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AFSC 2R2X1



MAINTENANCE MANAGEMENT

CAREER FIELD EDUCATION AND TRAINING PLAN

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**CAREER FIELD EDUCATION AND TRAINING PLAN MAINTENANCE
MANAGEMENT PRODUCTION SPECIALTY AFSC 2R1X1**

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CAREER FIELD EDUCATION AND TRAINING PLAN MAINTENANCE MANAGEMENT SPECIALTY AFSC 2R2X1

PART I

PREFACE

1. This Career Field Education and Training Plan (CFETP) for AFSC 2R2X1, Maintenance Management Specialty, is a comprehensive education and training document that identifies life cycle education and training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP provides personnel a clear career path to success and instills rigor in all aspects of career field training. A copy of the current CFETP is available for review/download at <http://www.e-publishing.af.mil/>. This CFETP was developed in accordance with the requirements in DAFMAN 36-2689, *Training Program*. This publication is applicable to all uniformed members of the Regular Air Force, the Air Force Reserve, the Air National Guard, and the United States Space Force.

NOTE: Civilians occupying associated positions will use Part II to support duty position qualification training.

2. The CFETP consists of two parts; supervisors plan, manage, and control training within the specialty using both parts of the plan.

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan. Section B identifies career field progression information, duties and responsibilities, training strategies, and career field path. Section C associates each level with specialty qualifications (knowledge, education, experience, training, and other). Section D indicates resource constraints. Some examples are funds, manpower, equipment, facilities.

2.2. Part II includes the following: Section A contains the course objective list and training standards supervisors use to determine if Airmen have satisfied Air Education and Training Command (AETC) training requirements. Section B identifies available support materials. An example is a Qualification Training Package (QTP) developed to support proficiency training. Section C identifies a training course index supervisors use to determine resources available to support training; included here are both mandatory and optional courses. Section D identifies Major Command (MAJCOM) unique training requirements supervisors use to determine additional training requirements unique to the MAJCOM. Section E identifies the Specialty Training Standard (STS) and includes duties, tasks, and technical references to support training; AETC conducted training; wartime course requirements; core tasks; and correspondence course requirements.

3. Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate point in their career. This plan will enable us to train today's work force for tomorrow's jobs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training (AT): Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career Airmen at the advanced level of the AFS.

Air Force Job Qualification Standard (AFJQS): A comprehensive task list that describes a particular job type or duty position. They are used by supervisors to document task qualifications. The tasks on an AFJQS are common to all persons serving in the described duty position.

Career Field Education and Training Plan (CFETP): A CFETP is a comprehensive, multipurpose document covering the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, eliminate duplication, and ensure this training is budget defensible.

Certification: A formal indication of an individual's ability to perform a task to required standards.

Certification Official: A person the supervisor assigns to determine an individual's ability to perform a task to required standards.

Continuation Training: Additional training exceeding requirements with emphasis on present or future duty assignments.

Core Task: A task Air Force Career Field Managers (AFCFMs) identify as a minimum qualification requirement within an Air Force Specialty regardless of duty position.

Course Objective List (COL): A publication identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-, 5-, and 7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with DAFI 36- 2670, *Total Force Development*.

Course Training Standard (CTS): Training Standard that identifies the training members will receive in a specific course not covered in the CFETP.

Critical Task: Additional tasks, identified by MAJCOM Functional Managers, commanders, and supervisors as being required for skill-level upgrade training. When designated, certify these core tasks using normal core task certification procedures.

Enlisted Specialty Training (EST): A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade Airmen in each skill level of a specialty.

Exportable Training: Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

Field Technical Training (Type 4): Special or regular on-site training conducted by a Training

Detachment (TD) or by a Mobile Training Team (MTT).

Initial Skills Training (IST): A formal resident course which results in the award of a 3-skill level AFSC.

Instructional System Development (ISD): A deliberate and orderly process for developing, validating, and reviewing instructional programs that ensures personnel are taught the knowledge and skills essential for successful job performance.

MyTraining: Air Force training environment that hosts all enlisted training records management.

Occupational Analysis Report (OAR): A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

On-the-Job Training (OJT): Hands-on, over-the-shoulder training at the duty location used to certify personnel for both skill level upgrade and duty position qualification.

Qualification Training (QT): Actual hands-on task performance training designed to qualify an Airman in a specific duty position. This training occurs both during and after the upgrade training process. It is designed to provide the performance skill / knowledge training required to do the job.

Qualification Training Package (QTP): An instructional package designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer-based, or in other audiovisual media.

Resource Constraints: Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being accomplished.

Specialty Training Standard (STS): An Air Force publication that describes an Air Force Specialty in terms of tasks and knowledge an Airman may be expected to perform or to know on the job. It serves as a contract between the Air Education and Training Command and the functional user to show which of the overall training requirements for an Air Force Specialty Code are taught in formal schools, career development courses, and exportable courses.

Upgrade Training (UGT): A mixture of mandatory courses, task qualification, QTPs, and CDCs required for award of the 3-, 5-, 7-skill levels.

Utilization and Training Workshop (U&TW): A forum, co-chaired by the AFCFM and Training Pipeline Manager, of MAJCOM Air Force Specialty Code (AFSC) functional managers, Subject Matter Experts (SMEs), and AETC training personnel that determines career ladder training requirements.

