AFSC 4T0X1

MEDICAL LABORATORY
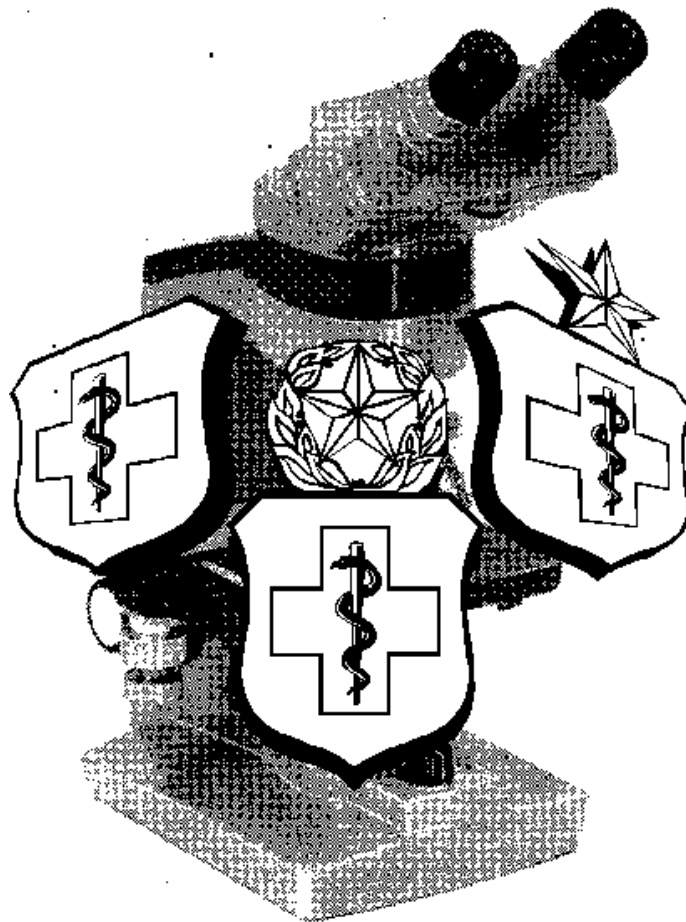
CAREER FIELD EDUCATION

AND TRAINING PLAN

CAREER FIELD EDUCATION AND TRAINING PLAN
MEDICAL LABORATORY SPECIALTY

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MEDICAL LABORATORY SPECIALTY
AFSC 4T0X1
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PART I

Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for the medical laboratory specialty. The CFETP will provide laboratory personnel a clear career path to success and will instill rigor in all aspects of career field training. **NOTE***:* Civilians occupying associated positions will use Part II to support duty position qualification training.

2. The CFETP consists of two parts; both parts are used by supervisors to plan, manage, and control training within the career field.

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 skill level with specialty qualifications (knowledge, education, training, and other). **Section D** indicates resource constraints. Examples are funds, manpower, equipment, and facilities. **Section E** identifies transition training guide requirements for the ranks of SSgt through MSgt.

2.2. Part II provides training guidance for all skill levels. **Section A** identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training, wartime tasks, core task, and correspondence course requirements. **Section B** contains course objective information supervisors will use to determine if an airman has satisfied training requirements. **Section C** identifies available support materials. An example is a Qualification Training Package (QTP). There are no QTPs required at this time for the medical laboratory specialty. **Section D** identifies a training course index supervisors can use to determine resources available to support training. Included here are both mandatory and optional courses. **Section E** identifies MAJCOM unique training requirements supervisors can use to determine additional training required for the associated qualification needs. Training for AFRC and ANG personnel are identified in this section. **Section F** provides guidance on managing and documenting enlisted training (medical specific) and six-part competency folders.

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 the unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS, ACRONYMS, AND TERMS EXPLAINED

Air Force Career Field Manager (AFCFM). Individual appointed by HQ USAF for an assigned Air Force Specialty (AFS). AFCFMs are responsible for the overall management of their assigned career field. In addition they are responsible for development, implementation and maintenance of the Career Field Education and Training Plan (CFETP). For more information on AFCFM responsibilities, see AFI 44-104, *Military and Civilian Consultant Programs and Medical Enlisted Career Field Manager Program.* **NOTE:** For purposes of this CFETP, from this point forward the term "AFCFM" will refer to the 4T0XX AFCFM.

Air Force Job Qualification Standard/Command Job Qualification Standard (AFJQS/CJQS). A comprehensive task list that describes a particular job type or duty position. Used by supervisors to document task qualifications. Tasks on an AFJQS/CJQS are common to all persons serving in the described duty position.

Career Field Education and Training Plan (CFETP). A comprehensive, multipurpose document encapsulating 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 training is budget defensible.

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

Core Task. Tasks that the AFCFM identifies as minimum qualification requirements within an AFSC, regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. Guidance for completing core tasks can be found in the applicable CFETP narrative.

Course Objective List (COL). A publication, derived from the initial/advanced skills course training standard, identifying the tasks and knowledge requirements, and respective standards provided, to achieve a 3-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, *Developing, Managing and Conducting Training.*

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.

Expeditionary Medical Support (EMEDS). Operational medical support concept of an Air Force Theater Hospital (AFTH); the health support piece of the Expeditionary Aerospace Force. EMEDS is a modular, flexible, lean, state-of-the-art capability that allows theater commanders to tailor medical support to best suit their needs. See AFI 41-106, *Medical Readiness Planning and Training*, for additional information.

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

Go/No Go. The stage at which an individual has gained enough skill, knowledge, and experience to perform the tasks without supervision. Meeting the task standard.

Instructional System Development (ISD). A deliberate and orderly, but flexible, process for planning, developing, implementing, and managing instructional systems. It ensures personnel are taught in a cost efficient way the knowledge, skills, and attitudes essential for successful job performance.

Initial Skills Training. A formal resident course that results in an AFSC 3-skill level award.

MAJCOM Functional Manager (MFM). MFMs are appointed field representatives who provide accurate, up-to-date information to enhance decisions made by the AFCFM. MFMs are command focal points providing guidance, information, and support within the command on enlisted issues. Additionally MFMs advise MAJCOM Surgeons General (SGs) on utilization of resources and personnel within their respective command.

Master Task Listing (MTL). Document maintained within a workcenter that identifies all tasks performed in that workcenter. This includes core, critical, position qualification, and wartime tasks. This document can be automated.

Master Training Plan (MTP). A comprehensive training plan for a workcenter. It can include the MTL, QTPs, AFJQS, task breakdowns, commercial publications, and any other document that supports training.

Occupational Survey Report (OSR). 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 conducted to certify personnel in both upgrade (skill-level award) and job qualification (duty position certification) training.

Proficiency Training. Additional training, either in-residence or exportable advanced training courses, or OJT, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade.

Qualification Training (QT). Actual hands-on task performance training designed to qualify an individual in a specific duty position. This portion of the dual channel OJT program occurs both during and after the upgrade training process. It is designed to provide the performance skills required to do the job.

Readiness Skills Verification Program (RSVP). A framework to ensure adequate experience and training for those required skills, knowledge and proficiency in a deployed setting.

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

Skills Training. A formal course which results in the award of a skill level.

Specialty Training. A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in the award of a skill level.

Specialty Training Standard (STS). An Air Force publication that describes skills and knowledges that airmen in a particular AFS need on the job. It further serves as a contract between AETC and the user to show the overall training requirements for an AFSC that the formal schools teach.

Standard. An exact value, a physical entity, or an abstract concept, established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

Sustainment Training. Training required by AF Reserve personnel in order to demonstrate continued (sustained) competency in required task elements. Tasks requiring sustainment training are identified by an "s" in Column 2 of the STS.

Task Certifier. A person whom the commander assigns to determine an individual's ability to perform a task to a required standard. See AFI 36-2201, *Developing, Managing and Conducting Training*, for further details.

Total Force. All collective Air Force components (active, reserve, guard, and civilian elements) of the United States Air Force.

Trainer. A trained and qualified person who teaches airmen to perform specific tasks through OJT methods. See AFI 36-2201, *Developing, Managing and Conducting Training*, for further details.

Upgrade Training (UGT). Mandatory training which leads to attainment of a higher level of proficiency.

Utilization and Training Workshop (U&TW). A forum of MAJCOM Air Force Specialty Code (AFSC) functional managers, Subject Matter Experts (SMEs), and AETC training personnel that determines career ladder training requirements.

Wartime Course. Any course (for officers or enlisted) designed by higher headquarters to be conducted during wartime. Wartime courses are categorized as (1) courses directed to continue training at the existing student flow to satisfy the training personnel requirements (TPR), or (2) courses directed to expand student flow above the TPR to satisfy wartime training requirements.

Wartime Tasks. Tasks/Knowledge items trained during the accelerated resident wartime course. Graduates of the wartime course will only have training on those identified items to the specified proficiency code level. Wartime tasks are identified in column 2 of the STS with a "w".

Section A - General Information

1. Purpose. This CFETP provides information necessary for the AFCFM, 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 the 4T0X1 specialty should receive in order 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 of the technical training centers.

1.1. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 5-, 7- and 9-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/knowledge required to do the job. Proficiency training is additional training, either in-residence or exportable advanced training courses, or OJT, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes, some are:

1.1.1. 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.

1.1.2. 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.

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

1.1.4. Identifies major resource constraints that impact full implementation of the desired career field training process.

2. Uses. The plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual 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 will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. Identified requirements can be satisfied by OJT, resident training, contract training, or exportable courses. MAJCOM-developed training to support this AFSC must be identified for inclusion into this plan.

2.3. Each individual 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 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 Descriptions.

4.1. Medical Laboratory Superintendent/Chief Enlisted Manager (CEM).

4.1.1. Specialty Summary. Manages all medical laboratory activities in support of patient care, medical research, and military public health. Related DoD Occupational Subgroup: 311.

4.1.2. Duties and Responsibilities.

4.1.2.1. Plans and organizes laboratory activities. Composes and reviews local medical laboratory operating instructions. Advises superiors regarding status and adequacy of equipment, supplies, budgets, personnel training, and operating efficiency. Coordinates with other activities, agencies, and organizations.

4.1.2.2. Directs medical laboratory activities. Resolves problems concerning medical laboratory activities. Ensures supply and equipment availability. Applies continuous and effective internal quality control of all medical laboratory elements.

4.1.2.3. Inspects and evaluates medical laboratory activities. Furnishes deficiency reports and outstanding accomplishments to superiors. Interprets inspection findings and recommends corrective action. Supervises laboratory work area maintenance according to good laboratory techniques, taking precautions to maintain safe conditions for both medical treatment facility and laboratory personnel. Evaluates laboratory quality control program effectiveness.

4.1.2.4. Performs medical laboratory functions. Assists medical officers and allied scientists in research assignments pertaining to the field of pathology. Directs toxicology procedures incident to aerospace pathology and forensic medicine programs. Assists in developing procedures for detecting bacteriological agents incident to biological warfare.

4.2. Medical Laboratory Apprentice/Journeyman/Craftsman.

4.2.1. Specialty Summary. Tests and analyzes specimens of human origin and other substances by established scientific laboratory techniques to aid in diagnosing, treating, and preventing disease;

supports medical research and supervises medical laboratory activities. Related DoD Occupational Subgroup: 311.

4.2.2. Duties and Responsibilities.

4.2.2.1. Performs hematological tests and urinalyses. Accomplishes standardized qualitative and quantitative evaluation of erythrocytes, leukocytes, and thrombocytes. Examines stained blood smears microscopically and refers any abnormal cells to superiors. Performs coagulation studies on human blood and plasma. Performs chemical, macroscopic, and microscopic urine specimen examinations.

4.2.2.2. Performs chemical analyses. Analyzes human material or other products submitted to the laboratory, using photometric, titrimetric, radioisotope, or any other chemical or physical procedure applicable to clinical chemistry. Calibrates and maintains instruments. Makes necessary calculations and reports data to superiors. Reviews chemistry procedures for currency and validity.

4.2.2.3. Performs blood bank duties. Collects and processes blood aseptically by standardized techniques. Completely types donor and recipient blood; assists in crossmatching blood to establish donor-recipient compatibility, reporting any abnormal reactions to immediate supervisor. Prepares blood derivatives. Accomplishes all techniques required for blood transfusion services.

4.2.2.4. Performs microbiological and serological tests. Conducts procedures to isolate and identify bacteria by macroscopic and microscopic examination, staining, biochemical and immunological procedures, or any other determination of growth characteristics. Performs sensitivity tests on pathogenic bacteria. Assists in identifying viruses and fungi. Applies parasitology techniques to recover and identify parasites. Performs general and specified serological tests for identifying antibodies and antigens specific to disease.

