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CAREER FIELD
EDUCATION AND TRAINING PLAN

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CAREER FIELD EDUCATION AND TRAINING PLAN

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HISTOPATHOLOGY SPECIALTY
AFSC 4T0X2
CAREER FIELD EDUCATION AND TRAINING PLAN

PART I, CAREER FIELD INFORMATION

Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document identifying life-cycle education and training requirements, training support resources, and minimum core task requirements for the histopathology specialty. The CFETP will provide histopathology personnel a clear career path to success and will instill rigor in all aspects of career field training. **NOTE:** Civilians occupying associated positions may 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 is career field information and provides necessary data for overall management of the specialty. **Section A** explains the purpose of the CFETP and how everyone will use the plan. **Section B** identifies career field progression information, duties and responsibilities, training decisions, and Career field education and training flowcharts or tables showing both mandatory and optional requirements. **Section C** associates each skill level with specialty qualifications (knowledge, education, training, and other variables). **Section D** indicates resource constraints if applicable. Examples are funds, manpower, equipment, and facilities.

2.2. Part II is Training Standards. At the unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan. **Section A** identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references (TRs) to support training, Air Education and Training Command (AETC) conducted training, core tasks, and correspondence course requirements. **Section B** contains the Course Objective List (COL) if applicable, and training standards 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) or other products that may be developed to support proficiency training requirements. **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 Major Command (MAJCOM) unique training requirements supervisors can use to determine additional training required for the associated qualification needs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

3. Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate points in their careers. This plan enables us to train today's work force for tomorrow's jobs.

Abbreviations/Terms Explained

Air Education and Training Command (AETC). Conducts basic training for all Air Force enlisted personnel, produces skilled flying and ground personnel, and trains many of the world's military forces. Along with basic military, technical, and flying training, AETC provides other types of training, such as aircrew transitional, special, advanced, lateral, and survival training.

Air Force Career Field Manager (AFCFM). The Air Force focal point for the designated career field within a functional community. Serves as the primary advocate for the career field, addressing issues and coordinating functional concerns across various staffs. Responsible for the career field policy and guidance.

Air Force Enlisted Classification Directory (AFECD). The official directory for all military enlisted classification descriptions, codes, and identifiers. Establishes the occupational structure of the Air Force enlisted force. The occupational structure is flexible to permit enlisted personnel to specialize and develop their skills and abilities while allowing the Air Force to meet changing mission requirements. Individual enlisted personnel have a joint responsibility with commanders and supervisors at all levels to fully develop their abilities consistent with Air Force needs and within the established patterns of specialization.

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

Air Force Training Record (AFTR). A hierarchical web-based system used to track enlisted training. The system gives trainee, supervisor, and functional manager access to virtual training products, such as CFETP and AFJQS. Additionally, they are able to create individual training plans and document upgrade training.

Air Reserve Component (ARC). The Air Reserve Component consists of the Air Force Reserve and Air National Guard.

Career Development Course (CDC). These self-study courses help Airmen complete the specialty knowledge portion of the dual-channel concept for the enlisted training program. Airmen must complete career development courses successfully at various stages to advance in their careers. Career development courses are also available on a voluntary basis for career broadening. Note: this AFSC has no CDCs at this time.

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive core training document identifying: Life-cycle education and training requirements, training support resources, and minimum core task requirements. The CFETP aims to give personnel a clear path and instill a sense of industry in career field training.

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

Certification Official. A person the commander assigns to determine an individual's ability to perform a task to required standards (also referred to as task certifier).

Computer Based Training (CBT). Training accomplished via computer.

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

Core Task. Tasks the AFCFM identifies as minimum qualification requirements for everyone within an Air Force Specialty Code (AFSC) regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. Guidance for using core tasks can be found in the CFETP narrative.

Course Objective List (COL). A publication derived from initial/advanced skills course

training standard, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3- or 7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations.

Education and Training Course Announcement (ETCA). Contains specific MAJCOM procedures, fund cite instructions, reporting instructions, and listings for those formal courses conducted or managed by the MAJCOMs or field operating agencies (FOAs). The ETCA contains courses conducted or administered by the AF and Reserve forces and serves as a reference for the AF, Department of Defense (DoD), other military services, government agencies, and security assistance programs. ETCA can be accessed through the Air Force Portal.

Enlisted Specialty Training (EST). A combination of formal training (technical school) and informal on-the-job (OJT) training 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 modular, flexible, lean, and state-of-the-art with capabilities allowing theater commanders to tailor medical support to best suit their needs.

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

Go/No-Go. The “Go” is the stage at which a trainee has gained enough skill, knowledge, and experience to perform the tasks without supervision; meets the task standard. “No-Go” is the stage at which the trainee has not gained enough skill, knowledge, and experience to perform task without supervision; does not meet 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, which results in award of the entry skill level.

MAJCOM Functional Manager (MFM). A person appointed by their respective Command Surgeon as the senior representative for an Air Force Specialty (AFS) within a specific MAJCOM. Among other responsibilities, the MFMs work with AFCFM to develop, implement and maintain the CFETP.

Master Task Listing (MTL). A comprehensive list (100%) of all tasks performed within a work center and consisting of the current CFETP or AFJQS and locally developed AF Form 797, *Job Qualification Standard Continuation/Command JQS* (as a minimum). Should include tasks required for deployment and/or Unit Type Codes (UTC) requirements.

Master Training Plan (MTP). Employs a strategy for ensuring the completion of all work center job requirements by using a MTL and provides milestones for task, CDC completion, and prioritizes deployment/UTC, upgrade, and qualification tasks.