Section A - General Information

1. Purpose. This CFETP provides information necessary for AFCFM, MAJCOM Functional Managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective career field training program. This plan outlines the training that individuals in AFSC 2R2X1 should receive to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced, and proficiency training. Initial skills training is the AFS specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. Normally, this training is conducted by AETC at one or more of the technical training wings. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 3-, 5-, and 7- skill levels. Qualification training is actual hands-on task performance training designed to qualify an Airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills and knowledge required to do the job. Advanced training is formal specialty training for selected Airmen. Proficiency training is additional training, either in-residence, exportable advanced training courses, or on-the-job training (OJT), provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes. Some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in the specialty and recommends education/training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and the training delivery method.

1.4. Identifies major resource constraints, which impact full implementation of the desired career field training process.

2. Use of the CFETP. The plan is used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for everyone in the specialty.

2.1. AETC training personnel will develop/revise formal resident, non-resident, field, and exportable training based on requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. OJT, resident training, and contract training or exportable courses can satisfy identified requirements. Ensure MAJCOM-developed training to support this AFS is identified for inclusion into this plan and must not duplicate other available training resources.

23. Everyone will complete the mandatory training requirements specified in this plan. The lists of courses in Part II will be used as a reference to support training.

3. Coordination and Approval. The AFCFM is the approval authority. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager for this specialty will initiate an annual review of this document by AETC and MFMs to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training.

Section B - Career Progression and Information

4. Specialty Description.

4.1. Specialty Summary. Central agency for managing, monitoring, and developing strategies for aerospace vehicles, engines, armament/munitions, missiles, space systems, Aerospace Ground Equipment (AGE), and selected equipment inventory. Ensures aerospace vehicles and supporting equipment are managed in accordance with established policy and advises maintenance leadership on the health of the fleet. Initiates studies and investigations and performs statistical analysis to aid in the development and coordination of generation flow plans for units required to meet emergency war order and wartime taskings. Presents information to help senior leadership assess the health of the units' weapon systems and equipment. Informs managers of significant factors affecting the mission and unit readiness. Manages and operates Maintenance Information Systems (MIS).

Related DoD Occupational Subgroups: 155500 and 155800.

4.2. Duties and Responsibilities. The Air Force Enlisted Classification Directory (AFECD) contains a summary of the following:

4.2.1. Provides written guidance, reports and special studies for recommendations and briefings to account for flying hour data, equipment performance, materiel consumption, scheduling, management, and resources. Uses statistical techniques, interprets findings from data, and identifies trends and significant deviations to ensure senior leaders are briefed on issues that could potentially impact long term fleet health and recommends corrective action. Manages aerospace vehicle maintenance and utilization requirements by developing plans and production schedules to meet mission requirements. Determines maintenance capabilities, production factors, and work priorities in developing operational schedules. Prepares daily, weekly, monthly, quarterly, and annual utilization schedules for known maintenance and operational mission and training requirements. Coordinates with base activities to ensure support is available to meet schedules.

4.2.2 Controls, maintains, and audits weapons systems records in applicable MIS. Coordinates and develops aircraft configuration, Time Compliance Technical Orders (TCTO), Special Inspections (SI), and Time Change Items (TCI) in the MIS in accordance with aircraft documentation policies ensuring safe and reliable weapons systems to meet ever evolving global mission demands. Coordinates with MIS program offices to ensure automated systems capability and compatibility with customer requirements are met. Focal point to validate and track MIS requirements and enhancements for higher headquarters approval.

5. Skill level/Career Progression.

5.1. Adequate training and timely progression from the apprentice to the superintendent skill level play an important role in the Air Force's ability to accomplish its mission. It is essential for everyone involved in training to do his or her part to plan, manage, and conduct an effective training program. The guidance provided in this part of the CFETP will ensure everyone receives necessary training at appropriate points in their career. The following narrative and AFSC 2R2X1 Career Field tables identify the skill/career progression.

5.2 Apprentice (3) Level. Following Basic Military Training, initial skills training will be provided to members in a resident course at the 82d Training Wing, Sheppard AFB, TX. The course will lay the foundation for additional training at the graduate's first duty assignment. Trainees will utilize the Career Development Course (CDC), and task qualification training to progress in their career field. Upon completion of CDC 2R251 and Air Force core task qualifications, the trainee should complete other available duty position training.

5.3 Journeyman (5) Level. Once upgraded to the 5-level, the journeyman will enter continuation training that will broaden their experience base by increasing their knowledge and skill in troubleshooting and solving more complex problems. Journeymen typically will be assigned job positions such as Maintenance scheduler, Analyst, and Documentation specialist, etc. 5-levels should begin cross utilization training (CUT) across maintenance operations. They will attend Airman Leadership School (ALS) to enhance their Professional Military Education (PME). After attending the Air Force Training course, 5-levels can be considered for appointment as trainers. Trainers must be qualified to perform the task to be trained. CDC study is continued to prepare for Weighted Airman Promotion testing. Airmen should also consider continuing their formal education by pursuing a Community College of the Air Force (CCAF) degree.

