critical voice, data and video services. Installs, upgrades, replaces, configures and maintains systems/circuits/IP-based intrusion detection systems that access military, Federal and commercial networks. Manages infrastructure devices and systems using the latest approved software tools.

2.2. Deploys and operates expeditionary communications systems. Uses agile logistics support channels to sustain continuous network operations. Removes, repairs and replaces assemblies and subassemblies to optimally sustain voice, data and video networks.

2.3. Establishes priorities, maintains, tests, troubleshoots, and repairs network systems equipment and circuits utilizing tools and test equipment. Isolates malfunctions using diagnostic software, technical data, block diagrams, voltage and waveform measurements, and other tests requiring specialized test equipment.

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2.4. Monitors performance of systems and circuits. Coordinates with coalition forces, DoD agencies and other service providers to analyze and isolate performance faults and implement corrective actions. Checks equipment for serviceability and performs preventive maintenance. Isolates faults by coordinating with commercial service providers and depots to test system components and assemblies.

2.5. Maintains and administers network and circuit databases, records and forms. Interprets sketches and layout drawings for placement of distribution systems. Coordinates request for service orders. Reviews, recommends, and implements changes to communications-computer systems installations records (CSIR), technical data, engineering drawings, and equipment wiring diagrams. Updates and verifies entries on system, facility, maintenance, and inspection records. Initiates, tracks, and maintains shipping, receiving, supply, and equipment documents.

2.6. Conducts periodic inspections of systems installations and repair activities. Interprets inspection reports and implements corrective actions, documents inspection and maintenance actions.

2.7. Reviews and maintains operational measurement reports and analyzes network utilization. Ensures equipment and components meet installation practice technical order and accepted commercial installation specifications.

2.8. Applies communications security programs to include physical, cryptographic, transmission, and emission security. Develops and ensures compliance with safety standards and instructions.

2.9. Manages, supervises, and performs planning and implementation activities. Manages implementation and project installation and ensures architecture, configuration, and integration conformity. Develops, plans, and integrates base communications systems. Serves as advisor at meetings for facility design, military construction programs and minor construction planning. Evaluates base comprehensive plan and civil engineering projects. Monitors status of base civil engineer work requests. Performs mission review with customers. Controls, manages, and monitors project milestones and funding from inception to completion. Determines adequacy and correctness of project packages and amendments. Monitors project status and completion actions. Manages and maintains system installation records, files, and indexes. Evaluates contracts, wartime, support, contingency and exercise plans to determine impact on manpower, equipment, and systems.

3. Specialty Qualifications:

3.1. Knowledge. Knowledge of electronic and network principles, information assurance, telephony, copper and fiber-optic transmission principles, cryptographic techniques, network system installation practices, project and circuit diagram interpretation, test equipment, special tools, and management practices is mandatory.

3.2. Education. For entry into this specialty, completion of high school is mandatory. Additional courses in mathematics, computer science or information technologies is desirable. Network+ certification is desirable.

3.3. Training. For award of AFSC 3D132, completion of Cyber Transport initial skills course is mandatory.

3.4. Experience. The following experience is mandatory for award of the AFSC indicated:

3.4.1. 3D152. Qualification in and possession of AFSC 3D132. Also, experience in installation, maintenance, and repair of voice, data and video network infrastructure and cryptographic equipment. AFECD, 31 October 2013 201

3.4.2. 3D172. Qualification in and possession of AFSC 3D152. Also, experience in supervising installation, maintenance, and repair of voice, data and video network infrastructure and cryptographic equipment.

3.5. Other: The following are mandatory as indicated:

3.5.1. For entry into this specialty:

3.5.1.1. Normal color vision as defined in AFI 48-123, *Medical Examinations and Standards*.

3.5.1.2. Must possess a valid state driver's license to operate government motor vehicles (GMV) in accordance with AFI 24-301, *Vehicle Operations*.

3.5.1.3. See Attachment 4 for additional entry requirements.

3.5.2. For award and retention of these AFSCs, must maintain an Air Force Network License according to AFI 33-115, Vol 2, *Licensing Network Users and Certifying Network Professionals.*

☐3.5.3. Specialty routinely requires work in the networking environment. For award and retention of AFSCs 3D132/3D152/3D172, must attain and maintain a minimum Information Assurance Technical Level II certification according to DoD 8570.01-M, *Information Assurance Workforce Improvement Program*.

3.5.4. Specialty requires routine access to Top Secret material or similar environment. For award and retention of AFSCs 3D152/72, completion of a current Single Scope Background Investigation (SSBI) according to AFI 31-501, *Personnel Security Program Management* is mandatory.

NOTE: Award of the 3-skill level without a completed SSBI is authorized provided an interim Top Secret security clearance has been granted according to AFI 31-501.

Materials included in these reports are from:

• The AIR FORCE ENLISTED CLASSIFICATION DIRECTORY (AFECD)-The Official Guide to the Air Force Enlisted Classification Codes- Published October 2013

• The Department of Labor's My Next Move pages and links.

• The USAF public web pages.