Occupational Analysis Report (OAR). Collecting and analyzing factual data on the tasks and/or knowledge performed by Air Force career fields. This data is used to provide personnel and training decision-makers with factual and objective job information, which enables them to justify and/or change personnel utilization policies and programs, refine and maintain

occupational structures, and establish, validate, and adjust testing and training programs.

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. An alpha/numeric code assigned to a subject knowledge, task knowledge or task performance level.

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

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

Comprehensive Medical Readiness Program (CMRP). Recurring training necessary to maintain skills of a fully qualified individual to adequately perform the mission and related duties required in peacetime and wartime.

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

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

Specialty Training Requirements Team (STRT). Team comprised of AFCFM, MFMs, and Subject Matter Experts (SME) who determine present training requirements to the AETC Training Pipeline Manager and course Training Manager.

Subject Matter Expert (SME). An individual appointed by the AFCFM who provides accurate and up-to-date information to enhance decisions made by the AFCFM. SMEs are focal points for providing guidance, information, and support on Air Force Specialty Code (AFSC) specific issues. Additionally, SMEs advise MFMs, Command Surgeons, and other agencies on resource and personnel utilization within the AFSC.

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 (AF) publication describing an AFS in terms of tasks and knowledge an Airman in a specialty may be expected to perform or to know on the job. STSs identify the training provided to achieve a 3-, 5-, or 7-skill level within an enlisted AFS. It further serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and correspondence courses.

Total Force. All collective AF components (active, Reserve, Guard, and civilian elements) of the United States Air Force.

Trainer. A trained and qualified person approved by the commander to teach personnel to perform specific tasks through on-the-job methods.

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 AFSC functional managers, SMEs, and AETC training personnel who determine career ladder training requirements.

Section A – General Information

1. Purpose of the CFETP. This CFETP provides information necessary for the AFCFM, MAJCOM Functional Managers (MFMs), commanders, training managers, supervisors, trainers and certifiers to plan, develop, manage, and conduct an effective career field training program. The plan outlines the training individuals in the 4T0X2 specialty should receive in order to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced, and proficiency training. 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. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. In addition, it helps supervisors identify training at the appropriate point in an individual's career.

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

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

1.4. Identifies major resource constraints that impact full implementation of the desired career field training program.

2. Uses of the CFETP. This document 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. METC training personnel will develop/revise formal resident training based on the STS established by the users and documented in Part II of this CFETP. Personnel will develop/revise non-resident, field, and exportable training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. Requirements are satisfied through OJT, resident training, contract training, or exportable courses. MAJCOM developed training to support this AFSC must be identified for inclusion into this CFETP.

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

3. Coordination and Approval. The AFCFM is the approval authority for the CFETP. In addition, the AFCFM will initiate an annual review of this document to ensure currency and accuracy. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. Using the list of courses in Part II, they will eliminate duplicate training. They will submit, through proper channels, initial and subsequent changes to the CFETP.

Section B – Career Progression and Information

1. Specialty Descriptions. The following information incorporates the latest changes to the Enlisted Classification Directory located on the Air Force Personnel Services website (type ‘Enlisted Classification Directory’ in the search block).

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

1.1.1. Specialty Summary. Manages all medical laboratory activities in support of patient care, medical research, and military public health. Related DoD Occupational Subgroup: 131100.

1.1.2. Duties and Responsibilities.

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

1.1.2.2. Directs medical laboratory activities. Resolves problems about medical laboratory activities. Ensures supply and equipment availability. Applies continuous and effective internal quality control of all medical laboratory departments.

1.1.2.3. Inspects and evaluates medical laboratory activities. Inspects of 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 technique, taking precautions to maintain safe conditions for both hospital and laboratory personnel. Evaluates laboratory quality control program effectiveness.

1.1.2.4. Performs medical laboratory functions. Assists medical officers and allied scientists in research assignment in broad pathology field. Prepares tissue for electron microscopy. Directs toxicology procedures performance incident to aerospace pathology and forensic medicine programs. Assists biological warfare officer in developing procedures for detecting bacteriological agents incident to biological warfare.

1.2. Histopathology Apprentice/Journeyman/Craftsman

1.2.1. Specialty Summary. Performs sub-professional duties at autopsies, prepares autopsy and surgical specimens, and supervises histopathology activities. Related DoD Occupational Subgroup: 131100.

1.2.2. Duties and Responsibilities.

1.2.2.1. Prepares surgical, cytological, and autopsy specimens. Receives and prepares specimens for fixation, dehydration, and impregnation processes by either manually or automatically sending specimens through a series of formalins, alcohols, clearing agents, and paraffin. Embeds tissues and prepares paraffin blocks for cutting on rotary microtome. Attaches cut tissues on specialty prepared microslides and clears paraffin from tissue. Obtains tissue slides by surgical, cytological, or autopsy number. Submits finished tissue slides to the pathologist along with pertinent clinical data received from originating agency and gross examination by the pathologist. Performs special stains and procedures.

1.2.2.2. Performs duties at autopsies. Serves as a technical assistant at autopsies. Assists pathologist in opening abdominal, pleural, and cranial cavities; examining various organs; and procuring and handling specimens from these organs. Prepares remains for transfer to mortuary,

to include cleaning and closing all incisions. Labels and stores autopsy specimens until pathologist makes final examination prior to fixing, embedding, and staining.

1.2.2.3. Maintains histopathology records and instruments. Maintains complete records of all surgical, cytological, and autopsy specimens, to include filing and storing of paraffin blocks and stained tissue slides by accession number. Prepares and ships blocks, slides, and diagnosis reports to various military and civilian medical facilities. Maintains all surgical and autopsy instruments, to include sharpening and cleaning microtome blades, knives, scissors, and chisels.