5.4 Craftsman (7) Level. A craftsman can expect to fill various supervisory and management positions such as NCOIC of maintenance scheduling or analysis, section chief, engine manager, AVDO, Quality Assurance Inspector etc. 7-levels should continue CUT in maintenance operations. Exportable courses, MAJCOM, and unit directed courses are also available. 7-levels should take courses or obtain added knowledge of management of resources and personnel and be thoroughly familiar with all facets of maintenance operations. Individuals promoted to TSgt will attend the Noncommissioned Officer Academy IAW DAFMAN 36-2689

5.5 Superintendent (9) Level. A 9-level can be expected to fill the position of MAJCOM Functional Manager or Maintenance Operations (MXO) Superintendent, with knowledge of Maintenance Management, Engine Management, Supply, Maintenance Training Management, Cyber/Space/Communication, Maintenance Operations Center (MOC), Quality Assurance (QA), Weapons Standardization and Programs. Additional training in the areas of budget, manpower, resources, and personnel management should be pursued through continuing education. Individuals promoted to SMSgt will attend the Senior Noncommissioned Officer Academy IAW DAFMAN 36-2689. They should be knowledgeable and possess the ability to apply the AF Tactics, Techniques, and Procedures and theory of constraints as outlined in [AFTTP 3-4.21V1, Aircraft Maintenance](#). Additional higher education and completion of courses outside their career AFSC is also recommended.

6. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the 2R2X1 Maintenance Management career field. The spectrum includes a strategy for when, where, and how to meet these training requirements. The strategy must ensure we develop affordable training, eliminate duplication, and prevent a fragmented approach to training. The following training decisions were made at the Career Field STRT at Sheppard AFB from 23 January 2023 to 27 January 2023, and U&TW 29-30 August 2023.

6.1 Three Level (3-level) Initial Skills. The 3-level resident course will provide training in Maintenance Management scheduling, database management and analysis functions. The STRT/U&TW working group members outlined requirements for the new Maintenance Management course that merged previous requirements from the Maintenance Management Analysis and Maintenance Management Production courses. Maintenance Information System specific training was removed and shifted to Job Qualification Standard training. Course length will be 63 days.

6.2 Five Level (5-level) Upgrade Requirements. To upgrade to the 5-level, personnel must meet educational, training, and grade requirements as listed in Table A8.2. Enlisted Career Path. The STRT/U&TW outlined core tasks required for upgrade training from both the previously existing Maintenance Management Analysis and Maintenance Management Production core tasks. The member must be in upgrade training for a minimum of 12 months for upgrade to 5-level.

6.3 Seven Level (7-level) Upgrade Requirements. To upgrade to the 7-level, personnel must meet educational and training requirements and grade requirements as listed in Table A8.2. Enlisted Career Path. 7-levels must be a SSgt, complete core task training, complete 7-level CDC, and complete the 7-level resident course at Sheppard AFB Texas for upgrade to the Craftsman level. Additionally, the trainee must meet all requirements prescribed in the applicable MAJCOM training directives. During the STRT/U&TW, the group made significant changes to the 7-level upgrade training tasks, incorporating core tasks required for upgrade training from both the previously existing Maintenance Management Analysis and Maintenance Management Production core tasks. All students regardless of component will attend the Craftsman course.

6.4 Continuation Training. Any additional knowledge and skill requirements which are not taught through initial, or upgrade training are assigned to unit training or training detachments. The purpose of the continuation training program is to provide additional training exceeding minimum upgrade training requirements with emphasis on present and future duty positions. MAJCOMs develop a proficiency training program that ensures individuals in the 2R2X1 Maintenance Management career field receive necessary training at the appropriate point in their career. The program identifies both mandatory and optional training requirements.

7. Community College of the Air Force (CCAF). CCAF offers and awards job-related associate in applied science degrees and other academic credentials that enhance mission readiness, contribute to recruiting, assist in retention and support the career transitions of Air Force enlisted members. The college works with Air Force training centers, regional accrediting agencies, and hundreds of cooperating civilian colleges and universities. The technical nature of most Air Force courses, placed at the same level with college studies, can award Airmen full college credits for

most of what they learn through formal coursework and on-the-job training. Enrollment in CCAF occurs upon completion of basic military training. CCAF provides the opportunity to obtain an Associate in Applied Science Degree. In addition to its associate degree program, CCAF offers the following:

7.1 Occupational Instructor Certification. Upon completion of instructor qualification training, consisting of the Basic Instructor Course (BIC) and supervised practice teaching, CCAF instructors who possess an associate degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

7.2 Instructor of Technology and Military Science Degree. Air Force and other service enlisted personnel who are performing duty as full-time CCAF instructors may register in this program. Airmen must hold their career-field-related CCAF degree or equivalent civilian college degree before registration.

7.3 Association for Operations Management. This AFSC qualifies for enrollment in the Advanced Planning Inventory Control Society (APICS) program. Information on this program may be found at: <http://www.apics.org/Certification>

7.4 Project Management Institute. This AFSC qualifies for certification as a project management professional. Information on this program may be found at: <http://www.pmi.org/certifications>

7.5 Degree Requirements. All Airmen are automatically entered into the CCAF program. Prior to completing an associate degree, the 5-level must be awarded and the following requirements must be met:

Semester Hours	
Technical Education.....	24
Leadership, Management, and Military Studies.....	6
General Education.....	15
Program Electives.....	15
Technical Education; Leadership, Management, and Military Studies; or General Education	
Total	60

7.5.1 Technical Education (24 Semester Hours): Completion of the 2R2X1 training courses satisfies some semester hours of the technical education requirements. A minimum of 12 semester hours of Technical Core subjects/courses must be applied and the remaining semester hours applied from Technical Core/Technical Elective courses.

Course	Semester Hours
J3ABR2R231 0M3A.....	30
J3AZR2R2XX 0E1B.....	5
J3ACR2R271 0M7A.....	14
J3AZR2R2X1 0A1A.....	5
J3AZR2R2X2 0S1A.....	5

NOTE: These are the approximate hours listed for courses. These hours will change because of

revisions being made to courses. CCAF must be contacted to get the correct number of hours for all courses.