4.2.2.5. Accomplishes general medical laboratory duties. Conducts bacteriological and chemical examination of food products, water, dairy products, and sewage incidental to preventive and veterinary medicine programs. Takes all necessary precautions to maintain safe conditions in the laboratory for both medical treatment facility and laboratory personnel. Performs preventive maintenance procedures on laboratory equipment. Performs, evaluates, and interprets laboratory quality control procedures. Operates computerized laboratory information systems. Prepares reagents and controls for use in test performance. Prepares specimens for shipment to reference laboratories; processes incoming specimens for medical laboratory analyses.

4.2.2.6. Plans, organizes, directs, coordinates, and evaluates medical laboratory activities.
Composes local medical laboratory operating instructions. Applies continuous effective internal quality control of all medical laboratory elements. Advises superiors regarding status and adequacy of equipment, supplies, personnel training, and operating efficiency. Coordinates with other activities, agencies, and organizations. Resolves problems concerning medical laboratory operations. Inspects medical laboratory activities. Furnishes deficiency reports and outstanding accomplishments to superiors. Participates in proficiency surveys; interprets inspection findings and recommends corrective actions. Ensures compliance with regulatory and accreditation agencies. Evaluates point-

of-care testing (POCT) activities. Researches medical laboratory related subject material and presents educational inservices.

4.2.2.7. Performs medical laboratory functions. Assists medical officers and allied scientists in research assignments pertaining to the field of pathology. Directs toxicology procedures incident to aerospace pathology and forensic medicine programs. Assists in epidemiological and demand reduction investigations. Assists in developing procedures for detecting bacteriological agents incident to biological warfare.

5. Skill/Career Progression. 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 that everyone involved in training 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 each individual receives viable training at appropriate points in their career. The following narrative, and the AFSC 4T0X1 career field flowcharts in Section 8, identifies the training career path. It defines the training required for an individual's career.

5.1. Apprentice 3-Skill Level. Initial skills training in this specialty consists of the tasks and knowledge training provided in the 3-skill level resident courses: Medical Laboratory Apprentice/ Phase I (J3AQR4T031 001) located at Sheppard AFB TX, and Medical Laboratory Apprentice/ Phase II (J5ABO4T031 001) conducted at one of the designated medical treatment facilities (MTFs). The decision to train specific tasks and knowledge items in the initial skills courses is based on a review of occupational survey report (OSR) data, training requirements analysis (TRA) data, and 4T0X1 subject-matter expert (SME) input. Task and knowledge training requirements are identified in the specialty training standard (STS) in Part II, Section A of the CFETP. Individuals must complete **both** initial skills courses **(Phase I and Phase II)** to be awarded AFSC 4T031.

5.2. Journeyman 5-Skill Level. Upgrade training to the 5-skill level in this specialty consists of completing: (1) all core tasks specified by an asterisk (*) in column 2 of the STS (see note below), (2) all STS tasks for the assigned duty position, and (3) Career Development Courses (CDC) 4T051A, 4T051B, and 4T051C. Once upgraded to the 5-skill level, a journeyman will maintain proficiency by completing all continuation training required or specified by command or local policies. SrA will attend ALS after reaching 48 months TAFMS or after being selected for promotion to SSgt. Individuals will use their CDCs to prepare for testing and promotion under the Weighted Airman Promotion System (WAPS). They should also consider continuing their education toward a CCAF degree in Medical Laboratory Technology and obtaining national certification as a Medical Laboratory Technician. Five level journeymen are eligible for application and selection as an instructor for the Medical Laboratory Apprentice/Phase I and Phase II courses. **NOTE:** Core tasks can be satisfied by the trainee either by demonstrating subject knowledge to the specified skill level or performing the actual procedure. Subject knowledge levels are used alone when the task cannot be performed at current duty location, and appropriate documentation annotated on the AF Form 623A, **On-The-Job Training Record Continuation Sheet.**

5.3. Craftsman 7-Skill Level. Upgrade training to the 7-skill level in this specialty consists of completing: (1) all core tasks, (2) all STS tasks for the assigned duty position, (3) Medical Laboratory Craftsman ICW Course (J6ACU4T07X 000) [Note: personnel who graduated from

Medical Laboratory Craftsman course (J3ACR4T07X 000) do NOT have to complete course J6ACU4T07X 000], and (4) CDCs 4T051A, 4T051B, and 4T051C (or previous editions) **if not previously completed during 5-skill level UGT.** A laboratory craftsman can be expected to fill various supervisory and management positions within the laboratory such as NCOIC of the laboratory or a department. In addition, they may develop work schedules for subordinate personnel and ensure necessary manning levels are maintained at all time during hours of laboratory operations. Seven-levels should take courses or obtain added knowledge on management of resources and personnel. Continued academic education through CCAF and higher degree programs is encouraged. In addition, when promoted to TSgt, individuals will attend the Noncommissioned Officer Academy.

5.4. Superintendent 9-Skill Level. To be awarded AFSC 4T090, an individual must be an E8 or E8 selectee, complete the Senior NCO Academy, and any other requirement specified in AFI 36-2101, *Classifying Military Personnel (Officer and Airmen).* A 9-skill level can be expected to fill positions such as Superintendent of Laboratory Services, Medical Laboratory Flight Superintendent, or various staff positions within a medical group, such as Squadron Superintendent. 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. Additional higher education and completion of courses outside their career AFSC are also recommended.

6. Duty Titles. Appropriate duty titles for personnel working in this specialty depend on rank, skill level, and/or actual duty position as specified on the Unit Manning Document (UMD). Generally, 4T031 personnel will have the title, *Medical Laboratory Apprentice*; 4T051 personnel will have the title, *Medical Laboratory Journeyman*; and 4T071 personnel will have the title, *Medical Laboratory Craftsman.* In those instances where an NCO is responsible for managing a distinct element of the laboratory—or the laboratory as a whole—with more than one staff personnel assigned, the title, *NCOIC, XXXX Element/Flight*, is appropriate. Additional use of the *NCOIC* and *Assistant NCOIC* titles should be strictly limited. SrA and below should never have the *NCOIC* title since they are not NCOs. The title *Superintendent* will not be used except by SMSgt 4T090s, or MSgt 4T07Xs filling a 4T090 position on the UMD. MSgts and below filling MSgt and below positions will NOT use the title *Superintendent.* CMSgt 4T000s may use the title, *Manager, XXXX Flight/Squadron.* A SMSgt 4T090 assigned to a CMSgt billet may also use the *Manager* title. No 4T0XX personnel should ever have dual duty titles; in instances where personnel hold two significant duties, the duty title should reflect the position more than 50% of the member's time is spent performing.

7. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the 4T0X1 career field. The spectrum includes a strategy for when, where, and how to meet training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training. The following training decisions were made during the AFSC 4T0X1 Utilization and Training Workshop, held 15-19 November 1999 at Sheppard AFB, TX. A follow-up coordination was done by the AFCFM with MFMs and AETC training personnel.

7.1. Initial Skills Training. The Medical Laboratory Apprentice course must meet the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) guidelines. The initial skills course provides airmen the needed education, motivation and training skills necessary to become 3-skill level apprentices.

7.2. 5-Skill Level Upgrade Requirements. Completion of CDCs 4T051A, 4T051B, and 4T051C are mandatory before the individual is eligible for upgrade to the 5-skill level. All core tasks will be completed, as well as any duty position STS tasks identified by the supervisor. Individuals must complete a minimum of 15 months in UGT (9 months for retrainees).

7.3. 7-Skill Level Upgrade Requirements. Completion of CDCs 4T051A, 4T051B, and 4T051C (or previous edition), if not already accomplished during 5-skill level UGT. Completion of the Medical Laboratory Craftsman ICW Course (J6ACU4T07X 000) is mandatory before the individual is eligible for upgrade to the 7-skill level. All core tasks, as well as any duty position STS tasks identified by the supervisor, will also be completed. Individuals must complete a minimum of 12 months in 7-skill level UGT.

7.4. **Proficiency Training.** Any additional knowledge and skill requirements which were not taught through initial skills or UGT are assigned to continuation training. The purpose of continuation training is to provide additional training exceeding minimum upgrade training requirements with emphasis on present and future duty positions. Individual medical laboratory managers must develop a continuation training program that ensures individuals in the medical laboratory career field receive the necessary training at the appropriate point in their career. The training program will identify both mandatory and optional training requirements.

8. Enlisted Medical Badge. Although AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel,* states the enlisted medical badge is an optional uniform item, it is strongly recommended all 4T0X1 personnel authorized to wear the badge do so proudly – identifying them as Air Force Medical Service professionals.

8.1. Basic Enlisted Medical Badge. Authorized for wear after award of the 3-skill level. It is highly encouraged that students graduating from Phase II technical training are awarded this initial badge as part of their graduation ceremony.

8.2. Senior Enlisted Medical Badge. Worn after award of the 7-skill level.

8.3. Master Enlisted Medical Badge. Authorized for wear by MSgts and higher with five years experience in the specialty from award of the 7-skill level.

9. Community College of the Air Force (CCAF). Enrollment in CCAF automatically occurs upon completion of Basic Military Training. CCAF provides the opportunity to obtain an Associate in Applied Science Degree in Medical Laboratory Technology. Completion of initial skills training in the Medical Laboratory Apprentice Phase I and Phase II courses satisfies the technical education and the program elective requirements for a CCAF degree. Currently 34 semester hours are awarded after the completion of Phase I and 53 semester hours are awarded after

the completion of Phase II. The Medical Laboratory Craftsman course (eliminated 1 Oct 01) awarded 5 additional semester hours in laboratory management.

9.1. Degree Requirements: The journeyman or 5-skill level must be awarded and the following requirements must be met:

Subject Courses	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15

Program Electives
     Technical Education; Leadership, Management, and
     Military Studies; or General Education
	15

Total	64

Complete degree requirements can be found in the CCAF General Catalog located at: http://www.au.af.mil/au/ccaf . View newest catalog index, and look for Medical Laboratory Technology degree program elements.

9.1.1. Technical Education (24 Semester Hours): 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 subjects/courses.

9.1.2. Leadership, Management, and Military Studies (6 Semester Hours): Professional military education and/or civilian management courses. **Note:** Credits awarded from completion of the Medical Laboratory Craftsman course will not fulfill this requirement.

9.1.3. Physical Education (4 Semester Hours): The requirement is satisfied by the completion of Basic Military Training.

9.1.4. 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.

9.1.5. Program Electives (15 Semester Hours): Satisfied with applicable Technical Education; Management and Military Studies; or General Education subject/courses, including natural science courses meeting GER application criteria. Six semester hours of CCAF degree applicable technical credits 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.

9.2. Off-duty Education. Additional off-duty education is a personal choice and is *highly* encouraged. Individuals desiring to become an AETC Instructor should actively pursue an associate degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools (SACS).

9.3. Occupational Instructor Certification. Upon completion of instructor qualification training, consisting of the instructor methods course and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

9.4. Trade Skill Certification. When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

NOTE: Students who have completed both Medical Laboratory Apprentice Phase I and Phase II courses and desire certification should contact the following agencies: American Society of Clinical Pathologists (ASCP), 1-800-621-4142, http://www.ascp.org; American Medical Technologists (AMT), 1-800-275-1268, http://www.amt1.com; or National Credentialing Agency for Laboratory Personnel, Inc. (NCA), (913) 438-5110, http://www.nca-info.org.

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10. Career Field Path. Charts depicting this specialty's career path are presented on the next two pages. The **Medical Laboratory (4T0X1) Enlisted Career Path** outlines when training is required for each skill level and function within this specialty. The **Enlisted Education and Training Path** presents education and training requirements, average sew-on time for stripes, and a chart representing earliest date of rank and high year of tenure (HYT) dates for ranks of SrA and above.