1.2.2.4. Performs quality assurance. Evaluates current and new procedures for implementation and effectiveness. Monitors specimen handling, cutting, and staining quality; and equipment and controlled substances inventory. Assists in maintaining accreditation standards.

2. Skill and Career Progression. Adequate training and timely progression from the apprentice through the superintendent skill level play an important role in the AF's ability to accomplish its mission. It is essential everyone involved in training must 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.

2.1. Apprentice 3-Skill Level. Initial skills training in this specialty consists of tasks and knowledge provided in the 3-skill level resident Histopathology Apprentice course located at METC. This course includes extensive didactic training followed by laboratory practicum and clinical practicum training. The decision to train on specific task and knowledge items is based on a review of occupational analysis report (OAR) data and a review of training requirements by 4T0X2 SMEs. Task and knowledge requirements are identified in the STS of this CFETP. Effective CY 20: At the conclusion of the Histopathology Apprentice course, attendees will challenge the American Society for Clinical Pathology (ASCP) Histotechnician (HT) certification examination. Personnel that fail to obtain the HT certification at the end of the apprentice course will have 15 months to re-challenge and pass the examination. Award of the HT certification is required for upgrade to the 4T052 AFSC, waivable only by AFCFM. Maintenance of the HT credential is required for retention in AFSCs 4T052, 4T072, and 4T090.

2.2. Journeyman 5-Skill Level. Journeymen will attend the Airman Leadership School (ALS) after 48 months in the Air Force, or sooner, if selected for promotion to Staff Sergeant. After ALS, journeymen can perform duties as trainers and supervisors and be considered for appointment as unit trainers. To enhance their skills, members are highly encouraged to continue their education toward a College of Allied Health Sciences (CAHS) associate degree.

2.3. Craftsman 7-Skill Level. A histopathology craftsman can be expected to fill various supervisory and management positions within the laboratory such as NCOIC of the laboratory or 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. The 7-levels should take courses or obtain added knowledge on management of resources and personnel. Members are highly encouraged to continue their education toward a CAHS associate degree.

2.4. Superintendent 9-Skill Level. A 9-skill level can be expected to fill positions such as Superintendent of Laboratory Services, 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. If another associate degree is already awarded, completion of an Associate Degree in Histologic Technology is highly encouraged. Completion of additional degrees in medical laboratory or management-related fields of study is encouraged.

3. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the 4T0X2 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 AFCFM's coordination with MAJCOM representatives.

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

3.2. 5-Skill Level. During the STRT, voting members elected to add 5-skill level tasks to formal training as an upgrade requirement in an effort to standardize on-the-job training and to provide Airmen with fundamental AFS career knowledge. A formally developed 5-skill OJT package will be used by supervisors to conduct OJT and ensure members meet all requirements for histopathology technician at 4T052 AFSC. The 5-skill level OJT package will be developed by personnel designated by the AFCFM. Supervisors are required to use this OJT package as a guide to conduct OJT. The member's commander awards the 5-skill level upon successful completion of the 5-skill level OJT as verified by the supervisor, successful completion of all 5-skill level core tasks, and a minimum of 12-months' time in upgrade training.

3.3. 7-Skill Level. Voting members agreed to create core tasks for 7-skill level upgrade training. All related tasks provide supervisors with the proper training of managing technicians within a laboratory. A formally developed 7-skill OJT package will be used by supervisors to conduct OJT and ensure members meet all requirements for histopathology technician at 4T072 AFSC. The 7-skill level OJT package will be developed by personnel designated by the AFCFM. Supervisors are required to use this OJT package as a guide to conduct OJT. The member's commander awards the 7-skill level upon successful completion of the 7-skill level OJT as verified by the supervisor, successful completion of all 7-skill level core tasks, and a minimum of 12-months' time in upgrade training.

4. College of Allied Health Sciences (CAHS). CAHS is a component of the Uniformed Services University of Health Sciences (USUHS) and a degree-granting institution. The college is regionally accredited to award Associate degrees designed for specific medical specialties. All enlisted airmen entering this specialty are entered into the CAHS degree program.

4.1. CAHS Degree Requirements. The Associate of Science in Health Sciences (ASHS) requires at least 60 semester hours with these requirements:

- A GPA of at least 2.0 and a grade of C or better in all courses
- Residence of at least 25% of the degree plan
- General Education of at least 30 semester hours
- Major technical field of study of at least 15 semester hours
- General electives up to 15 semester hours (as needed to achieve at least 60 semester hours)

The following requirements are for a Histology Technician ASHS from CAHS:

DEGREE PROGRAM.....	Hrs
General Education Requirements (30 hours)	
Oral Communication.....	3
Written Communication.....	3
Math	3
Science	3
Anatomy and Tissue ID*	3
Special Stains for Histology*.....	2
Cytopreparatory Techniques*	1
Immunohistochemistry*	1
Histology Practicum I*	5
Humanity.....	3
Social Science I.....	3
Major Requirements (38 hours)	
Major Technical Field of Study from the Histopathology Apprenticeship Course.....	38
	Total: 68