7.5.2 Leadership, Management, and Military Studies (6 Semester Hours): Professional military education and/or civilian management courses.

7.5.3 General Education (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the General Education Requirements (GER) and be in agreement with the definitions of applicable General Education subjects/courses as provided in the CCAF General Catalog.

7.5.5 Program Electives (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects/courses, including natural science courses meeting GER application criteria. Six semester hours of CCAF degree applicable technical credit otherwise not applicable to this program may be applied. See the CCAF General Catalog for details regarding the Associate of Applied Science for this specialty.

7.6 AETC Instructor Requirements: Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an AETC instructor should be actively pursuing an associate degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

8. Career Field Path

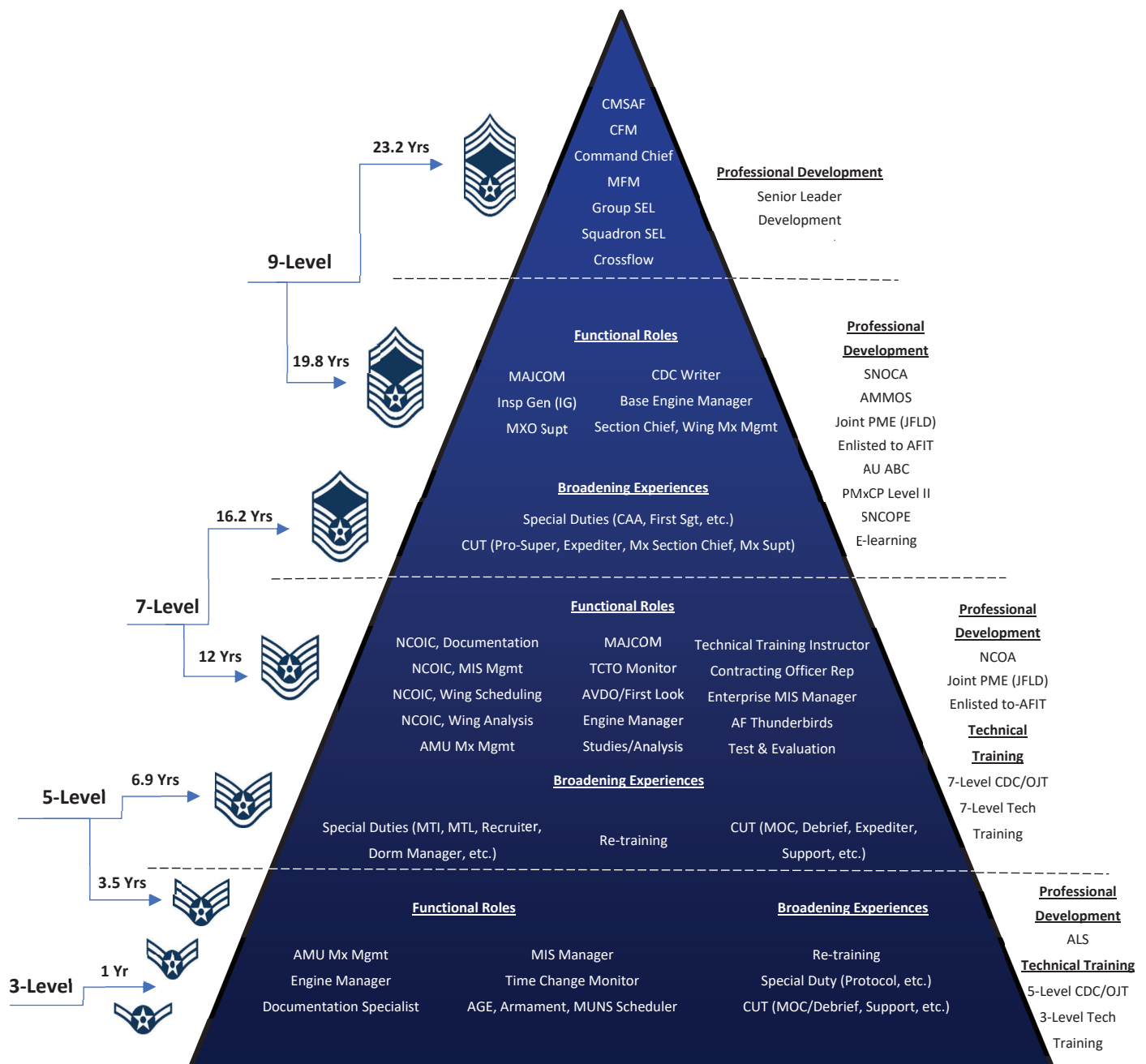
NOTE: For the latest information, go to <https://myvector.us.af.mil/myvector/>

8.1 The Enlisted Development Team (EDT) is the deliberate force development steering group for the Maintenance Management Career Field IAW DAFMAN 36-2689. The EDT outlines the training, education, and experience requirements for critical Maintenance Management duty positions, and provides recommendations for the best qualified SNCOs into these key leadership positions across the Air Force. The EDT also identifies other developmental opportunities for Maintenance Management SNCOs to facilitate their deliberate development. These recommendations or vectors are the EDT's collective recommendations for experience level, training and/or education opportunity, or position type that a member should be considered and seek out for professional growth. Vectoring will consist of recommendations for identified positions (i.e., development, leadership and strategic positions) within the Maintenance Management construct for which a member should be considered in subsequent assignments but will not identify a specific location of assignment.