10.1. Medical Laboratory (4T0X1) Enlisted Career Path.
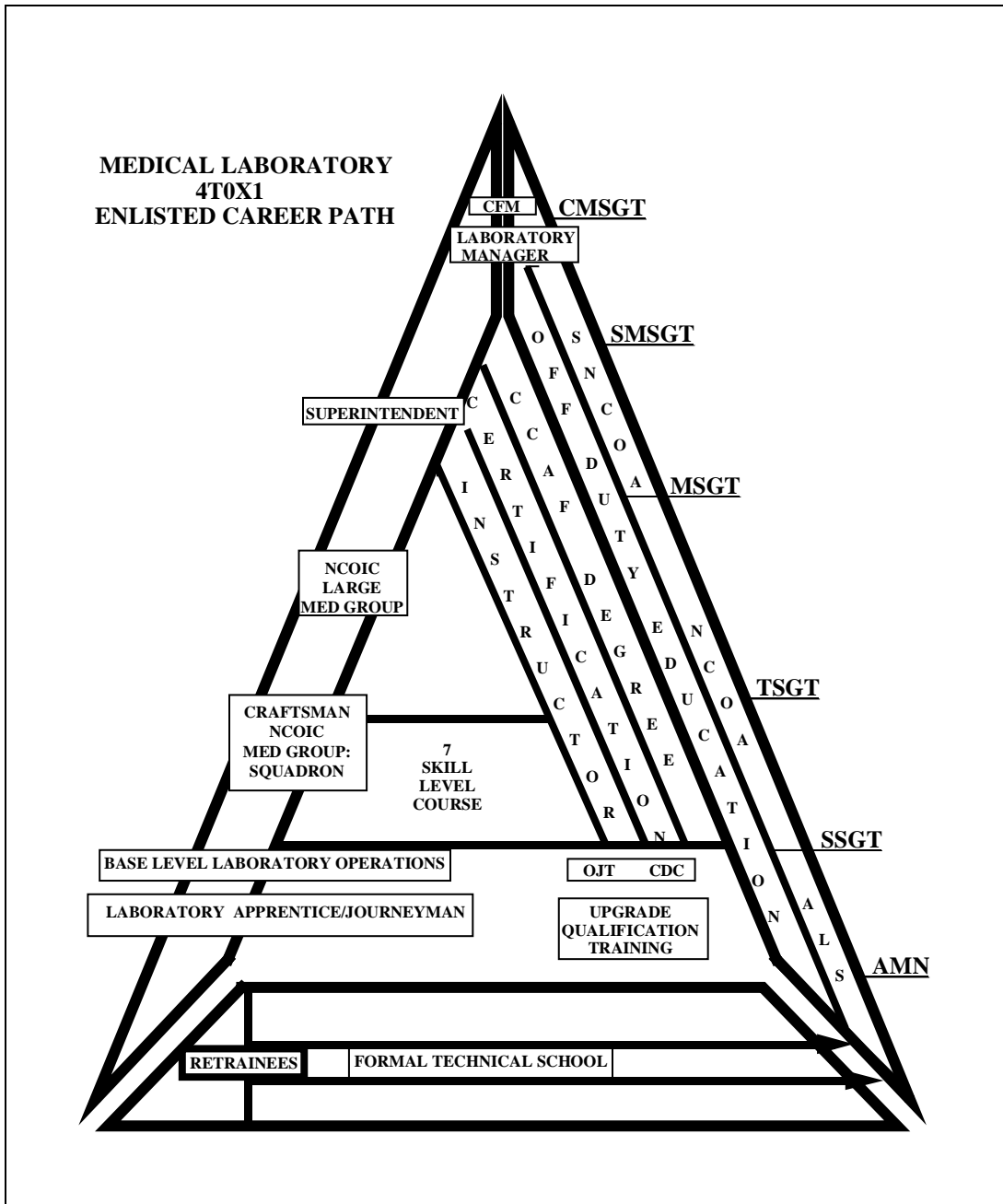
10.2. Enlisted Education and Training Path.

Enlisted Education and Training Path				
Education and Training Requirements	**GRADE REQUIREMENTS**			
	Rank	**Average Sew-on ***	**Earliest Sew-on**	**High Year Of Tenure (HYT) ****
Basic Military Training				
Upgrade To Apprentice: Technical Schools (3-Skill Level) - Medical Laboratory Apprentice Course/Phase I - Medical Laboratory Apprentice Course/Phase II	Amn A1C	6 months 16 months		
Upgrade To Journeyman (5-Skill Level) - Minimum 15 months in UGT - Complete CDCs 4T051A, 4T051B, and 4T051C - Must be SrA or above for award of the 5-skill level	SrA	3 years	28 months	10 years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt selectee - Resident graduation is a prerequisite for SSgt sew-on **(active duty only)**	**Trainer** - ALS graduate - Possess the same AFSC at a higher skill level than the trainee, and be certified to train others - Must attend formal OJT Trainer Training and appointed by Commander			
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt - 12 months UGT - Complete 5-skill level CDCs (if not previously done) - Complete Medical Laboratory Craftsman ICW Course - Must be a 7-skill level to sew on TSgt	SSgt	6.5 years	3 years	20 years
	Certifier - Possess at least 7-skill level in same AFSC, if possible, but not required - Attend formal OJT Certifier Course and appointed by Commander - Be a person other than the trainer			
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt selectee - Resident graduation is a prerequisite for MSgt sew-on (active duty only)	TSgt MSgt	13.5 years 16.5 years	5 years 8 years	22 years 24 years
USAF Senior NCO Academy (SNCOA) - Must be a CMSgt selectee, SMSgt or SMSgt selectee, or a MSgt selected to attend (active duty only) - Resident graduation is a prerequisite for CMSgt sew-on (active duty only) **Upgrade To Superintendent** (9-Skill Level) - Minimum rank of SMSgt - Must be a resident graduate of SNCOA (active Duty only)	SMSgt	19.5 years	11 years	26 years
Upgrade To Chief Enlisted Manager (4T000)	CMSgt	21.6 years	14 years	30 years

* Based on average TIS, per grade, for promotion cycles 1996-2001, 4T0X1 selectees only
** May extend for up to 2 extra years if allowable under periodic personnel programs (contact local MPF for more information)

Section C - Skill Level Training Requirements

11. Purpose. Skill level training requirements in this 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 at Part II, Sections A and B, of this CFETP.

12. Apprentice Level Training (3-skill level):

12.1. Specialty Qualifications:

12.1.1. Knowledge. Knowledge of medical terminology, clinical laboratory and pathology fundamentals – as outlined in training material covered in Medical Laboratory Phase I and Phase II technical training. Knowledge of medical ethics applicable to the areas of medical laboratory procedures, and general administrative principles.

12.1.2. Education. For entry into this specialty, completion of high school or college courses in algebra and chemistry are mandatory. Completion of courses in biology and other basic sciences is desirable.

12.1.3. Training. For award of AFSC 4T031, completion of the basic medical laboratory course (Medical Laboratory Apprentice Phase I and Phase II) is mandatory.

12.1.4. Experience. For AFSC 4T031, no prior experience is mandatory for the award of the   3-skill level. Trainees are required to satisfy the specific subject and task knowledge training requirements according to Column 4A of the STS.

12.1.5. Other. For entry into this specialty, normal color vision, as defined in AFI 48-123, Medical Examination and Standards, is mandatory.

12.2. Training Sources/Resources. For AFSC 4T031, completion of Medical Laboratory Apprentice/Phase I course (J3AQR4T031 001) and Medical Laboratory Apprentice/Phase II course (J5ABO4T031 001) satisfies the knowledge and training requirements specified in the specialty qualification section.

12.3. Implementation. Entry into AFSC 4T031, initial skills training, is accomplished by pipeline students from basic training or by approved retraining from any AFSC.

13. Journeyman Level Training (5-skill level):

13.1. Specialty Qualifications. All 4T031 qualifications apply for the 4T051 requirements.

13.1.1. Knowledge. In addition to the knowledge required for a 3-level, the following subjects are mandatory: increased knowledge of safety and health hazards; professional conduct; routine equipment maintenance; general management principles; general laboratory cleanliness; and increased knowledge of principles and procedures in the areas of hematology, clinical chemistry, urinalysis, microbiology, parasitology, blood banking, immunology, and specimen collection, processing, and shipment.

13.1.2. Education. N/A

13.1.3. Training. Completion of Career Development Courses 4T051A, 4T051B, and 4T051C.

13.1.4. Experience. The following experience is mandatory for award of the 4T051 AFSC: qualification in and possession of AFSC 4T031.

13.1.5. Other. Same as AFSC 4T031.

13.2. Training Sources/Resources. Completion of CDCs 4T051A, 4T051B, and 4T051C satisfies the knowledge requirements specified in the specialty qualification for the award of the 5-skill level.

13.3. Implementation. Entry into 5-skill level upgrade training is initiated immediately after arrival at first permanent duty station. The 5-skill level is awarded when an individual: (1) possesses the 3-skill level and is in the rank of SrA or above, (2) completes a minimum of 15 months in 5-skill level UGT, (3) completes the appropriate 5-skill level CDCs, (4) completes all core tasks specified in Column 2 of the STS, (5) completes all STS tasks for the assigned duty position, and (6) is recommended by their supervisor according to AFI 36-2101, Classifying Military Personnel (Officers and Airmen).

14. Craftsman Level Training (7-skill level):

14.1. Specialty Qualifications. All 4T051 qualifications apply to 4T071 requirements.

14.1.1. Knowledge. In addition to the knowledge required for the 5-skill level, the following subjects are mandatory: increased knowledge of health and safety hazards, and implementation of programs designed to minimize such hazards; medical laboratory management functions – to include budgeting, scheduling, procurement of supplies and equipment, and related administrative principles; and increased knowledge of principles and procedures in the areas of hematology, clinical chemistry, urinalysis, microbiology, parasitology, blood banking, immunology, and specimen collection, processing and shipment.

14.1.2. Education. N/A

14.1.3. Training. Completion of Medical Laboratory Craftsman ICW course (J6ACU4T07X 000).

14.1.4. Experience. The following experience is mandatory for the award of the 4T071 AFSC: qualification and possession of AFSC 4T051.

14.1.5. Other. Same as AFSC 4T031.

14.2. Training Sources/Resources. Completion of Medical Laboratory Craftsman course (J3ACR4T07X 000) or Medical Laboratory Craftsman ICW course (J6ACU4T07X 000) satisfies the knowledge and performance training requirements specified in the specialty qualification for the award of the 7-skill level.

14.3. Implementation. The 7-skill level is awarded when an individual: (1) possesses the 5-skill level and is in the rank of SSgt or above, (2) completes a minimum of 12 months UGT, (3) completes CDC 4T07X or the Medical Laboratory Craftsman course, (4) completes all core tasks specified in Column 2 of the STS, (5) completes all STS tasks for the assigned duty position, and (6) is recommended by their supervisor.

15. Superintendent Level (9-skill level):

15.1. Specialty Qualifications. All 4T071 qualifications apply to 4T090 requirements.

15.1.1. Knowledge. Knowledge of overall administrative, logistical, managerial and technical laboratory activities is mandatory.

15.1.2. Education. Completion of an Associates Degree in Medical Laboratory Technology highly encouraged. Completion of additional degrees in medical laboratory or management-related fields of study encouraged.

15.1.3. Training. There are no formal training requirements.

15.1.4. Experience. For award of AFSC 4T090, qualification in and possession of either AFSC 4T071, 4T072, or 4T073 is mandatory.

15.1.5. Other. Same as AFSC 4T031.

15.2. Training Sources/Resources. N/A.

15.3. Implementation. The 9-skill level is awarded when an individual: (1) possesses a 7-skill level, (2) is an E8 or an E8 selectee, (3) has completed the Senior NCO Academy, and (4) has completed any other requirements specified in AFI 36-2101.

Section D - Resource Constraints

16. Purpose. This section identifies known resource constraints which 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 required, office

of primary responsibility, and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.

17. Apprentice 3-Skill Level Training: No 3-skill level resource constraints exist.

18. Journeyman 5-Skill Level Training:

18.1. Constraints. Three 5-skill level career development courses exist at this time consisting of 11 volumes. Per changes to the STS/CFETP, resulting from the November 1999 U&TW, all 11 volumes will require moderate to major revision.

18.1.1. Impact. Training requirements, as outlined in the new STS/CFETP, will not be met for the 4T051A, 4T051B, and 4T051C career development courses if the revisions are not made.

18.1.2. Resources Required. One CDC writer already exists. If all three courses are to be revised and completed by July 2003 another CDC writer will be required. With one writer the proposed approximate completion dates for the courses are: December 2002 for 4T051A, November 2003 for 4T051B, and November 2004 for 4T051C. If another CDC writer is not assigned the 4T051B and 4T051C courses will not meet the field need date.

18.1.3. Action Required. A temporary second CDC writer position needs to be approved and filled as soon as possible.

18.2. OPR/Target Completion Date. Mrs. Jo Etta Wimberley, DSN 736-6794. The target completion date (Field Need Date) of all three courses is March 2003.

19. Craftsman 7-Skill Level Training:

19.1. Constraints. No 7-skill level resource constraints exist.

19.1.1. Impact. N/A

19.1.2. Resources Required. N/A

19.1.3. Action Required. N/A

19.2 OPR/Target Completion Date. N/A

Section E - Transitional Training Guide – There are currently no transitional training requirements. This area is reserved.

Part II

Section A - Specialty Training Standard

1. Implementation. This STS will be used for technical training provided by AETC for Medical Laboratory Apprentice Phase I class 020617 graduating 021015 and Medical Laboratory Apprentice Phase II class 021029 graduating 030724.

2. Purpose. As prescribed in AFI 36-2201, *Developing, Managing, and Conducting Training,* this STS:

2.1. Lists in column 1 (Tasks, Knowledge, and Technical References) the most common tasks, knowledge, and technical references (TR) necessary for airman to perform duties in the 3-, 5-, and 7-skill level. Number task statements sequentially (i.e., 1.1, 1.2, 2.1). Column 2 (Core/Wartime/ Sustainment Tasks) identifies Core Tasks by asterisk (*) for specialty-wide training requirements, tasks identified in column 2 with a "w" are trained in the resident wartime course, and tasks identified with a "s" are mandatory tasks for AF Reserve 4T0X1 personnel as part of their sustainment training.