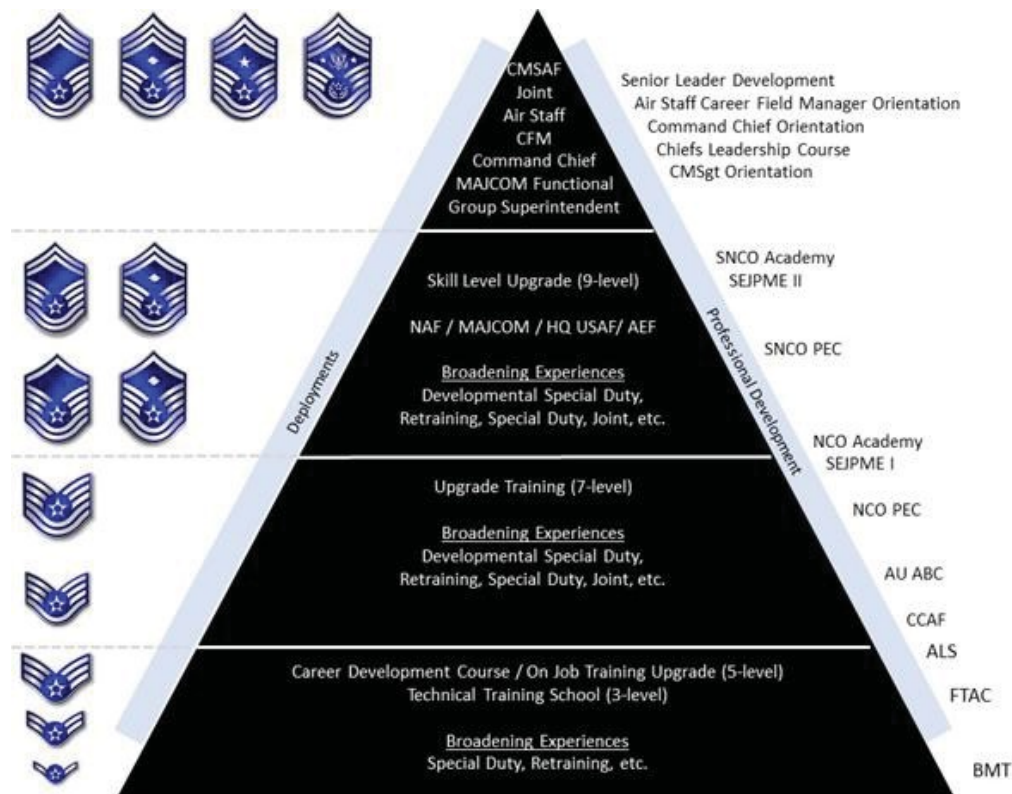
**Note: These are the general education credits from the Histopathology Apprenticeship Course which awards a total of 50 semester hours.*

4.2. Air Force Credentialing Opportunities On-Line (AF COOL). AF COOL replaced the CCAF Credentialing and Education Research Tool. The AF COOL program provides a research tool designed to increase an Airman's awareness of national professional credentialing and CCAF education opportunities available for all AF occupational specialties. AF COOL also provides information on specific occupational specialties, civilian occupational equivalencies, CCAF degree programs, AFSC-related national professional credentials, credentialing agencies, and professional organizations. AF COOL contains a variety of information about credentialing and licensing and can be used to:

- Get background information about civilian licensure and certification in general and specific information on individual credentials including eligibility requirements and resources to prepare for an exam.
- Identify licenses and certifications relevant to an AFSC.
- Learn how to fill gaps between AF training and experience and civilian credentialing requirements.
- Get information for opportunities to pay for credentialing exams and associated fees.
- Learn about resources available to Airmen that can help them gain civilian job credentials.

5. Career Field Path. The Enlisted Career Path (figure 5.1) outlines, with correlation to rank, when training is required for each skill level and function within this specialty.

Figure 5.1. Enlisted Career Path



Section C – Skill Level Training Requirements

1. Purpose. Skill level training requirements in this specialty are defined in terms of task 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.

2. Specialty Qualifications. The various skill levels in this career field are defined in terms of tasks and knowledge proficiency requirements for each skill level. They are stated in broad general terms and establish the standards of performance. Unit work centers must develop a structured training program to ensure the following requirements are met. All specialty requirements are located in the AFECD.

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

2.1.1. Specialty Qualifications.

2.1.1.1. Knowledge. Knowledge is mandatory of: methods of fixing, staining, embedding, and cutting all types of tissues; properties of various biological stains and reagents; autopsy procedures; equipment maintenance; and medical terminology, ethics, and basic administration.

2.1.1.2. Education. For entry into this specialty, completion of high school or college courses

in algebra, chemistry and biological sciences (e.g., anatomy and physiology, botany, general biology, microbiology, zoology, etc.) is mandatory.

2.1.1.3. Training. For award of AFSC 4T032, completion of the Histopathology course is mandatory. Attendees of the course will challenge the American Society for Clinical Pathology (ASCP) Histotechnician (HT) certification examination.

2.1.1.4. Experience. No prior experience is mandatory for the award of the 3-skill level.

2.1.1.5. Other. For entry into this specialty, normal color vision and a physical profile series factor (PULHES) as defined in AFI 48-123, *Medical Examinations and Standards*, is mandatory. For award and retention of AFSC 4T032, members must maintain local network access IAW AFI 17-130, *Cybersecurity Program Management*, and AFMAN 17-1301, *Computer Security (Compusec)*.

2.1.2. Training Sources/Resources. The initial skills course will provide the required knowledge and qualification.

2.1.3. Implementation. Entry into AFSC 4T032, initial skills training, is accomplished by pipeline students from basic training or by approved retraining from any AFSC. After technical school training, qualification training starts when an individual is assigned to their first duty position. Thereafter, it is initiated any time an individual is assigned duties they are not qualified to perform.

2.2 Journeyman Level Training (5-skill level):

2.2.1. Specialty Qualifications.

2.2.1.1. 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 all areas of histopathology.

2.2.1.2. Education. There are no additional educational requirements beyond those defined for the apprentice level.

2.2.1.3. Training. No mandatory AETC training courses are required for upgrade, but members must maintain HT certification.