8.2 Enlisted Critical Roles Path. Table A8.1 identifies critical roles required to develop SNCOs for the 2R2X1 Air Force Specialty.

Table A8.1 2R2X1 Critical Roles/SEI Matrix		
Duty Position	Duty Position Requirements	Applicable SEIs (if applicable)
Documentation Specialist or NCOIC, Documentation	Minimum 1 year, 2 years preferred (Any MDS)	2RA
MIS Manager or NCOIC, MIS Management	Minimum 1 year, 2 years preferred (Any MIS SEI such as FMxC2, IMDS, IMIS, ALIS)	2BA, 2BB, 2BC, 2BD
AVDO	Minimum 1 year (Any MDS)	2BE
AMU or equivalent, Wing or NCOIC of Analysis	Minimum 2 years (Any MDS)	2RB
AMU or equivalent, Wing or NCOIC of Scheduling	Minimum 2 years (Any MDS)	2RC
MOC, Debrief, or other Aircraft Maintenance Position	Minimum 6 months, 1 year preferred (Any MDS)	2RD, 2RE

8.3 Enlisted Career Path. Figure A 8.2 identifies career path for the 2R2X1 Air Force Specialty.



NOTE: Time above is computed using average time in service for active duty as of 2022.

Table A8.2. Base/Unit Education and Training Manager Checklist		
Requirements for Upgrade to:	Y	N
Journeyman - Does the apprentice possess the 2RX3X AFSC? - Has the apprentice completed mandatory CDCs if available? - Has the apprentice completed all appropriate 5-level core tasks identified in the CFETP? - Has the apprentice met mandatory requirements listed in specialty description, AFECD and CFETP? - Has the apprentice been recommended by their supervisor? 12 months minimum time in training for award of the 5-skill level.		
Craftsman - Does the journeyman possess the 2R251 AFSC? - Has the journeyman achieved the rank of SSgt? - Has the journeyman completed mandatory CDCs if available? - Has the journeyman completed all core tasks identified in the CFETP? - Has the journeyman been recommended by their supervisor? - Has the journeyman attended 7-skill level Craftsman course? • Must complete all 5 level core tasks before Craftsman course attendance. There is no minimum time in training for award of the 7-skill level		

TO: Squadron/CC

FROM: Squadron Training Manager

SUBJECT: Upgrade Trainee

Trainee is prepared to be upgraded and has completed all training requirements.

Training Manager

Supervisor

Section C - Skill Level Training Requirements

9. Purpose. Skill level training requirements in the 2R2X1 career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS in Part II, Sections C and E of this CFETP.

10. Specialty Qualification:

10.1. Apprentice (3) Level Training:

10.1.1 Specialty Qualification. This information is located in the official specialty description in the AFECD.

10.1.1.1 Knowledge. Knowledge is mandatory of: Maintenance and operations organization management and procedures applying to aircraft, missiles, communications-electronics, space systems, or related equipment. Exercises critical thinking while utilizing analytical theory and statistical processes. Serves as a subject matter expert in planning, scheduling, and documenting maintenance in various MIS. Utilizes concepts and application of maintenance directives to maintain aerospace vehicle, operational, inspection, time change management, delayed discrepancies, TCTO, and engine subsystems.

10.1.1.2 Education. For entry into this specialty, computer literacy, knowledge of commercial off the shelf (COTS) data management and visualization software, and completion of high school with courses in algebra, written communication, public speaking, and data entry are desirable.

10.1.1.3 Training. For award of AFSC 2R231, completion of the basic Maintenance Management course is mandatory.

10.1.1.4 Experience. None.

10.1.1.5 Other. Specialty requires routine access to Tier 3 (T3) information, systems, or similar classified environment. For award and retention of AFSC 2R231/51/71, completion of a current T3 Investigation required in accordance with DoDM 5200.02, AFMAN 16-1405, *Air Force Personnel Security Program*, is mandatory.

10.1.1.6 Training Sources and Resources. The 3-level initial skills course will provide the required knowledge, qualifications, and applicable certification. Initial skills training encompasses technical training publications, aerospace vehicle equipment, time change, special inspection and TCTO programs, and maintenance management as well as statistical methods of data analysis, computer application software, data retrieval techniques, knowledge of the various maintenance information systems, operation/maintenance of MIS, the procedures for maintaining and correcting data systems, the interpretation and use of reports from MISs, and the presentation of maintenance data.

10.1.1.7 Implementation. Upon graduation from Basic Military Training (BMT), completion of course J3ABR2R231 0M3A, Maintenance Management Apprentice, satisfies the knowledge and training resource requirements for award of the 3-skill level for Maintenance Management trainees.

10.2. Journeyman (5) Level Training:

10.2.1 Specialty Qualification. Qualification in and possession of AFSC 2RX3X.

10.2.1.1 Knowledge. In addition to the 3-level qualifications, a 5-skill level must possess the knowledge and skills necessary to maintain inspections, time changes, TCTO's, configuration management, and aerospace utilization. They must also possess the knowledge and skills necessary to apply statistical, analytical, and presentation techniques and manage/maintain assigned MIS(s). A 5-level must have knowledge of personal computer operations and productivity software (Microsoft PowerBI, Word, Excel, PowerPoint, and Access); using the assigned MIS(s) to extract, manipulate, organize, and analyze maintenance data; assisting users with the utilization of the assigned MIS(s) to document maintenance activities; using Maintenance Data Documentation reference materials; using descriptive statistics; using predictive analysis; computing and interpreting maintenance performance indicators; performing time series analysis; and completing special studies.