2.2. 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.

2.3. 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. See CADRE/ AFSC/CDC listing maintained by the unit training manager for current CDC listings. If the supervisor wants the trainee skilled at a higher level than is indicated, additional qualification training must occur at the local level, and documented appropriately on the trainee's AF Form 623a.

2.4. Qualitative Requirements. The page prior to the STS contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.5. Becomes a job qualification standard (JQS) for on-the-job training when placed in the 6-part folder, Section 2, with AF Form 623, **On-The-Job Training Record**, and used IAW AFI 36-2201. If available, AF Form 623B will be used in lieu of AF Form 623. When used as a JQS, the following requirements apply:

2.5.1. *Documentation.* Document and certify completion of training. Identify duty position requirements by circling—in pencil—the subparagraph number next to the task statement. As a minimum, complete the following columns in Part II of the CFETP: Training Completed, Trainee Initials, Trainer Initials, Certifier Initials (if applicable). An AFJQS may be used in lieu of Part II of the CFETP only upon approval of the AFCFM. Refer to Part II, Section F of this CFETP for training documentation (medical specific). **NOTE:** The AFCFM may supplement these minimum documentation procedures as needed or deemed necessary for the career field.

2.5.1.1. *Transcribing from Old CFETP to New CFETP.* Use the new CFETP to identify and certify all past and current qualifications IAW AFMANs 36-2245, *Managing Career Field Education and Training*, and 36-2247, *Planning, Conducting, Administrating, and Evaluating Training.* For those core and critical tasks previously certified and required in the current duty position, evaluate current qualifications and, when verified, recertify using current date as the completion date, and enter the trainee's and certifier's initials. Remember, during the transcription process no training is taking place. Therefore the trainer's initials are not required. For non-core and non-critical tasks previously certified and required in the current duty position, evaluate current qualifications and, when verified, recertify using current date as the completion date, and enter the trainee's and trainer's initials. When transcribing previous certification for tasks *not* required in the current duty position, carry forward *only* the previous completion date of certification. If and when the transcribed tasks become duty position requirements, recertify using standard certification procedures. The person whose initials appear in the trainer or certifier block during the transcription process must meet the requirements for their respective roles. Upon completion of the transcription process, give the old CFETP to the member.

2.5.1.2. *Documenting Career Knowledge.* When a CDC is not available: the supervisor identifies STS training references that the trainee requires for career knowledge and ensures, as a minimum, that trainees cover the mandatory items in AFMAN 36-2108. For two-time CDC course exam failures: supervisors identify all STS items corresponding to the areas covered by the CDC. The trainee completes a study of STS references, undergoes evaluation by the task certifier, and receives certification on the STS. **NOTE***:* Career Knowledge must be documented prior to submitting a CDC waiver.

2.5.1.3. *Decertification and Recertification.* When an airman is found to be unqualified on a task previously certified for his or her position, the supervisor lines through the previous certification or deletes previous certification when using an automated system. Appropriate remarks are entered on the AF Form 623A, **On-The-Job Training Record Continuation Sheet***,* as to the reason for decertification. The individual is recertified (if required) either by erasing the old entries and writing in the new or by using correction fluid (if the entries were made in ink) over the previously certified entry.

2.5.2. *Training Standard.* Tasks are trained and qualified to the go/no go level. Go means the individual can perform the task without assistance and meets local demands for accuracy, timeliness, and correct use of procedures.

2.6. The 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 USAF Occupational Measurement 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 chapter 1, paragraph 1.19, and chapter 5 of AFI 36-2605, *Air Force Military Personnel Testing System.*

3. Recommendations. Identify inadequacies and recommended changes to this training standard through channels to 882 TRG/TTS, 939 Missile Rd, Sheppard AFB TX 76311-2245. Use the Customer Services Information Line (CSIL), DSN 736-2385 to report your findings.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL   **PAUL K. CARLTON, JR.**
                                                Lieutenant General, USAF, MC, CFS
                                                Surgeon General

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 (training must be conducted through OJT).

X This mark is used alone in course columns to show that training was required but not given due to limitations in resources.

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided		
		A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course / Phase II Course	CDC	ICW
1. CAREER LADDER PROGRESSION TR: AFIs 36-2101, 36-2306, 41-104, 44-102, AFMAN 36-2108, AFPDs 41-1, 44-1, CCAF Catalog									
1.1. The airman career ladder and educational opportunities							B	-	- -
1.2. 4T0X1 career ladder progression							A	-	- B
1.3. Duties of AFSC 4T0X1							A	-	- -
1.4. Mission, organization, development and function of the Medical Service and the Medical Laboratory Service							A	-	- -

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
2. MEDICAL READINESS (Initial Medical Readiness Training directed by AFI 41-106 is provided in the Basic Medical Readiness course conducted at 882d Training Group, SAFB, Texas. Completed training is documented on front side of the student training record for each course graduate. Continuing/on-going Medical Readiness Training for the individual is the responsibility of each MTF.)							-	-	-	-
2.1. The 4T0X1's role in biowarfare and bioterrorism							A	A	B	B
3. BASIC LIFE SUPPORT (BLS)							-	3c	-	-
4. AF OCCUPATIONAL SAFETY & HEALTH (AFOSH) PROGRAM TR: AFIs 91-301 & 91-302; AFOSH STD 91-8, NCCLS, Clinical Laboratory Safety (GP17-A)										
4.1. Hazards/AFOSH standards for AFSC 4T0X1							B	C	C	-
4.2. Exercise safety precautions during job performance							2b	3c	C	-
4.3. Accident reporting							A	B	C	-
4.4. Manage safety and chemical hygiene programs							-	-	-	B
5. PROFESSIONAL AND PATIENT RELATIONSHIPS TR: AFI 44-102; DoD 5500.7, Chapter 12, Sections 3, 4, 5, & 6, Knock Your Socks Off Service										
5.1. Maintain professional standards of ethics							b	3c	C	-
5.2. Customer Service										
5.2.1 AFMS customer service standards							A	-	-	-
5.2.2. Identification of key AFMS customers.							A	-	-	-

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
5.3. Practice customer care basics										
5.3.1. Listening techniques							b	-	-	-
5.3.2. Face-to-face contact (nonverbal communication)							b	-	-	-
5.4. Reinforcement of good customer service with customer follow-up							-	-	-	C
6. MEDICAL MATERIEL PROCEDURES TR: AFMAN 23-110, Vol. 5										
6.1. Air Force accountability and responsibility							A	-	-	C
6.2. Prepare request for issue/turn-in of supplies and equipment							A	-	-	B
6.3. Maintain stock levels							A	-	-	B
6.4. Methods of procurement							A	-	-	C
7. SUPERVISION TR: AFIs 36-2103, 36-2406, 36-2503, 36-2907, AFMAN 36-2108, AFPAMs 36-2241V1, 36-2241V2, 36-2627, Local Policies										
7.1. Orient new personnel							-	-	-	B
7.2. Plan and schedule work assignments and priorities							-	-	-	B
7.3. Establish:										
7.3.1. Work methods							-	-	-	-
7.3.2. Work controls							-	-	-	-
7.3.3. Performance standards							-	-	-	-
7.4. Evaluate work performance of subordinate personnel							-	-	-	-
7.5. Resolve technical problems for subordinate personnel							-	-	-	-
7.6. Counsel personnel and resolve individual problems							-	-	-	-

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
7.7. Initiate action to correct sub-standard performance by personnel							-	-	-	-
8. TRAINING TR: AFIs 36-2101, 36-2201, AFMANs 36-2108, 36-2245, 36-2247										
8.1. Evaluate personnel to determine need for training							-	-	-	-
8.2. Plan and supervise OJT										
8.2.1. Prepare job qualification standards (JQS)							-	-	-	-
8.2.2. Conduct training							-	-	-	-
8.2.3. Counsel trainees on their progress							-	-	-	-
8.2.4. Monitor effectiveness of training										
8.2.4.1. Career knowledge upgrade							-	-	-	-
8.2.4.2. Job proficiency upgrade							-	-	-	-
8.2.4.3. Qualification/Competency							-	-	-	-
8.3. Maintain training records							-	-	-	B
8.4. Evaluate effectiveness of training programs							-	-	-	-
8.5. Recommend personnel for training							-	-	-	-
9. MEDICAL LABORATORY ADMINISTRATION TR: AFIs 44-102, 33-360V1, AMA Physicians' Current Procedural Terminology, and NCCLS: Clinical Laboratory Technical Procedure Manuals(GP2-A3), Point-of Care *in Vitro* Diagnostic (IVD) Testing (AST2-A), Provider Performed Microscopy Testing (HS2-P), Terminology and Definitions for Use in NCCLS Documents (NRSCL8-A), CHCS Instructor Training Class Material, CAP Standards										

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
9.1. Operate the Composite Health Care System (CHCS)	w						1a	2b	-	-
9.2. Analyze workload reports							-	-	-	C
9.3. Perform and evaluate quality control	*/w						2b	3b	B	C
9.4. Files Maintenance							-	-	B	-
9.5. Use operating instructions (OIs)	*/w						1a	2b	-	-
9.6. Develop OIs							-	-	B	B
9.7. Accreditation/regulatory agencies							-	A	-	B
9.8. Point-of-care testing (POCT) activities							-	-	A	B
9.9. Analyze proficiency testing							-	-	-	B
9.10. Cost accounting							-	-	-	B
9.11. Manpower standards and documents							-	-	-	B
9.12. New technologies							-	-	-	B
10. MANAGED CARE TR: TRICARE Standard Handbook										
10.1. TRICARE/DoD Managed Care Terminology							A	-	-	-
10.2. Health care systems:										
10.2.1. Components of Military Health System (MHS)							A	-	-	-
10.2.2. Health care benefits options							A	-	-	-
10.3. Primary care provider/ manager/team responsibilities							A	-	-	-
11. COLLECT BLOOD SPECIMENS TR: NCCLS: _Procedures and Devices for the Collection of Diagnostic Blood Specimens by Skin Puncture (H4-A4)_, _Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture (H3-A4)_										

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
11.1. Neonatal										
11.1.1. Capillary	*						B	3c	C	-
11.1.2. Venous	*						B	C	C	-
11.2. Pediatric	*						B	3c	C	-
11.3. Adolescent	*						B	3c	C	-
11.4. Adult										
11.4.1. Capillary	*/w						2b	3c	C	-
11.4.2. Venous	*/w						2b	3c	C	-
11.5. Geriatric	*						B	3c	C	-
12. IMMUNOLOGY (SEROLOGY) TR: Immunology, Immunology and Serology in Laboratory Medicine, Clinical Immunology, Principles and Laboratory Diagnosis, Clinical Laboratory Medicine										
12.1. Fundamentals of antibody-antigen reactions							A	B	C	-
12.2. Perform immunology procedures										
12.2.1. Syphilis testing	*/w						2b	3c	C	-
12.2.2. Infectious mononucleosis testing	*/w/s						2b	3c	C	-
12.2.3. Rheumatoid testing	*						b	3c	C	-
12.2.4. Rubella testing							A	B	C	-
12.2.5. Hepatitis testing							A	B	C	-
12.2.6. Pregnancy testing										
12.2.6.1. Qualitative	*/w/s						A	3c	C	-
12.2.6.2. Quantitative	w						A	3c	C	-
12.2.7. HIV							A	B	C	-
12.2.8. Viral testing to include:										
12.2.8.1. Cytomegalovirus (CMV)							A	B	C	-
12.2.8.2. Respiratory syncytial virus (RSV)							A	B	C	-

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A		B	C
							3 Skill Level		5 Skill Level	7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
12.2.8.3. Human T-cell lymphotropic virus (HTLV)							A	B	C	-
12.2.8.4. Varicella zoster virus (VZV)							A	B	C	-
13. BLOOD BANK/ IMMUNOHEMATOLOGY TR: AFMANs 41-111, 41-119										
13.1. Fundamentals of immuno-hematology							A	B	C	-
13.2. Perform blood grouping and typing procedures										
13.2.1. ABO grouping	*/w/s						2b	3c	C	-
13.2.2. Rh typing	*/w/s						2b	3c	C	-
13.3. Perform atypical antibody studies										
13.3.1. Indirect Coombs (Ab screen)	*/w/s						2b	3c	C	-
13.3.2. Direct Coombs	*/w						2b	3c	C	-
13.3.3. Antibody identifications	*/w						2b	3c	C	-
13.3.4. Antibody titers							2b	c	C	-
13.4. Perform transfusion service procedures										
13.4.1. Routine compatibility testing	*/w/s						2b	3c	C	-
13.4.2. Minor side compatibility testing	W/s						a	-	B	-
13.4.3. Rh Immune Globulin (RhIG) eligibility	w						b	c	C	-
13.4.4. Prenatal workup	w						A	B	C	-
13.4.5. Newborn workup	w						A	B	C	-
13.4.6. Transfusion reaction workups	w						A	B	C	-
13.4.7. Prepare blood components for issue	*/w/s						b	3c	C	-
13.4.8. Issue blood or components	*/w/s						b	3c	C	-
13.4.9. Blood or component receipt/ storage	*/w/s						b	3c	C	-