2.2.1.4. Experience. Qualification in and possession of AFSC 4T032 is mandatory.

2.2.1.5. Other. See paragraph 2.1.1.5.

2.2.2. Training Sources/Resources. Supervisors provide oversight and guidance of upgrade training of the airmen to the 5-skill level, and use the STS and proficiency codes for 5-level OJT (see column 4B) to ensure airmen meet those standards. A formal OJT package for 5-skill level will be written to assist in this process to build from the trainee's current knowledge base and provide more in-depth knowledge to support OJT requirements. Until that OJT package is developed and made available to the supervisor, the OJT process is in the hands of the supervisor. The airmen in upgrade training are evaluated by supervisors per the proficiency codes in the STS and are certified in the AFTR (or the successor system).

2.2.3. Implementation. Entry into formal journeyman upgrade training is accomplished once individuals are assigned to their first duty station. Qualification training is initiated anytime

individuals are assigned to duties they are not qualified to perform.

2.3 Craftsman Level Training (7-skill level):

2.3.1. Specialty Qualifications.

2.3.1.1. 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; 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 specimen collection, processing and shipment.

2.3.1.2. Education. There are no additional educational requirements beyond those defined for the apprentice level.

2.3.1.3. Training. No mandatory AETC training courses are required for upgrade, but members must maintain HT certification.

2.3.1.4. Experience. Qualification in and possession of AFSC 4T052 is mandatory.

2.3.1.5. Other. See paragraph 2.1.1.5.

2.3.2. Training Sources/Resources. The formal OJT package for 7-skill level is written to build from the trainee's current knowledge base and provide more in-depth knowledge to support OJT requirements. The airmen complete study of references, are evaluated by supervisors as directed by the OJT package, and are certified in the AFTR (or successor system).

2.3.3. Implementation. Entry into OJT is initiated when individuals obtain the necessary rank and skill level. Qualification training is initiated anytime an individual is assigned to duties they are not qualified to perform.

2.4 Superintendent Level (9-skill level):

2.4.1. Specialty Qualifications. All 4T072 qualifications apply to 4T090 requirements.

2.4.1.1. Knowledge. Knowledge is mandatory of: pathology and histopathology fundamental, clinical chemistry, urinalyses, hematology, microbiology, blood banking, immunology, medical terminology, medical ethics applicable to performing medical laboratory procedures, and medical laboratory management and medical administration principles.

2.4.1.2. Education. There are no additional educational requirements beyond those defined for the apprentice level.

2.4.1.3. Training. No mandatory AETC training courses are required for upgrade, but members must maintain HT certification.

2.4.1.4. Experience. For award of AFSC 4T090, qualification in and possession of either AFSC 4T071 or 4T072 is mandatory. In addition, experience is mandatory managing functions such as preparing body tissues for microscopic study, chemical analyses, or bacteriology.

2.4.1.5. Other. See paragraph 2.1.1.5.

2.4.2. Training Sources/Resources. Duty position qualification represents the required resources for upgrade to the 9-level.

2.4.3. Implementation. The 9-skill level is awarded when an individual: (1) possesses a 7-skill

level, (2) is a SMSgt, and (3) has completed any other requirements specified in AFI 36-2651, *Air Force Training Program*.

Section D – Resource Constraints

16. Purpose. This section identifies known resource constraints, which preclude optimal and 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, at 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. No 5-skill level resource constraints exist.

19. Craftsman 7-Skill Level Training. No 7-skill level resource constraints exist.

Section E – Transitional Training Guide - There is currently no transition training requirement. This area is reserved.

PART II, TRAINING STANDARDS

Section A – Specialty Training Standard (STS)

1. Implementation. The STS will be used for technical training provided by METC for the 3-skill level Education and Training Apprentice course with the class beginning no earlier than 6 January 2020. There are no CDCs for this course, but the 5-skill level OJT package will be implemented with the first graduating class based on this STS. Implementation of using the 7-skill level OJT package is effective when that package has been completed.

2. Purpose of the STS and explanation of columns.

2.1. Column 1 (Task, Knowledge, and Technical Reference) lists the most common tasks, knowledge, and technical references (TR) necessary for Airmen to perform duties in the 3-, 5-, and 7-skill level.

2.2. Column 2 (Core Tasks) identifies specialty-wide training requirements, and if the task has to be certified when signed off (indicated by “^”).

2.3. Column 3 provides certification for OJT and is used to record completion of tasks and knowledge training requirements. Use the automated Air Force Training Record (AFTR), or successor system, to formally document technician qualifications.

2.4. Column 4 shows formal training and correspondence course requirements.

2.4.1. Column 4A is used to indicate the level of training and knowledge provided by resident 3-skill level training in the Histopathology Apprentice Course.

2.4.2. Column 4B and 4C are used to indicate level of training and knowledge provided during upgrade training for the 5 and 7-skill level respectively and using the formally developed OJT package.

2.5. Qualitative Requirements. The proficiency code key is on the page before the STS and is used to indicate the level of training and knowledge provided by resident training and OJT. Also on this page is a section for identification of the trainee and certifying officials.

2.6. Training responsibilities. See AFI 36-2651, *Air Force Training Program*, chapter 6 for details regarding responsibilities for conducting OJT. For OJT, tasks are trained and qualified per formally developed OJT package and correlate to proficiency codes in columns 4B and 4C.

2.7. 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 AETC Airman Advancement Division 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 Enlisted Promotions References and Requirements Catalog (EPRRC). Examinee responsibilities are listed in paragraph 4.2.15 of AFMAN 36-2664, *Personnel Assessment Program*.