10.2.1.2 Education. There are no additional education requirements beyond those defined for the apprentice level. However, after upgrade, pursuit of higher levels of academic education is desirable.

10.2.1.3 Training. For award of AFSC 2R251, the 5-level CDC provides the career knowledge training required. Qualification training and OJT will provide training and qualification on the core tasks identified in the STS. The CDC is written to build from the trainee's current knowledge base and provides more in-depth knowledge to support OJT requirements.

10.2.1.4 Experience. Qualification in and possession of AFSC 2RX3X. Experience performing maintenance scheduling and documentation functions and activities along with analysis activities as required. Maintenance Managers should also be familiar with production management activities outside of maintenance operations (i.e., production superintendent, back shop functions, and expeditors).

10.2.1.5 Other. None

10.2.1.6 Training Sources and Resources. Completion of the 2R251 CDC and 5-level core tasks represent the resources needed for award of the 5-skill level. There is a 12 month minimum time in training requirement, however for Regular Air Force, the recommended time is 15 months.

10.2.1.7 Implementation. Training to the 5-level is performed by the units, utilizing the STS, exportable courses, and CDCs. Upgrade to the 5-level requires completion of the CDC and completion of all 5 level core tasks. Wear the Basic Maintenance Badge after award of the 5-skill level.

103. Craftsman (7) Level Training:

10.3.1 Specialty Qualification. Qualification in and possession of AFSC 2RX51.

10.3.1.1 Knowledge. In addition to the 5-level qualifications, a 7-level must possess advanced skills and knowledge of theory, concepts, principles, and applications of maintenance management. Must also possess advanced skills and knowledge of theory, concepts, principles, and application of statistical, analytical, and presentation techniques, maintaining/operating assigned MIS(s) and evaluating/analyzing MIS data. Qualification is required on extracting/manipulating/organizing maintenance data, using the analysis process, developing hypothesis statements, performing parametric/nonparametric tests, performing sampling techniques, and developing control charts.

10.3.1.2 Education. There are no additional education requirements beyond those defined for the apprentice level. However, completion of a CCAF degree or civilian equivalent is desirable.

10.3.1.3 Training. Completion of mandatory CDCs, the Maintenance Management Craftsman course, all 7-level core tasks are mandatory for upgrade to 2R271.

10.3.1.4 Experience. Qualification in and possession of AFSC 2RX51 is mandatory. Experience performing or supervising maintenance management functions and activities is required.

10.3.1.5 Other. Data Analytics courses should be pursued further. Courses are available through Air Force Institute of Technology (AFIT).

10.3.1.6 Training Sources and Resources. Completion of the 2R271 CDC, Maintenance Management Craftsman course, and 7-level core tasks represent the resources needed for award of the 7-skill level and should be knowledgeable of AFTTP 3-4.21V1.

10.3.1.7 Implementation. Training to the 7-level is performed by the units, utilizing the STS, exportable courses, and CDCs. Upgrade to the 7-level requires completion of the 2R271 CDC, completion of all 7 level core tasks, and the Maintenance Management Craftsman course. There is no minimum time in training requirement, however for Regular Air Force, the recommended time is 8 months. Wear the Senior Maintenance Badge after award of the 7-skill level.

104. Superintendent (9) Level Training:

10.4.1 Specialty Qualification. Qualification in and possession of AFSC 2RX71. Also, experience managing maintenance scheduling and analysis activities.

10.4.1.1 Knowledge. In addition to 7-level qualifications an individual must possess advanced skills and knowledge of maintenance concepts, directives, organizational structure, and principles of maintenance management. Maintenance operations superintendent responsibilities include knowledge of: Plans, Scheduling, Documentation, Maintenance Management Analysis duties, Maintenance Operations Center policies and procedures, maintenance training programs, engine management, Quality Assurance, Weapon Standardization, Air Force supply procedures, resource

management, and should be knowledgeable of AFTTP 3-4.21V1 and FB-01, *Theory of Constraints*.

10.4.1.2 Education. Completion of a CCAF degree or civilian degree is required and a Bachelor's degree is desirable.

10.4.1.3 Training. None.

10.4.1.4 Experience. For award of AFSC 2R290, qualification in and possession of AFSC 2RX71 is mandatory.

10.4.1.5 Training Sources/Resources. Duty position qualifications represent the required resources for upgrade to the 9-skill level.

10.4.1.6 Implementation. The 9-skill level will be awarded upon promotion to SMSgt. Wear the Master Maintenance Badge after award of the 9-skill level.

Section D - Resource Constraints

Purpose. This section identifies known resource constraints that preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions office of primary responsibility, and target completion dates. As a minimum, resource constraints will be reviewed and updated annually.

There are no resource constraints identified for 2R2X1 training.

PART II

Section A - Course Objective List

1. Measurement. Each proficiency coded STS task or knowledge item taught at the technical school is measured using an objective. An objective is a written instruction for the student so he or she knows what is expected of them to successfully complete training on each task. Each objective consists of a condition, behavior, and standard. The condition is the setting in which the training takes place (i.e., TOs, type of equipment, etc.). The behavior is the observable portion of the objective (i.e., perform an operational check). The standard is the level of performance that is measured to ensure the STS proficiency code level is attained. Each objective uses letter codes(s) to identify how it is measured. All objectives use the PC code that indicates a progress check is used to measure subject or task knowledge. “W” indicates a comprehensive written test and is used to measure the subject or task knowledge at the end of a block of instruction. “PC/W” indicates a subject or task knowledge progress check and a separate measurement of both knowledge and performance elements using a written test.