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
13.4.10. Selection of nongroup specific components	*/w						2b	3c	C	-
13.4.11. Red cell antigen screening	*/w						b	3c	C	-
13.4.12. Transfusion service records										
13.4.12.1 Documentation and maintenance	*/w						b	2c	C	-
13.4.12.2. Defense Blood Standard System (DBSS)	w						A	2b	B	-
13.4.13. Fetal maternal hemorrhage testing							A	B	C	-
13.5. Donor service procedures										
13.5.1. Maintain active donor rosters	w						b	2b	B	-
13.5.2. Maintain donor service records	w						b	2b	B	-
13.5.3. Screen donors	w						b	2b	B	-
13.5.4. Perform donor phlebotomy	w/s						b	2b	B	-
13.5.5. Process donor blood	w						b	2b	B	-
13.5.6. Prepare blood components	w						a	b	B	-
13.5.7. Ships blood or components	w						a	b	B	-
14. HEMATOLOGY TR: The Morphology of Human Blood Cells, Clinical Hematology and Fundamentals of Hemostasis, Body Fluids, Clinical Hematology – Principles, Procedures, & Correlations										
14.1. Fundamentals of hematology							A	B	C	-
14.2. Microscopy	*/w						2b	3c	C	-
14.3. Perform hematology procedures										
14.3.1. White blood cell counts (WBC)	*/w/s						2b	3c	C	-
14.3.2. Red blood cell counts (RBC)	*/w/s						b	3c	C	-
14.3.3. Hemoglobin	*/w/s						2b	3c	C	-
14.3.4. Hematocrit	*/w/s						2b	3c	C	-
14.3.5. RBC indices	*/w/s						2b	3c	C	-

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
14.3.6. Differentials	*/w/s						2b	3c	C	-
14.3.7. Sickle cell testing	*/w						2b	3c	C	-
14.3.8. Reticulocyte counts	*/w/s						2b	3c	C	-
14.3.9. Eosinophil counts							b	2b	B	-
14.3.10. Erythrocyte sedimentation rate							a	2b	B	-
14.3.11. Thrombocyte counts	*/w/s						2b	3c	C	-
14.3.12. G-6-PD screen	*/w						a	2b	B	-
14.3.13. Blood smears for malarial parasites	*/w/s						b	2c	C	-
14.4. Principles of coagulation							A	B	C	-
14.5. Perform coagulation procedures										
14.5.1. Activated partial thromboplastin time (APTT)	*/w/s						2b	3c	C	-
14.5.2. Prothrombin time (PT) and international normalized ratio (INR)	*/w/s						2b	3c	C	-
14.5.3. Disseminated intravascular coagulation (DIC) screens	W/s						A	B	C	-
14.5.4. Fibrinogen	w						A	B	C	-
14.5.5. Bleeding time							2b	3c	C	-
14.6. Perform related hematology procedures										
14.6.1. Semen analysis							b	2b	B	-
14.6.2. Cerebrospinal fluid (CSF) counts	*/w/s						b	3c	C	-
14.6.3. Nasal eosinophil smears							b	2b	B	-
14.6.4. Other body fluids	*/w/s						b	2b	B	-
14.7. Operate automated hematology analyzers	*/s						b	3c	C	-
14.8. Operate automated coagulation analyzers	*/s						b	3c	C	-

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A		B	C
							3 Skill Level		5 Skill Level	7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
15. CLINICAL CHEMISTRY TR: Tietz Textbook of Clinical Chemistry, Clinical Diagnosis and Management by Laboratory Methods, Clinical Chemistry: Theory, Analysis and Correlation, Clinical Laboratory Medicine, NCCLS: Procedures for Handling and Processing Blood Specimens (H18-A2), Principles of Laboratory Instruments										
15.1. Clinical chemistry theory							A	B	C	-
15.2. Prepare specimens for analysis	*/w						2b	3c	C	-
15.3. Process specimens for shipment	*/w						b	3c	C	-
15.4. Prepare reagents, controls, and other solutions	*/w						2b	3c	C	-
15.5. Operate automated chemistry analyzers	*/w/s						2b	3c	C	-
15.6. Blood chemistry analytes										
15.6.1. Amylase	*/w/s						B	3c	C	-
15.6.2. Lipase							A	B	C	-
15.6.3. Alkaline phosphatase (ALP)	*/w/s						B	3c	C	-
15.6.4. Aspartate aminotransferase (AST)	*/w/s						B	3c	C	-
15.6.5. Alanine aminotransferase (ALT)	*/w/s						B	3c	C	-
15.6.6. Gamma glutamyltransferase (GGT)							B	3c	C	-
15.6.7. Lactate dehydrogenase (LD)	*/w						B	3c	C	-
15.6.8. Creatine kinase (CK)	*/w/s						B	3c	C	-
15.6.9. Bilirubin	*/w/s						B	3c	C	-
15.6.10. Cardiac markers	W/s						B	B	C	-
15.6.11. Lipid profile										
15.6.11.1. Cholesterol	*/w/s						B	3c	C	-
15.6.11.2. Triglycerides	*/w						B	3c	C	-

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
15.6.11.3. High-density lipoprotein (HDL)							B	3c	C	-
15.6.11.4. Low-density lipoprotein (LDL)							B	3c	C	-
15.6.11.5. Lipid ratios							B	3c	C	-
15.6.12. Serum proteins										
15.6.12.1. Total protein	*/w/s						B	3c	C	-
15.6.12.2. Albumin	*/w/s						B	3c	C	-
15.6.12.3. A/G ratio	*/w						B	3c	C	-
15.6.13. Glucose	*/w/s						B	3c	C	-
15.6.14. Creatinine	*/w/s						B	3c	C	-
15.6.15. Blood urea nitrogen (BUN)	*/w/s						B	3c	C	-
15.6.16. Uric acid	*/w/s						B	3c	C	-
15.6.17. Electrolytes										
15.6.17.1. Sodium (Na^+)	*/w/s						B	3c	C	-
15.6.17.2. Potassium (K^+)	*/w/s						B	3c	C	-
15.6.17.3. Chloride (Cl^-)	*/w/s						B	3c	C	-
15.6.17.4. Bicarbonate (HCO_3^-)	*/w/s						B	3c	C	-
15.6.17.5. Magnesium (Mg^{2+})							-	-	C	-
15.6.17.6. Calcium (Ca^{2+})	*/w/s						B	3c	C	-
15.6.17.7. Phosphate (PO_4^{-3})	*/w						B	3c	C	-
15.6.17.8. Anion gap							B	3c	C	
15.6.18. Blood Gases	w						B	2b	C	-
15.7. Urine chemistries										
15.7.1. Protein	*/w						B	B	C	-
15.7.2. Glucose	*/w						B	B	C	-
15.7.3. Creatinine	*/w						B	B	C	-
15.7.4. Urea nitrogen	*/w						B	B	C	-
15.7.5. Electrolytes	*/w						B	B	C	-
15.7.6. Calcium (Ca^{2+})	*/w						B	B	C	-

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
15.7.7. Amylase	*/w						B	B	C	-
15.8. Cerebrospinal fluid (CSF)	*/w						b	3c	C	-
15.9. Other body fluids	*						b	3c	C	-
15.10. Toxicology procedures	*/w/s						a	3c	C	-
15.11. Therapeutic drug monitoring (TDM)	*/w						a	3c	C	-
15.12. Blood alcohol										
15.12.1. Medical	*/w/s						B	3c	C	-
15.12.2. Legal	*/w/s						a	2b	C	-
15.13. Prostate specific antigen (PSA)							A	B	B	-
15.14. Thyroid studies							B	2b	C	-
15.15. Tumor markers							-	-	B	-
15.16. Iron studies							-	-	B	-
16. URINALYSIS PROCEDURES TR: Tietz Textbook of Clinical Chemistry, Urinary Sediment: A Textbook Atlas, Clinical Diagnosis and Management by Laboratory Methods, Clinical Hematology – Principles, Procedures, and Correlations, Principles of Laboratory Instruments										
16.1. Fundamentals of urinalysis							A	B	C	-
16.2. Perform macroscopic analysis	*/w/s						2b	3c	C	-
16.3. Perform microscopic examinations	*/w/s						2b	3c	C	-
16.4. Perform qualitative and semi-quantitative urine chemistry procedures (i.e. dipsticks)	*/w						2b	3c	C	-
16.5. Perform confirmatory tests	*/w						2b	3c	C	-

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
17. MICROBIOLOGY PROCEDURES TR: Atlas of Human Parasitology, Bailey & Scott's Diagnostic Microbiology, Color Atlas and Textbook of Diagnostic Microbiology, Medically Important Fungi, A Guide to Identification, Medical Microbiology, Manual of Clinical Microbiology, Foundations of Parasitology										
17.1. Characteristics of microorganisms							A	B	C	-
17.2. Provide instructions for collection of biological specimens	*/w						b	3c	C	-
17.3. Perform microscopic examination of biological material										
17.3.1. Darkfield preparation							A	A	B	-
17.3.2. Potassium hydroxide (KOH)	*/w/s						b	2b	C	-
17.3.3. India ink preparation	w/s						b	2b	B	-
17.3.4. Fecal direct examination	*/w						2b	3c	C	-
17.3.5. Gram stain	*/w						2c	3c	C	-
17.3.6. Wet prep	*/w/s						b	2b	B	-
17.3.7. Acid fast bacillus stain							b	c	C	-
17.4. Process specimens for bacteriological identification										
17.4.1. Aerobic cultures	*/w/s						2b	3c	C	-
17.4.2. Anaerobic cultures	*/w/s						b	3c	C	-
17.4.3. Microaerophilic cultures	*/w						2b	3c	C	-
17.5. Identify bacteria using										
17.5.1. Culture and staining procedures	*/w/s						2b	3c	C	-
17.5.2. Biochemical procedures	*/w/s						2b	3c	C	-
17.5.3. Serological procedures	w/s						A	3c	C	-
17.6. Identify ova and parasites using										

1. Tasks, Knowledge And Technical References	2. Core (*) / War-time (w) / Sustain-ment (s) Tasks	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/ Information Provided			
		A	B	C	D	E	A 3 Skill Level		B 5 Skill Level	C 7 Skill Level
		Training Start Date	Training Complete Date	Trainee Initials	Trainer Initials	Certifier Initials	Phase I Course	Phase II Course	CDC	ICW
17.6.1. Concentration procedures	w/s						2b	3c	C	-
17.6.2. Permanent stained slides	s						a	2b	C	-
17.6.3. Macroscopic analysis	*/w						2b	3c	C	-
17.6.4. Pinworm identification							b	3c	C	-
17.7. Identify and record mycology colony morphology							a	b	B	-
17.8. Perform susceptibility testing	*/w/s						2b	3c	C	-
17.9. Prepare specimens for shipment	*/w						a	2b	B	-
17.10. Operate automated analyzers							a	b	B	-
17.11. Perform occult blood screens	*/w/s						2b	3c	C	-
17.12. Polymerase chain reaction (PCR)							A	B	B	-
18. OPERATE EXPEDITIONARY MEDICAL SUPPORT (EMEDS) EQUIPMENT TR: Principles of Laboratory Instruments										
18.1. Chemistry analyzer	w						2b	-	C	-
18.2. Blood gas analyzer	w						b	-	C	-
18.3. Hematology analyzer	w						2b	-	C	-
18.4. Coagulation analyzer	w						2b	-	C	-
18.5. Laboratory information system	w						A	-	-	-

Summary of changes: CFETP 4T0X1 dated February 1997 was extensively revised due to changes in the career field, applicable AFIs, and training requirements. Editions of the 4T0X1 CFETP older than May 2002 are obsolete and should not be used.

TECHNICAL REFERENCE (TR) SOURCE SUMMARY
FOR COMMERCIAL AND OTHER SERVICE PUBLICATIONS
STS 4T0X1

Commercial Texts (all skill levels):

Ash, Lawrence R. and Thomas C. Orihel, Atlas of Human Parasitology, 4th ed., American Society of Clinical Pathologists, ASCP Press, 1997.

Baron, Ellen Jo, Lance R. Peterson, and Sydney M. Finegold, Bailey & Scott's Diagnostic Microbiology, 10th ed., Mosby Year Book, Inc., 1998.