3. Recommendations. Identify inadequacies and recommend changes to this training standard through channels at 59 TRG/TGE, 2931 Harney Rd, JBSA Fort Sam Houston, Texas 78234-7674 or use the Customer Service Information Line (CSIL) (DSN) 420-1080, (Commercial) 210-808-1080 to report your findings.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

DOROTHY A. HOGG
Lieutenant General, USAF, NC
Surgeon General

Attachment
STS: Histopathology Specialty (4T0X2)

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

QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	Definition: The individual
Task Performance Levels	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (Extremely Limited)
	2	Can do most parts of the task. Needs only help on hardest parts. (Partially Proficient)
	3	Can do all parts of the task. Needs only a spot check of completed work. (Competent)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (Highly Proficient)
*Task Knowledge Levels	a	Can name parts, tools, and simple facts about the task. (Nomenclature)
	b	Can determine step by step procedures for doing the task. (Procedures)
	c	Can identify why and when the task must be done and why each step is needed. (Operating Principles)
	d	Can predict, isolate, and resolve problems about the task. (Advanced Theory)
**Subject Knowledge Levels	A	Can identify basic facts and terms about the subject. (Facts)
	B	Can identify relationship of basic facts and state general principles about the subject. (Principles)
	C	Can analyze facts and principles and draw conclusions about the subject. (Analysis)
	D	Can evaluate conditions and make proper decisions about the subject. (Evaluation)

Explanations

* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)

** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.

- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.

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

NOTE: All tasks and knowledge items shown with a proficiency code are trained during war time.

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
1. CAREER LADDER PROGRESSION TR: Air Force Enlisted Classification Directory (AFECD); AFH 36-2618, The Enlisted Force Structure; AFI 36-2101, Classifying Military Personnel (Officer and Enlisted); AFI 36-2649, Voluntary Education Program; AFI 41-104, Professional Board and National Certification Examinations; AFI 44-102, Medical Care Management; AFD 41-1, Healthcare Programs and Resources; AFD 44-1, Medical Operations; CCAF Catalog									
1.1. Progression in 4T0X2 Career Ladder							A	B	-
1.2. 4T0X2 Educational Opportunities							B	B	-
1.3. Military Health System (MHS)									
1.3.1. AFMS Flight Path							A	-	B
1.3.2. Laboratory Service Organization and Mission							A	-	B
1.4. Acquire American Society for Clinical Pathology (ASCP) Histotechnician (HT) certification	5^						-	-	-
2. MEDICAL READINESS TR: AFI 41-106, Medical Readiness Program Management. NOTE: Initial training is provided in the Emergency Medical Readiness Course (EMRC) conducted at the 59th Training Group, JBSA Ft Sam Houston Texas. Continuing/on-going Medical Readiness training for the individual is the responsibility of each member's unit									
3. BASIC LIFE SUPPORT (BLS) TR: American Red Cross BLS for Healthcare Providers									
3.1. Perform Basic Life Support (BLS)							3c	-	-
4. REGULATORY AGENCIES TR: AFI 44-108, Infection Prevention and Control Program; AFI 48-158, Occupational Exposure to Hazardous Chemicals in Laboratories; AFI 91-202, The US Air Force Mishap Prevention Program; AFI 91-203, Air Force Consolidated Occupational Safety Instruction; GP 17-A3, Clinical Laboratory Standards Institute (CLSI) Clinical Laboratory Safety									
4.1. Occupational Safety and Health Administration (OSHA) Standards							A	B	-
4.2. Air Force Office of Safety and Health (AFOSH) Standards							A	B	-
4.3. Environmental Protection Agency (EPA) Regulations							A	B	-
4.4. Apply Safety Precautions	5						b	c	-
4.5. Accident Reporting							A	B	-
4.6. Safety Programs							A	C	-

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
5. PROFESSIONAL AND PATIENT RELATIONSHIPS TR: AFI 36-2909, Professional and Unprofessional Relationships; AFI 44-102, Medical Care Management; DoD 5500.7-R, Joint Ethics Regulation, Chapter 12									
5.1. Standards of Ethics							A	-	-
5.2. Health Insurance Portability and Accountability Act (HIPAA)							B	-	-
5.3. Customer Service							A	B	-
6. MEDICAL MATERIEL TR: AFI 41-209, Medical Logistics Support									
6.1. Air Force Accountability and Responsibility							A	B	-
6.2. Supply Procurement							A	B	-
6.3. Supply Disposition							A	B	-
6.4. Equipment Procurement							A	B	-
6.5. Equipment Disposition							A	B	-
7. SUPERVISION TR: AFH 1, The Airman Handbook; AFH 36-2618, The Enlisted Force Structure; AFI 36-2406, Officer and Enlisted Evaluation Systems; AFI 36-2502, Airman Promotion/Demotion Programs; AFI 36-2616, Technical Training Requirements Programs (Officer and Enlisted); AFI 36-2907, Unfavorable Information File (UIF) Program									
7.1. Orient New Personnel	7						-	-	-
7.2. Schedule Work Assignments	7						-	-	-
7.3. Establish Performance Standards for Subordinates	7						-	-	-
7.4. Evaluate Work Performance Standards for Subordinates	7						-	-	-
7.5. Resolve Technical Problems							-	-	-
7.6. Counsel Personnel	7						-	-	-
7.7. Resolve Personnel Problems	7						-	-	-
7.8. Initiate Action to Correct Substandard Performance by Personnel	7						-	-	-
8. MANAGEMENT TR: AFI 38-201, Management of Manpower Requirements and Authorizations; AFI 41-106, Medical Readiness Program Management; AFI 65-601 Volume 1, Budget Guidance and Procedures; AFMAN 41-120, Medical Resource Management Operations									