2. Standard. The standard for written examinations is 70%. Standards for performance objectives are indicated in the objective and are also indicated on the individual progress check checklist. The instructor will use the checklist to document each student’s progress on each task. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained. Students must satisfactorily complete all PCs prior to taking the written test.

3. Proficiency Level. Review column 4A of the STS to determine the proficiency level of a particular task or knowledge item. Review the course objective list to determine which STS item the objective supports. Review the proficiency code key in Attachment 1 of this CFETP for an explanation of the proficiency codes. Most task performance is taught to the “2b” proficiency level which means the students can do most parts of the task but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step-by-step procedures for doing the task.

4. Course Objectives. A detailed listing of initial skills or craftsman course objectives may be obtained by submitting a written request to 363 TRS/TRR, 520 Missile Road, Sheppard AFB TX 76311-2261 or contacting the OPR by telephone at DSN 736-8777.

Section B - Support Materials

5. Support materials for the 2R2X1 career field are available at the following web sites:

5.1. Maintenance Management Community of Practice is available at:

<https://usaf.dps.mil/teams/2R-Sharepoint/SitePages/Home.aspx>

5.2. Interactive Courseware information is available online through the 367th Training Support Squadron. The repository of courses is located in MyLearning at:

<https://lms-jets.cce.af.mil/moodle/course/index.php?categoryid=240>

5.3. Headquarter Air Force Reserve Command Analysis information is available at: [Analysis - Home \(dps.mil\)](#)

5.4 AFTTP 3-4.21V1, Aircraft Maintenance. Available at the Air Force Combat Support TTP Repository: <https://usaf.dps.mil/teams/TTP/SitePages/ApprovedAFTTP.aspx>

5.5 AFTTP 3-4.21V2, Munitions and Missile MX. Available at the Air Force Combat Support TTP Repository: <https://usaf.dps.mil/teams/TTP/SitePages/ApprovedAFTTP.aspx>

Section C - Training Course Index:

6 Purpose. This section of the CFETP identifies training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field training programs. For further information on the following courses, contact the OPR at:

363 TRS/TRR
520 Missile Road
Sheppard AFB TX 76311-2261
DSN 736-8777

7. Air Force In-Resident Courses.

COURSE NO.	COURSE TITLE	LOCATION	USER
J3ABR2R231 0M3A	Maintenance Management Apprentice	Sheppard AFB, TX	USAF
J3ACR2R271 0M7A	Maintenance Management Craftsman	Sheppard AFB, TX	USAF
J3AZR2R1XX 0E1B	Engine Management	Sheppard AFB, TX	USAF
J3AZR2R2X1 0A1A	Maintenance Management Analysis Transition	Sheppard AFB, TX	USAF
J3AZR2R2X2 0S1A	Maintenance Management Production Transition	Sheppard AFB, TX	USAF

8 Air Force Career Development Academy (AFCDA) Courses.

For further information on the following courses, contact the OPR at:

363 TRS/TRR
520 Missile Road
Sheppard AFB TX 76311-2352
DSN 736-8777

COURSE NO.	COURSE TITLE	User
CDC 2R251	Maintenance Management Journeyman	USAF

CDC 2R271	Maintenance Management Craftsman	USAF
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9. Exportable Courses. For further information on the following exportable courses, contact the OPRs at:

367 TRSS/Catalog
6058 Aspen Ave Bldg 1295
Hill AFB, UT 84056-5805
DSN 777-5868

COURSE NO.	COURSE TITLE	OPR	User
C6ANU00TVT7506	Combat Sortie Generation	367 TRSS	USAF
C2MDU00TCB7567	Aerospace Vehicle Distribution Officer (AVDO) Reference	367 TRSS	USAF
C3MDU00TCB0002	Maintenance Operations officer-in-Charge/Superintendent (OIC/SUPT)	367 TRSS	USAF

10. Other Supplemental Courses.

Data Analytics and Theory of Constraint courses are available from the AFIT School of Systems and Logistics continuing education website at: <https://www.afit.edu/LS/catalog.cfm?t=3>

The Professional Maintenance Certificate Program (PMxCP) is available through the Air Force Logistics Professional Development Program at: <https://usaf.dps.mil/teams/10352/sitepages/home.aspx>

Airmen should pursue the Data Analysis skill and Data Scientist career path on the Air Force Digital University website at: <https://digitalu.af.mil/>

10.1. Postgraduate Education. Airmen and civilians are eligible to apply for the AFIT graduate Certificate in Data Analytics. Additional information can be found at the program page at: <https://www.afit.edu/EN/programs.cfm?a=view&D=64>

Airmen are eligible to compete annually through the Enlisted-to-AFIT program for the following Master's degrees: Applied Mathematics, Computer Science, Logistics and Supply Chain Management, and Operations Research. Review admission requirements for full details.

11. Training Detachment (TD) Courses.

There are no TD courses for the 2R2X1 career field.