Burtis, Carl A. and Edward R. Ashwood, Tietz Textbook of Clinical Chemistry , 3rd ed., W. B. Saunders Co., 1999.

Diggs, Sturm, and Bell, The Morphology of Human Blood Cells, 7th ed., Abbott Laboratories, 1990.

Haber, Meryl H., Urinary Sediment: A Textbook Atlas, American Society of Clinical Pathology, ASCP Press, 1981.

Harmening, Denise M., Clinical Hematology and Fundamentals of Hemostasis, 3rd ed., F.A. Davis Co., 1997.

Henry, John B., Clinical Diagnosis and Management by Laboratory Methods, 19th ed., W.B. Saunders Co. 1996.

Kaplan, Lawrence A. and Amadeo J. Pesce, Clinical Chemistry: Theory, Analysis and Correlation, 3rd ed., Mosby Year Book, 1996.

Kjeldsberg, C.R. and J.A. Knight, Body Fluids: Laboratory Examination of Amniotic, Cerebrospinal, Seminal, Serous & Synovial Fluids, 3rd ed., American Society of Clinical Pathology Press, Chicago, 1993.

Koneman, Elmer W. and Stephen D. Allen, Color Atlas and Textbook of Diagnostic Microbiology, 5th ed., J.B. Lippincott Co., 1997.

Lavone, Davise H., Medically Important Fungi, A Guide to Identification, 3rd ed., American Society of Microbiology, 1995.

Lotspeich-Steininge, Cheryl, Clinical Hematology - Principles, Procedures, and Correlations, 2nd ed., J. B. Lippincott, 1998.

McClatchey, Kenneth D., Clinical Laboratory Medicine, 1st ed., Williams and Wilkins, 1994.

Murray, Patrick, Kobaysahi, G., Pfaller, M., Rosenthal, K., Medical Microbiology, 3rd ed., Mosby Year Book, 1998.

Murray, Patrick, et al (ed), Manual of Clinical Microbiology, 7th ed., American Society of Microbiology, 1999.

National Committee for Clinical Laboratory Standards Staff, Clinical Laboratory Safety, Approved Guideline (GP17-A), 1996, NCCLS.

--- Clinical Laboratory Technical Procedure Manuals; Approved Guidelines (GP2-A3), 3rd ed., NCCLS, 1996.

--- Procedures and Devices for the Collection of Diagnostic Blood Specimens by Skin Puncture; Approved Standard (H4-A4), 4th ed., NCCLS, 1999.

--- Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture; Approved Standard (H3-A4), 4th ed., NCCLS, 1998.

--- Procedures for the Handling and Processing of Blood Specimens; Approved Guideline (H18-A2), 2nd ed., NCCLS, 1999.

--- Point-of-Care in Vitro Diagnostic (IVD) Testing; Approved Guideline (AST2-A), NCCLS, 1999.

--- Provider Performed Microscopy Testing; Proposed Guideline (HS2-P), NCCLS, 2000.

--- Terminology and Definitions for Use in NCCLS Documents; Approved Standard (NRSCL8-A), NCCLS, 1998.

Roitt, Ivan, Jonathan Brostoff, and David Male, Immunology, 5th ed., Mosby, 1998.

Schmidt, Gerald D. and Larry S. Roberts, Foundations of Parasitology, 6th ed., McGraw Hill, 1999.

Schoeff, Larry E. and Robert H. Williams, Principles of Laboratory Instruments, Mosby Year Book, 1992.

Sheehan, Catherine, Clinical Immunology, Principles and Laboratory Diagnosis, 2nd ed., Lippincott, Williams & Wilkins, 1997.

Taylor, Elizabeth J., et al (ed), Dorland's Illustrated Medical Dictionary, 29th ed., W. B. Saunders Co., 2000.

Turgeon, Mary Louise, Immunology and Serology in Laboratory Medicine, 2nd ed., Mosby Year Book, 1996

Zemke, Ron and Kristin Anderson, Knock Your Socks Off Service, American Management Association, 1997.

Commercial Texts (3-skill level only):

Barlett, Margaret A., Diagnostic Bacteriology: A Study Guide, F.A. Davis Company, Philadelphia, 2000.

Carr, Jacqueline H. and Rodak, Bernadette F., Clinical Hematology Atlas, W. B. Saunders Company, 1999.

Dean, Theresa M. and Whitlock, Sheryl A., Clinical Chemistry: Delmar's Clinical Laboratory Manual Series, Delmar Publishers, 1997.

Estridge, Barbara H., Reynolds, Anna P., and Walters, Norma J., Basic Medical Laboratory Techniques, 4th ed., Delmar Thompson Learning, 2000.

Kern, Martha E. and Blevins, Kathleen S., Medical Mycology, A Self-Instruction Text, 2nd ed., F. A. Davis Company, Philadelphia, 1997.

Linne, Jean J. and Ringsrud, Karen M., Clinical Laboratory Science, The Basics and Routine Techniques, 4th ed., Mosby Inc., 1999.

Murray, Patrick R., Rosenthal, Ken S., Kobayashi, George S. and Pfaller, Micheal A., Medical Microbiology, 3rd ed., Mosby, Inc., 1998.

Russell, Alan P., Hematology: Delmar's Clinical Laboratory Manual Series, Delmar Publishers, 1997.

Strasinger, Susan K., Urinalysis and Body Fluids, 3rd ed., F. A. Davis Company, Philadelphia, 1994.

Whitlock, Sheryl A., Immunohematology: Delmar's Clinical Laboratory Manual Series, Delmar Publishers, 1997.

Ziebig, Elizabeth A., Clinical Parasitology, A Practical Approach, W. B. Saunders Company, 1997.

Air Force Publications (all skill levels):

AFI 33-360, V1, Publications Management Program

AFI 36-2101, Classifying Military Personnel (Officers and Airmen)

AFI 36-2103, Individualized Newcomer Treatment and Orientation (Intro.) Program

AFI 36-2201, Developing, Managing, and Conducting Training

AFI 36-2306, The Education Services Program

AFI 36-2406, Officer and Enlisted Evaluation Systems

AFI 36-2503, Administrative Demotion of Airmen

AFI 36-2907, Unfavorable Information File (UIF) Program

AFI 41-104, Professional Board and National Certification Examinations

AFI 41-106, Medical Readiness Planning and Training

AFI 44-102, Community Health Management

AFI 91-301, Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program

AFI 91-302, Air Force Occupational and Environmental Safety, Fire protection, Health (AFOSH) Standards

AFMAN 23-110, Vol. 5, USAF Supply Manual

AFMAN 36-2108, Airman Classification

AFMAN 36-2245, Managing Career Field Education and Training

AFMAN 36-2247, Planning, Conducting, Administering, and Evaluating Training

AFMAN 41-111, American Association of Blood Bankers Standards for Blood Banks and Transfusion Services

AFMAN 41-119, American Association of Blood Bankers Technical Manual

AFOSH STD 91-8, Medical Facilities

AFPAM 36-2241, V1, Promotion Fitness Examination (PFE) Study Guide

AFPAM 36-2241, V2, USAF Supervisory Examination (USAFSE) Study Guide

AFPAM 36-2627, Airman and NCO Performance Feedback System (EES)

AFPD 41-1, Health Care Programs and Resources

AFPD 44-1, Medical Operations

DoD 5500.7, Chap. 12, Sec. 3, 4, 5, & 6, Standards of Conduct

QUALITATIVE REQUIREMENTS

Section B - Course Objective List

4. Resident Courses. If a written list of the course objectives are required, contact the Medical Laboratory Apprentice course training manager at DSN 736-6794 or write to the 382 TRS/TRR, 917 Missile Road, Ste 3, Sheppard AFB TX 76311-2263. A copy will be sent to you as soon as possible.

5. Career Development Courses. CDC information can be obtained from the Air Force Institute for Advanced Distributed Learning [formally the Extension Course Institute (ECI)] at Maxwell AFB, Gunter Annex, AL or by contacting the CDC Writer/Manager at DSN 736-4089.

Section C - Support Materials

6. *Note:* There are currently no support materials requirements. This area is reserved.

Section D - Training Course Index

7. 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.

8. Air Force/DoD In-Resident Courses.

COURSE NUMBER	COURSE TITLE	DEVELOPER
J3AQR4T031 001	Medical Laboratory Apprentice Course (Phase I)	Sheppard AFB, TX
J5ABO4T031 001	Medical Laboratory Apprentice Course (Phase II)	Sheppard AFB, TX and Various Medical Treatment Facilities
J3ACR4T07X 000 (eliminated 1 Oct 01)	Medical Laboratory Craftsman Course	Sheppard AFB, TX

8.1. Other MAJCOM And FOA Courses

COURSE NUMBER	COURSE TITLE	DEVELOPER
J3AIR3S200-069*	Basic Instructor Course	Sheppard AFB, TX
J3AIR3S5200 036*	Technical Training Teaching Practicum	Sheppard AFB, TX
J3AIR3S200 025**	Technical Writer Principles	Sheppard AFB, TX
J3AIR3S200 015**	Technical Writer Nonresident	Sheppard AFB, TX
MECI 100**	ECI Course for Authors	Maxwell AFB, Gunter Annex, AL

*Mandatory training for Resident Instructor positions

**Mandatory training for CDC Writer/Managers

NOTE*: Additional training classes can be completed as continuing education classes, and are listed on the Education and Training Course Announcements (ETCA) website.

9. Air Force Institute for Advanced Distributed Learning (AFIADL) Courses.

COURSE NUMBER	COURSE TITLE
CDC 4T051A	Medical Laboratory Journeyman —Administration and Chemistry
CDC 4T051B	Medical Laboratory Journeyman —Microbiology
CDC 4T051C	Medical Laboratory Journeyman – Hematology, Immunology, and Blood Banking

10. Exportable Courses. J6ACU4T07X 000, Medical Laboratory Craftsman course, developed by Sheppard AFB,TX.

11. Courses Under Development/Revision.

COURSE NUMBER	COURSE TITLE	LOCATION	USER
J3AQR4T031 001	Medical Laboratory Apprentice Course (Phase I)	SAFB TX	AF
J5ABO4T031 001	Medical Laboratory Apprentice Course (Phase II)	SAFB TX and other MTFs	AF
J6ACU4T07X 000	Medical Laboratory Craftsman Course	SAFB TX	AF
CDC 4T051A	Medical Laboratory Journeyman -Administration and Chemistry		AF
CDC 4T051B	Medical Laboratory Journeyman -Microbiology		AF
CDC 4T051C	Medical Laboratory Journeyman -Hematology, Immunology, and Blood Banking		AF

Section E - MAJCOM Unique Requirements

Air Force Reserve Training Requirements

OPR: HQ AFRC/SGM, CMSgt Jesse Galindo, 115 2nd St., Robins AFB GA 31090-1635
DSN 497-1893, jesse.galindo@afrc.af.mil.

12. Purpose: This part of the CFETP applies to **all** 4T0X1s assigned to **all** AFRes medical units and squadron medical elements.

12.1. <u>Additional 3-skill level training requirements</u>: Upon graduation from a Phase II Medical Laboratory Apprentice course, AF Reserve 4T031 personnel will forward a copy of their technical training school certificate (AF Form 1256) to their reserve unit of assignment. The unit will then initiate an AF Form 2096 upgrade action to award the 3-skill level and enter the member in appropriate training status code (TSC) "B" or "F". Concurrently, AF Reserve 4T031 personnel will be assigned to an active duty medical laboratory for up to 60 days (minimum 45 days) to demonstrate competency on all core tasks as listed in this CFETP. Active duty trainers and/or task certifiers must ensure trainees satisfy core task training elements to the specified proficiency code(s). Upon completion of core tasks, trainees will be officially entered into 5-skill level UGT.

12.2. <u>Additional 5-skill level training requirements</u>: None. Requirements are the same as for ADAF upgrade trainees.

12.3. <u>Additional 7-skill level training requirements</u>: None. Requirements are the same as for ADAF upgrade trainees.

12.4. <u>Sustainment training</u>. Sustainment training task elements have been identified by the AFCFM and HQ AFRC/SGM as those minimum tasks required for AF Reserve personnel to demonstrate continued proficiency as medical laboratory craftsmen. Sustainment training is not required until the member has been awarded the 5-skill level. As specified in the STS, Column 2, all sustainment training task elements are biennial requirements.

Air National Guard Training Requirements

OPR: ANGRC/SGXT, CMSgt Jim D. Weivoda, 3500 Fetchet Ave, Andrews AFB MD
DSN 278-8559, **weivodaj@ang.af.mil**weivodaj@ang.af.mil.