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
8.1. Unit Manning Document (UMD) (i.e., Authorization change request, organization change request, career progression group, zero balance transfer, manpower change request, assignment of personnel, reconciliation)							-	-	-
8.2. Unit Personnel Manning Roster (UPMR) reconciliation							-	-	-
8.3. Program Objective Memorandum (POM)							-	-	-
8.4. Manpower Standard							-	-	-
8.5. Prepare Clinical Laboratory Management Indicators Report (CLMI)	7						-	-	3c
8.6. Manage Readiness Program	7						-	-	2b
8.7. Budget Preparation/Execution							-	-	-
9. TRAINING TR: Air Force Enlisted Classification Directory (AFECD); AFI 36-2101, Classifying Military Personnel (Officer and Enlisted); AFI 36-2651, Air Force Training Program									
9.1. Evaluate Personnel to Determine Need for Training	7						-	-	-
9.2. Plan OJT	7						-	-	-
9.3. Supervise OJT	7						-	-	-
9.4. Prepare Job Qualification Standards (JQS)	7						-	-	-
9.5. Design Work Center Specific Training	7						-	-	-
9.6. Conduct Work Center Specific Training	7						-	-	-
9.7. Counsel Trainees on their Progress	7						-	-	-
9.8. Monitor Qualification and Competency Effectiveness	7						-	-	-
9.9. Maintain Training Records	7						-	-	b
9.10. Evaluate Effectiveness of Training Programs	7						-	-	-
9.11. Recommend Personnel for Training	7						-	-	-
10. ANATOMIC PATHOLOGY ADMINISTRATION TR: AFI 33-360, Publications and Forms Management; AFI 44-102, Medical Care Management; AFI 48-158, Occupational Exposure to Hazardous Chemicals in Laboratories; OSHA Pub 3111, Hazard Communication Guidelines for Compliance; 29CFR 1910.134, Respiratory Protection; Quality Management in Anatomic Pathology, Nakhlen, R. E., and Fitzgibbons, P. L. 2005. College of American Pathologists (CAP); Standards for Laboratory Accreditation. 2017. College if American Pathologists (CAP)									

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
10.1. Operate Automated Data Systems									
10.1.1. Laboratory Information Systems (LIS)									
10.1.1.1. Enter Orders	5						2b	-	-
10.1.1.2. Confirm Orders	5						2b	-	-
10.1.1.3. Acknowledge External Orders	5						2b	-	-
10.1.1.4. Perform Shipping Functions	5						2b	-	-
10.1.1.5. Verify Results	5						2b	-	-
10.1.1.6. Search Patient Profile	5						2b	-	-
10.1.2. Anatomic Pathology LIS									
10.1.2.1. Accession Specimens	5						2b	-	-
10.1.2.2. Log and Label Printing	5						2b	-	-
10.1.2.3. Run Database Searches	5						2b	-	-
10.1.2.4. Design Database Searches	7						-	-	3c
10.2. Compile Workload Reports	5						-	-	-
10.3. Analyze Workload Reports	7						-	-	3c
10.4. Quality Control									
10.4.1. Perform Quality Control	5^						2b	3c	-
10.4.2. Analyze Quality Control	7^						-	-	3c
10.5. Use Operating Instructions (OIs)							2b	-	-
10.6. Develop OIs	7						-	-	3c
10.7. Accreditation Agencies									
10.7.1. The Joint Commission (TJC)							-	B	-
10.7.2. College of American Pathologists (CAP)							A	-	-
10.7.3. Prepare for Accreditation Inspections	7						-	2b	3c
10.8. Hazardous Materials Program Management							-	B	-

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
11. HISTOTECHNOLOGY TR: Histotechnology: A Self-Instructional Text, 3rd edition, Freida L Carson and Christa Hladik. 2009. ASCP Press; Diagnostic Pathology Normal Histology 2nd Edition, Matthew R. Lindberg and Laura W. Lamps. 2017. Elsevier; Bancroft's Theory and Practice of Histological Techniques. 7th Edition, Kim Suvana, Christopher Layton, and John Bancroft. 2012, Elsevier; Essentials of Medical Terminology, 3rd Edition. Davies, Juanita J. 2008. Delmar-Thompson Publishing									
11.1. Histotechnology Fundamentals							B	-	-
11.2. Operate equipment									
11.2.1. Tissue Processor	5						2c	-	-
11.2.2. Microtome	5						2c	-	-
11.2.3. Cryostat	5						2c	-	-
11.2.4. Embedding Center	5						2c	-	-
11.2.5. Bone Saws	5						2b	-	-
11.2.6. Microscope	5						2b	-	-
11.2.7. Balance	5						2b	-	-
11.2.8. Laboratory Glassware	5						2b	-	-
11.2.9. Surgical Instruments	5						2b	-	-
11.2.10. Pipettes							a	-	-
11.2.11. Automated Hematoxylin & Eosin (H&E) Stainer	5						2b	-	-
11.2.12. Automated Immunohistochemistry Stainer	7						2b	c	3c
11.2.13. Automated Special Stainer							2b	-	-
11.2.14. Automated Cover Slipper	5						2b	-	-
11.2.15. Microwave							a	-	-
11.2.16. Hot Plate/Stirrer							a	-	-
11.2.17. Waterbath	5						2b	-	-
11.2.18. Slide Printer							2b	-	-
11.2.19. Block Printer							2b	-	-
11.3. Medical Terminology							A	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
12. PERFORM HISTOTECHNOLOGY PROCEDURES TR: Histotechnology: A Self-Instructional Text, 3rd edition, Freida L Carson and Christa Hladik. 2009. ASCP Press; AP-LIS & CoPath plus System Manager Training Manual; Junqueira's Basic Histology, Text & Atlas 13th Edition, Anthony L. Mescher. 2013, McGraw Hill Lange Publishing; Diagnostic Pathology Normal Histology, Matthew R. Lindberg and Laura W. Lamps. Elsevier; Quality Management in Anatomic Pathology. Nakhleh, Raouf E. 2005. College of American Pathologists (CAP); The Joint Pathology Center (JPC) Contributor's Manual; The Joint Pathology Center (JPC) Instructions to Contributors; CAP Regulations (current checklist)									
12.1. Specimen Accessioning	5						2b	-	-
12.2. Surgical Gross Set-up and Disposition	5						2b	-	-
12.3. Tissue Processing	5						2b	3c	-
12.4. Embedding	5^						2c	-	-
12.5. Microtomy	5^						2c	-	-
12.6. Routine Staining	5						2b	3c	-
12.7. Manual Coverslipping	5						2b	c	-
12.8. Repair Slides	5						2b	-	-
12.9. Labeling Slides	5						2b	-	-
12.10. Retention of Materials	5						2b	c	-
12.11. Frozen Sections	5^						2b	c	-
12.12. Decalcification	5						2b	c	-
12.13. Bone Marrow									
12.13.1. Aspirate							a	b	-
12.13.2. Core							a	b	-
12.14. Prepare Control Blocks							a	b	-
12.15. Prepare Muscle Biopsies							-	b	-
12.16. Dispose of Wet Tissues							-	b	-