12. REMIS Training

The REMIS training guides are provided by the REMIS PMO and are available in MyLearning

and the following URL:<https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t88B4F00B3EF1A1AA013F5CBF50330BA5&channelPageId=s6925EC1357EF0FB5E044080020E329A9>

13. CEMS Training

Training is provided by the Program Management Office at <https://cems.sso.cce.af.mil/cpmo/>

Section D - MAJCOM Unique Requirements

14. For MAJCOM unique requirements, refer to the MAJCOM mandatory course lists.

Section E - Specialty Training Standard

15. Implementation. This STS will be used for technical training provided by AETC for classes beginning with course J3ABR2R231 0M3A and J3ACR2R271 0M7A. These courses will be developed and are tentatively scheduled to be implemented in January (J3ACR2R271 0M7A) and May (J3ABR2R231 0M3A) of 2024. Courses J3AZR2R2XX 0E1B, J3AZR2R2X1 0A1A, and J3AZR2R2X2 0S1A have separate Course Training Standards (CTSs) and are not governed by this STS.

16. Purpose. As prescribed in DAFMAN 36-2689, this STS:

16.1. Lists in column 1 the most common tasks, knowledge, and Technical References (TR) necessary for Airmen to perform duties in the 3-, 5-, and 7-skill level.

16.2 Identifies in column 2 (Core Tasks) by the applicable number either five or seven (5, 7), specialty-wide training requirements. As a minimum, all AFCFM- directed core tasks applicable to this specialty must be completed and signed off for skill level upgrade. There is no longer an Air Force requirement for third-party certification of core tasks in this AFSC. However, MAJCOMs, commanders, and work center supervisors still retain the option to designate critical tasks (core or non-core) as requiring third-party certification. To designate a task as requiring third-party certification, circle the appropriate asterisk in the core task column on the specialty training standard (STS) portion of the CFETP in the master task list (MTL) and individual training records. If the task is not already designated as a core task, place just the circle at the appropriate location in the core task column. Core tasks, which are not applicable to base assigned aircraft or equipment, are not required for upgrade (units are not required to send personnel TDY for core task training). Also in column 2 are specialized training tasks. Those indicated with an asterisk (*) are tasks required for deployment, ~ are for CBRN(TQT), and + are for SEI.

16.3 Provides certification for OJT. Column 3 is used to record completion of tasks and knowledge training requirements. Use automated training management systems to document technician qualifications, if available. Task certification must show a certification/completed date.

16.4 Shows formal training and correspondence course requirements. Column 4 shows the proficiency to be demonstrated on the job by the graduate as a result of training on the task/ knowledge and the career knowledge provided by the correspondence course.

16.5 Qualitative Requirements. Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

16.6 Job Qualification Standard. Becomes a job qualification standard (JQS) for on-the-job training when placed in AF Form 623, **On-The-Job Training Record**, and used according to DAFMAN 36-2689. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. "Go" means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct procedures. When used as a JQS, the following requirements apply:

16.6.1 Documentation. Document and certify completion of training in accordance with DAFI 36-2670. Use of paper 623s or other automated tool is authorized until further notice. MyTraining is also optional, but not mandatory as the system has errors for our CFETP and they will not be updated until further notice.

16.6.2 Converting from Old Document to CFETP. All AFJQSs and previous CFETPs are replaced by this CFETP; therefore, conversion of all training records to this CFETP STS is mandatory. Use this CFETP STS (or automated STS) to identify and certify all past and current qualifications. Document and certify all previous and current training IAW DAFMAN 36-2689.

16.7 STS. This STS is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the AETC Studies and Analysis Squadron, by Senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in DAFI 36-2502, *Airman Promotion/Demotion Programs*. WAPS is not applicable to the Air National Guard or Air Force Reserve.

17. Recommendations. Report unsatisfactory performance of individual course graduates to the AETC training manager at 363 TRS/TRR, 520 Missile Road, Sheppard AFB TX, 76311-2261, DSN 736-8777, or e-mail to: camilla.cropper@us.af.mil. Reference specific STS paragraphs. For a quick response to problems, call our customer service information line, DSN 736-5236.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

TOM D. MILLER
Lieutenant General, USAF
DCS/Logistics, Engineering & Force
Protection

2 Attachments

1. Proficiency Code Key
2. STS 2R2X1

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QUALITATIVE REQUIREMENTS MAINTENANCE MANAGEMENT SPECIALTY

STS 2R1X1

<i>This Block Is For Identification Purposes Only</i>		
Name Of Trainee		
Printed Name (Last, First, Middle Initial)	Initials (Written)	SSAN Last Four
Printed Name of Certifying Official and Written Initials		
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	

QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	Definition: The individual
Task Performance Levels	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (Extremely Limited)
	2	Can do most parts of the task. Needs only help on hardest parts. (Partially Proficient)
	3	Can do all parts of the task. Needs only a spot check of completed work. (Competent)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (Highly Proficient)
*Task Knowledge Levels	a	Can name parts, tools, and simple facts about the task. (Nomenclature)
	b	Can determine step by step procedures for doing the task. (Procedures)
	c	Can identify why and when the task must be done and why each step is needed. (Operating Principles)
	d	Can predict, isolate, and resolve problems about the task. (Advanced Theory)
**Subject Knowledge Levels	A	Can identify basic facts and terms about the subject. (Facts)
	B	Can identify relationship of basic facts and state general principles about the subject. (Principles)
	C	Can analyze facts and principles and draw conclusions about the subject. (Analysis)
	D	Can evaluate conditions and make proper decisions about the subject. (Evaluation)
Explanations * A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b) ** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks. - This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC. X This mark is used alone in the course columns to show that training is required but not given due to limitations in resources. NOTE: All tasks and knowledge items shown with a proficiency code are trained during wartime.		