13. Purpose: This part of the CFETP applies to **all** 4T0X1s assigned to **all** Air National Guard medical units.

13.1. <u>Additional 3-skill level training requirements</u>: Upon completion of Phase I and Phase II technical training, each medical laboratory apprentice (4T031) will be evaluated by their Medical Unit Commander for an additional 30-60 days of proficiency/seasoning training. This training must be accomplished at an active duty MTF within one year of completing Phase II. This training is highly recommended for ANG personnel who are not in, or pursuing, a civilian related occupation.

To ensure continuity between resident (Phase I and Phase II) and subsequent clinical (UGT) training, the apprentice will forward a copy of his/her technical school certificate (AF Form 1256) to their unit of assignment. The ANG unit will then initiate upgrade action using AF Form 2096 to award the 3-skill level and enter the apprentice in the appropriate training status code (TSC) "B" or "F." This action will begin the 3-month apprenticeship phase while accomplishing MTF proficiency/seasoning training.

13.2. <u>Additional 5-skill level training requirements:</u> None. Requirements are the same as for ADAF upgrade trainees.

13.3. <u>Additional 7-skill level training requirements:</u> None. Requirements are the same as for ADAF upgrade trainees.

Section F - Documentation of Training

14. Development of a Work Center Training Plan. The focus of this training guidance is to bring all training documentation back into one "OJT" record. Over the years, training documentation has taken on many forms. Previous restrictions imposed by AFR 50-23, *On-The-Job Training*, allowed only certain documents to be maintained in the OJT record. Changing medical training requirements created a need for additional ways to document training outside the OJT record. The end result was that each training location created different means to document training. Often, a section might have training documented in three or more locations which made the training documentation and review process difficult to manage. Individuals involved in the training process, not to mention inspection teams, were finding it difficult to get a good overview of the training process, as they had to search through several different tracking folders to find the information they were looking for. Training documentation became very cumbersome to say the least. Air Force Instruction 36-2201, *Developing, Managing, and Conducting Training*, para. 5.1.5. authorizes Career Field Managers to bring training documentation back into one "OJT" record, thus the creation of the Enlisted Training and Competency Folder. The following information provides specific guidance, along with recommended documentation, consistent with current Air Force instructions/directives. This training guidance has focused on two main areas: (1) Developing a Master Training Plan, and, (2) Documentation of Training in the Enlisted Training and Competency Folder.

15. Developing a Master Training Plan (MTP).

15.1. *What Is It?* A Master Training Plan is a reference guide developed for each section that includes all facets of training for individuals assigned. It is to be used as a reference source for the type of training and training documentation that occurs with each assigned member. The MTP is used to standardize training and to give trainers, trainees, supervisors, NCOICs, and OICs an overview of the training process for the duty section. The MTP is also used as a means to reduce the amount of paperwork previously required during the training process.

15.2. *What's In It?* Keep in mind that the Master Training Plan is an overview of training for the duty section; it should include all documents involved in the training process for the duty section. Training will vary from section to section and person to person, but there are certain documents that will be a standard requirement for all MTPs. The documents are as follows:

15.2.1. Unit-specific orientation checklist.

15.2.2. Job description for each duty position within the duty section (see AFMAN 36-2108).

15.2.3. Dual channel OJT concept.

15.2.3.1. Career knowledge requirements.

15.2.3.2. Job qualification requirements.

15.2.4. Testing procedures for CDCs.

15.2.5. Uses of AF Form 623 and Job Qualification Standards (JQSs).

15.2.6. Performance standards/position qualification training for each duty position.

15.2.7. Master Career Field Education and Training Plan (CFETP).

15.2.7.1. Identifies all tasks required for the duty section.

15.2.7.2. Standardized reference source for initiating individual training.

15.2.7.3. Impact of training on career progression.

15.2.8. Qualification Training Packages (QTPs) required to perform peacetime/wartime duties. (There are no QTPs required at this time for the Medical Laboratory Specialty)

16. Documentation of Training: The Enlisted Training and Competency Folder.

16.1. The purpose of this section is to provide guidelines and examples of proper documentation for the many forms used in training 4T0X1 personnel. Training documentation helps us to assess readiness capability, individual strengths and weaknesses, and resources needed to support quality patient care. It also helps us meet JCAHO and regulatory requirements. The Enlisted Training and Competency Folder is limited to the forms presented here and those prescribed in AFI 36-2201. Your unit education and training manager can also assist you with specific questions on training documentation.

16.2. *Documents included in the 4T0X1 Enlisted Training and Competency Folder.*

16.2.1. To assemble a 4T0X1 training record, utilize a standard six-part folder.

16.2.2. Attach, centered on the front cover, a computer generated or typewritten title "Enlisted Training and Competency Folder." In addition, include the member's full name (last, first, MI), rank, and SSAN (see Figure 1).

16.2.3. The six parts of the folder are discussed in detail in the following paragraphs. Each part will contain specific documents that should be filed in descending order (see Figure 1). Index tabs/tabbed dividers may be used in parts that contain multiple documents. When multiple copies of any form are placed into the Enlisted Training and Competency Folder, they are placed in chronological order with the most current documentation on top.

ENLISTED TRAINING AND COMPETENCY FOLDER Freeman, Mary T. TSgt 123-44-6789		

PART 1
Section A:
**- Locally required training & skills
  competency documentation**
Section B:
- AF Form 55 – Safety Training
	PART 3
	- AF Form 1098
	Section A:
	- Mandatory Training
	Section B:
	- QTPs
	Section C:
	- Inservice Training
		PART 5
		**- AF Form 2096 or
		  PC III documentation**

PART 2
Section A:
- AF Form 623B
Section B:
- CFETP
Section C:
- AF Form 797
	PART 4
	**- AF Form 623A
	-- Job Description/Performance
	   Standards Review
	-- Orientation
	-- Training Progress**
		PART 6
		**- Training certificates, Continuing
		  Education documentation, and
		  Professional Certification
		  documentation (copies of originals)**

Figure 1: Organization of the 4T0X1 Enlisted Training and Competency Folder

16.2.3.1. Part 1 (first two-pronged section).

16.2.3.1.1. *Section A - Locally required training and skills competency documentation.* This section is for maintaining documentation required by other regulatory guidance that is not maintained elsewhere in the OJT record, regardless of grade or training status.

16.2.3.1.2. *Section B - AF Form 55, Employee Safety and Health Record.* Regardless of grade or training status, AF Form 55 for the member is maintained in Part 1. AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*, June 1996, authorizes supervisors to file the AF Form 55 with the AF Form 623, **The Individual Training Record**. If local policy is to keep all employee AF Form 55s in a general safety training folder, insert a page indicating where the AF Form 55 can be located. If used, AF Form 803, **Report of Task Evaluations**, will be filed in this section.

16.2.3.2. Part 2 (second two-pronged section).

16.2.3.2.1. *Section A - AF Form 623, The Individual Training Record (front and inside cover).* Attach the front and inside cover (containing Sections I through IV) of the member's current AF Form 623 onto Part 2 of the 6-part folder. All appropriate areas of AF Form 623 must be properly completed. The AF Form 623 is the document that is recognized by the personnel system in contingencies and deployments as the official formal training record. **If available, AF Form 623B will be used in lieu of AF Form 623.**

NOTE: Maintenance of AF Form 623 is mandatory for Airmen in the ranks Airmen Basic through Technical Sergeant. In addition, AF Form 623 is required for SNCOs, regardless of their rank, in retraining status or as directed by the Air Force career field manager, commanders, or supervisors.

16.2.3.2.2. *Section B - Career Field Education and Training Plan (CFETP).* The specialty training standard (STS) contained within the CFETP will be used to record training proficiency in various tasks that are required for an individual to perform duties in a specific work area. A master task listing for the work center is maintained in the MTP for the duty section. Circle only those tasks that the individual is required to perform in his/her current duty position.

16.2.3.2.3. *Section C - AF Form 797, Job Qualification Standard Continuation/Command JQS.* This form is used to document training on additional items, required for the members current duty position, that are not listed in the CFETP Part II or AFJQS per AFMAN 36-2247, para 5.2. Figure 2 is an example of how to document training on an AF Form 797.

TASK, KNOWLEDGE AND TECHNICAL REFERENCES	CORE TASK	CERTIFICATION				
		START DATE	COMPLETE DATE	TRAINEE'S INITIALS	TRAINER'S INITIALS	CERTIFYING OFFICIAL'S INITIALS
1. Perform Vitek Start-up. **TR: Vitek Operator's Manual**						
2. Perform Vitek Daily Quality Control. **TR: Vitek Operator's Manual**						
3. Perform Vitek Daily Maintenance. **TR: Vitek Operator's Manual**						
TRAINEE NAME (Last, First, MI) **Flair, Amanda L.**		**CFETP/JQS NUMBER** **4T0X1**			**PAGE NO**	

(table title: JOB QUALIFICATION STANDARD CONTINUATION/COMMAND JQS)

AF FORM 797 19990201 (EF-V2)

Figure 2: Sample AF Form 797 Documentation

16.2.3.3. **Part 3** (third two-pronged section).

16.2.3.3.1. *AF Form 1098, Special Task Certification and Recurring Training.* This part will contain three separate sections for the documentation of specific training. These forms are used to document qualification in tasks that require recurring training. They may also be used to document inservice and mandatory training. An AF Form 1098 will be created and clearly marked for each type of training documentation required. Ensure signatures and initials are included per AFI 36-2201.

16.2.3.3.1.1. *Section A* - **To document mandatory recurring training** (see Figure 3). Examples are BLS training, patient sensitivity training, and other mandated training as stipulated by JCAHO standards, Air Force, or MTF directives. Mandatory training requirements may vary from MTF to MTF. These requirements should be reviewed on an annual basis and updated as required.

SPECIAL TASK CERTIFICATION AND RECURRING TRAINING							
TASK OR RECURRING TRAINING AND TECHNICAL REFERENCES A.	DATE COMPLETED B.	SIGNATURE OF CERTIFYING OFFICIAL C.	INITIALS OF TRAINEE D.	EVALUATION OF TRAINING			
				SCORE OR HOURS E.	TYPE F.	FREQUENCY G.	DUE DATE H.
BLS Training	5 Nov 01			P		Biennial	5 Nov 03
Fire and Safety Training	4 Feb 02			P		Annual	4 Feb 03
Hazard Communication	3 Jan 02			P		Annual	3 Jan 03
Customer Service Training	10 Sept 01			P		Annual	10 Sept 02
NAME OF TRAINEE (Last, First, Middle Initial) Scully, Daun R.				GRADE SrA	UNIT AND OFFICE SYMBOL 60 MDTS/SGQC		

AF FORM 1098, 19850401 (EF-V2)

Figure 3: Sample AF Form 1098, Mandatory recurring training documentation

16.2.3.3.1.2. *Section B* - **Qualification Training Packages (QTPs)**. This section will be used to document ongoing completion of QTPs. **NOTE:** There are currently no QTPs for the 4T0X1 AFSC. If QTPs are developed, an erratum to this CFETP will be issued with instructions on proper documentation.

16.2.3.3.1.3. *Section C* - **Inservice training**. Will be used to document all completed continuing education or in-service training (see Figure 4).

SPECIAL TASK CERTIFICATION AND RECURRING TRAINING							
TASK OR RECURRING TRAINING AND TECHNICAL REFERENCES A.	DATE COMPLETED B.	SIGNATURE OF CERTIFYING OFFICIAL C.	INITIALS OF TRAINEE D.	EVALUATION OF TRAINING			
					TYPE F.	FREQUENCY G.	DUE DATE H.
Coagulation Update	5 Nov 01			3 Hours			
PCR	15 Dec 01			2 Hours			
Cardiac Markers	14 Jan 02			2 Hours			
NAME OF TRAINEE (Last, First, Middle Initial) Miller, Jackie M.				GRADE SSgt	UNIT AND OFFICE SYMBOL 82 MDSS/SGSC		

AF FORM 1098, 19850401 (EF-V2)

Figure 4: Sample Inservice Training Documentation

16.2.3.4. Part 4 (fourth two-pronged section).

16.2.3.4.1. *AF Form 623A, On-The-Job Training Record Continuation Sheet.* This form will be utilized to document all progress of individual training to include facility orientation, section specific orientation, upgrade training (UGT), Career Development Course (CDC) failures/corrective actions, any additional pertinent training, all decertification procedures, and supervisor/trainer/ certifier periodic review. The entire training process must be well documented on these forms. All individuals involved in the training process must document training progress as it occurs. Upgrade training status will be reviewed and documented ***at least monthly***.

16.2.3.4.1.1. *Facility orientation.* Include a statement on the AF Form 623A that verifies facility orientation requirements were met and include signatures of both the supervisor and orientee. A master copy of the facility orientation checklist will be maintained in the MTP for the duty section. Anytime there is a reference on the AF Form 623A to an orientation checklist, you must indicate the name and date of the checklist. Do not maintain copies of checklists in the OJT record.

16.2.3.4.1.2. *Unit-specific orientation.* The unit-specific orientation is essential for all assigned members. Documentation of the orientation process must be thorough. The trainer will use the master copy of the unit-specific orientation checklist located in the MTP. Each item on the checklist must be covered, to ensure standardization of training, and documented on AF Form 623A. An overprint AF Form 623A is recommended to ensure the suggested comments are annotated, the following are examples of minimal overprinted information to be included (see Figure 5).

16.2.3.4.1.2.1. Orientee and trainer name/rank/unit assignment.

16.2.3.4.1.2.2. Orientation start date with initial interview comments (i.e. goals, desires, concerns related to the orientation process, etc.). Identify name and date of the orientation checklist.

16.2.3.4.1.2.3. Mid-orientation progress check to evaluate training effectiveness. Signed and dated by both the trainer and orientee.

16.2.3.4.1.2.4. Final evaluation of orientation process with statement that verifies orientee's unit-specific competency has been achieved. Signed and dated by the trainer supervisor, OIC, and orientee. Identify name and date of the orientation checklist.

1 Sept 01
SSgt Blount was assigned to the Chemistry section on 30 Aug 01. TSgt Garza has been assigned as a trainer for him. She will orient SSgt Blount to the unit using the Chemistry Orientation Checklist, dated 1 Jun 01, located in the Master Training Plan (MTP). An initial interview was accomplished on this date.
_____   _____
SSgt Blount   **MSgt Maxwell**
Chemistry   **NCOIC, Chemistry**

16 Sept 01
A mid-orientation progress check was accomplished on this date. SSgt Blount has progressed through the Chemistry Orientation Checklist with little or no difficulty, and he has completed his review of the Chemistry OIs.
SSgt Blount is scheduled to complete his orientation NLT 12 Oct 01.
_____   _____
SSgt Blount   **TSgt Garza**
Chemistry   **Chemistry**

10 Oct 01
SSgt Blount has completed all training on the Chemistry Orientation Checklist. A review of the checklist with him indicates he was knowledgeable of all items discussed and ready to perform his duties in the Chemistry section. A review of his STS has also been performed making sure his current duty position is properly annotated in Column 1 per MTP guidance.
_____   _____
SSgt Blount   **TSgt Garza**
Chemistry   **Chemistry**

LAST NAME – FIRST NAME – MIDDLE INITIAL
Blount, Roy D.

AF Form 623A, 19790301 (EF-V2)

Figure 5: Sample Orientation Documentation

16.2.3.4.1.3. *Upgrade Training (5-7-9-skill levels).*

16.2.3.4.1.3.1. Document entry into upgrade training and periodic (*at least monthly*) evaluations of training progress (see Figures 6 and 6.1).

16.2.3.4.1.3.2. Information on extensions, waiver requests, or breaks in training should also be clearly documented on AF Form 623A with copies of any related correspondence.

16.2.3.4.1.3.3. Any further training pertinent to the duty section and or unit effectiveness can also be documented on the AF Form 623A (i.e., job qualifications).

16.2.3.4.1.3.4. Document any decertification proceedings, to include dates, reasons for decertification, and other applicable information on the AF Form 623A.

16.2.3.4.1.3.5. Once an individual completes upgrade training commensurate to his/her rank and maintains an appropriate skill level, their supervisor should continue to review requirements,

progress, and individual training needs. The six-part folder will be reviewed at least annually to ensure documentation currency and appropriateness.

ON-THE-JOB TRAINING RECORD
CONTINUATION SHEET
_____

INITIAL UPGRADE TRAINING BRIEFING

SrA Sarah Lineberry has been briefed on the On-The-Job-Training (OJT) Program and how she fits into the program while in 5-skill level upgrade training (UGT). UGT was explained as a dual-channel process designed to qualify an airman for skill level upgrade. Dual-channel OJT is a systematic reportable application of self-study and the craftsman/apprentice principle. Trainees acquire job qualification while performing on the job under supervision. This combination of knowledge and job position qualification constitutes the dual-channel concept. Requirements from AFIs 36-2101 and 36-2201, and AFMAN   36-2108 were covered. AF Forms 623B, 623A, 797, 1098, 2096, and the CFETP were explained. Responsibilities of the commander, base training, unit education and training manager (ETM), immediate supervisor, trainer, and trainee were discussed. The Career Development Courses (CDCs) were briefly discussed and will be explained in detail when the CDCs arrive. Requirements for 5-skill level upgrade in AFSC 4T0X1 are: (1) completion of CDCs 4T051A, B, & C, (2) completion of a minimum of 15 months in UGT, (3) complete all core tasks specified in Column 2 of the STS, (4) complete all STS tasks for assigned duty position, and (5) supervisor recommendation for upgrade. The STS portion of the CFETP is annotated to show only those tasks she is required to perform in her current duty position, all AFMAN 36-2108 mandatory requirements for upgrade, and core task requirements. In the STS, the trainer, trainee, and certifier (when required) have a space to initial when training is completed. After upgrade the STS will continue to be used to document further qualification training.

_____   _____   _____
SUPERVISOR'S SIGNATURE   TRAINEE'S SIGNATURE   DATE

LAST NAME – FIRST NAME – MIDDLE INITIAL
Lineberry, Sarah F.

AF Form 623A, 19790301 (EF-V2)

Figure 6: Sample Initial Upgrade Training Briefing

TRAINEE'S RESPONSIBILITIES DURING UPGRADE TRAINING (UGT)

1. Read and understand your AFS description, training requirements, objectives, and training record.

2. Budget time (on/off-duty) for timely completion of CDCs and keep all CDC materials for future reference and study.

3. Attain and maintain qualifications in your assigned AFSC.

4. After CDC briefing, trainee will do the following (read and initial):

____a. Read "Your Key to a Successful Course."

____b. Make all required course corrections and return entire package to your supervisor.

____c. When you are issued your first volume, read and study it, then complete all self test and unit review exercises (UREs). Questions will be answered in the spaces provided when possible. Highlight or reference where the answers are found in the text. You will have a month to complete each volume.

____d. Supervisor will check all self-test questions and UREs for accuracy and completeness. You will correct all incorrect responses.

____e. Supervisor issues the ECI form 34 (Field Scoring Sheet) for you to transcribe your answers from the URE. UREs are teaching devices and must be administered as open book exercises. All scores less than 100 percent require review training. Minimal acceptable training consists of correcting incorrect responses, reading the appropriate area from which the question was taken, and a verbal question and answer session.

____f. After successful completion of the first volume, your supervisor will issue the next volume. The process described above will be followed until the completion of the entire course.

____g. Upon completion of your last volume you and your supervisor will immediately start a comprehensive review of the entire course to prepare for your course examination (CE). Your supervisor will coordinate the ordering and scheduling of your CE.

5. Review and discuss training requirements with supervisor regularly. Provide input on your training and ask questions when necessary.

6. Upon satisfactory completion of your career knowledge training, position qualification, and mandatory requirements listed in AFMAN 36-2108, your supervisor will initiate your upgrade action.

_____   _____   _____
SUPERVISOR'S SIGNATURE   **TRAINEE'S SIGNATURE**   **DATE**

LAST NAME – FIRST NAME – MIDDLE INITIAL
Lineberry, Sarah F.

AF Form 623A, 19790301 (EF-V2)

Figure 6.1: Sample Upgrade Documentation

16.2.3.4.2. The Job Description/Performance Standards for each duty position should be maintained in the MTP in each duty section. An AF Form 623A overprint may be used to document both supervisor/subordinate reviews (see Figure 7). This form will be maintained in Part 4 of the OJT Record. The following statements will be jointly reviewed by the supervisor and subordinate:

16.2.3.4.2.1. "I know where to find a current copy of my Job Description/Performance Standards."

16.2.3.4.2.2. "I have read, discussed with my supervisor, and understand my Job Description/ Performance Standards." **

16.2.3.4.2.3. "I understand my duties and responsibilities for the position that I am currently working in ."**

16.2.3.4.2.4. "If I have questions or concerns about my Job Description/Performance Standards, I will seek assistance from supervisory personnel in my chain of command."

16.2.3.4.2.5. "It is my responsibility to review my Job Description/Performance Standards with my supervisor annually and with each change in supervisor/duty position."**

16.2.3.4.3. A signature and date block for both the supervisor and subordinate will reflect mutual understanding of these statements. It is recommended that several signature and date spaces for the continual review process be included.

Note: ** Indicates requirement according to Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

<div style="border:1px solid">

ON–THE–JOB TRAINING RECORD
CONTINUATION SHEET

4 Sept 01
1. I know where to find a current copy of my Job Description/Performance Standards. I have read, discussed with my supervisor and understand my Job Description/Performance Standards. I understand my duties and responsibilities for the position that I am currently working in. If I have questions or concerns about my Job Description/Performance Standards, I will seek assistance from supervisory personnel in my chain of command.
2. It is my responsibility to review my Job Description/Performance Standards with my supervisor during each feedback session and with each change in supervisor or duty position.

_____
Rebecca L. Sink, SrA, USAF
Microbiology
4 Sept 01

4 Sept 01
SrA Sink has completed her review of her Job Description/Performance Standards on this date. I am confident that she is thoroughly familiar with standards and expectations. At this time SrA Sink has no questions or concerns.

_____
Karla L. Puterbaugh, MSgt, USAF
Laboratory OJT Trainer
4 Sept 01

LAST NAME – FIRST NAME – MIDDLE INITIAL
Sink, Rebecca L.

</div>

AF FORM 623A 19790301 (EF-V2)

Figure 7: Sample Job Description/Performance Standards Review

16.2.3.5. Part 5 (fifth two-pronged section).

16.2.3.5.1. *AF Form 2096, Classification On-The-Job Training Action.* This form will be used to document official training actions [i.e., award of skill level, training status changes, decertifications, and award of special experience identifiers (SEIs)].

Note: A PC III or MILPDS automated document may be substituted for AF Form 2096.

16.2.3.6. Part 6 (sixth two-pronged section).

16.2.3.6.1. *Training Certificates, Continuing Education documentation, and Professional Certification documentation.*

16.2.3.6.2. This part will contain copies of Training Certificates, Continuing Education documentation, and Certification documentation as applicable to the member's AFSC or current duty position.

16.3. Supplemental AFSC-specific documentation instructions. The AFCFM is authorized to supplement or revise the general guidance contained in section F of the CFETP to ensure the documents maintained in the 6-part folder accurately reflect the needs of their AFSC/Medical specialties.

Part 2: Managing Training

17. Purpose.

17.1. The entire process of managing an effective training program centers on the supervisor.

17.2. Each supervisor must maintain accurate records that give a complete picture of the status of all training that they are responsible, as a supervisor, to oversee.

18. Monthly Training Checklist for Supervisors.

18.1. Using a checklist can assist the supervisor in managing an effective training program.

18.2. Figure 8 is a sample monthly training checklist for supervisors to use, *if they choose*, when managing training. The checklist is designed to address areas that apply to any/all trainee's that are placed under the supervision of the supervisor. The sample may be altered as needed to reflect the items deemed important for monitoring on a monthly basis.

MONTHLY TRAINING CHECKLIST FOR SUPERVISORS	
REQUIREMENT	**INITIALS**
APPOINTMENTS	
Notify those who have been scheduled for ancillary training, quality training, appointments, etc.	
NEW AIRMEN	
Conduct initial evaluation of knowledge and skills.	
Document initial evaluation on AF Form 623A.	
AF FORM 623B	
Review cover of AF Form 623B. Make any necessary changes.	
Note any open training requirements and ensure training is accomplished or scheduled on each. (Work with the trainer on this. Remember...it is the supervisor's responsibility to ensure training is being conducted).	
Certify or decertify qualifications when applicable. Be sure to change the MTL.	
Documents visits, counselings, etc. on AF Form 623A.	
CAREER DEVELOPMENT COURSES (CDCs)	
Distribute any new CDCs. See AFI 36-2201 for CDC administration procedures.	
Ensure training is progressing satisfactorily according to assigned schedule.	
When the last volume has been completed, request ordering and scheduling of the Course Examination (CE) from the Unit Education and Training Manager.	
Documents progress, visits, counselings, etc. on AF Form 623A.	
FORMAL SCHOOLS	
For individuals requiring formal schools, ensure they have planned accordingly ahead of time.	
Ensure formal school prerequisite requirements are met when applicable.	
TRAINERS AND CERTIFIERS	
Ensure trainers and certifiers have been appointed in writing by the commander.	
Ensure trainers and certifiers have attended appropriate trainer/certifier courses.	
SUPERVISORS MEETINGS	
Attend all supervisors meetings conducted by the Unit Education and Training Manager. (Send representative if unable to attend personally).	
UPGRADE TRAINEES	
Notify the Unit Education and Training Manager of any individuals who have been signed off on all training items, have met time requirements, completed CDCs, or completed formal schools when applicable.	
OTHER	

Figure 8: Monthly Training Checklist for Supervisors