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
13. ANATOMY TR: Junqueira's Basic Histology, Text & Atlas 13th Edition, Anthony L. Mescher. 2013, McGraw Hill Lange Publishing; Diagnostic Pathology Normal Histology, Matthew R. Lindberg and Laura W. Lamps. Elsevier; Gray's Anatomy for Students, Drake, R., Vogl A. W., and Mitchell A. 2014. Elsevier; Military Autopsy Manual: Concise Illustrated Guide to Techniques and Objectives of Autopsies from the Armed Forces Institute of Pathology, with Organ by Organ Information, Progressive Management; Wheater's Functional Histology: A Text and Colour Atlas. Young, B., Lowe, J. S., Stevens, A., and Heath, J. W. 2006, Elsevier; An Atlas of Forensic Pathology. Dix, J. 2000, CRC Press									
13.1. Identify Tissue Macroscopically							2b	c	-
13.2. Identify Tissue Microscopically							2b	c	-
14. PERFORM SPECIAL STAINS TR: Histotechnology: A Self-Instructional Text, 3rd edition, Freida L Carson and Christa Hladik. 2009. ASCP Press									
14.1. Connective Tissue	5						2b	c	-
14.2. Infectious Agents	5						2b	c	-
14.3. Nerve Tissue							-	-	-
14.4. Pigments and Minerals	5						2b	c	-
14.5. Polysaccharides	5						2b	c	-
14.6. Frozen	5						2b	c	-
15. PERFORM MATHEMATICAL COMPUTATIONS TR: Histotechnology: A Self-Instructional Text, 3rd edition, Freida L Carson and Christa Hladik. 2009. ASCP Press									
15.1. Percent Solutions							2b	-	-
15.2. Metric System							2b	-	-
16. SPECIMEN SHIPMENT TR: AFMES Toxicological Shipping Guidelines; AFRSSIR Specimen Collection Instructions; The Joint Pathology Center (JPC) Contributor's Manual; The Joint Pathology Center (JPC) Instructions to Contributors; International Air Transport Association (IATA) Dangerous Goods Regulation (DGR)									

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
16.1. International Air Transport Association (IATA) Compliance for Hazardous Material							A	B	-
16.2. Toxicology Specimens							A	B	-
16.3. Ship Microscopic Slides							a	b	-
16.4. Ship Paraffin Blocks							a	b	-
16.5. Ship Wet Specimens									
16.5.1. Routine Tissue							a	b	-
16.5.2. Muscle Biopsies							a	b	-
16.5.3. Renal Biopsies							a	b	-
16.5.4. Gynecology (GYN)							a	b	-
16.5.5. Non GYN							a	b	-
16.5.6. Flow Cytometry							a	b	-
16.5.7. Cytogenetics							a	b	-
17. AUTOPSY PROCEDURES TR: An Introduction to Autopsy Technique, 2nd Edition, Kim A. Collins and Grover M. Hutchens, 2003. College of American Pathologists (CAP); Autopsy Performance & Reporting, 3rd Edition, Kim A. Collins, College of American Pathologists; Military Autopsy Manual: Concise Illustrated Guide to Techniques and Objectives of Autopsies from the Armed Forces Institute of Pathology, with Organ by Organ Information, Progressive Management; Armed Forces Medical Examiner System Autopsy Diagrams and Description Sheets (from health.mil)									
17.1. Prepare for Post Mortem Examination									
17.1.1. Routine Cases							2b	c	-
17.1.2. Forensic Cases							b	c	-
17.2. Assist in the Removal of Body Organs							2b	c	-
17.3. Prepare Body for Release							b	c	-
17.4. Maintain Morgue									
17.4.1. Clean-Routine Cases							2b	c	-
17.4.2. Clean-Infectious Cases							b	c	-

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
18. CARE AND MAINTENANCE OF THE LABORATORY TR: Histotechnology: A Self-Instructional Text, 3rd edition, Freida L Carson and Christa Hladik. 2009. ASCP Press; AFI 48-158, Occupational Exposure to Hazardous Chemicals in Laboratories									
18.1. Sanitize Laboratory	5						2b	-	-
18.2. Decontaminate Laboratory	5						2b	-	-
18.3. Handle Hazardous Materials/Waste	5						2b	-	-
19. CYTOLOGY PROCESSING TR: Histotechnology: A Self-Instructional Text, 3rd edition, Freida L Carson and Christa Hladik. 2009. ASCP Press; Bancroft's Theory and Practice of Histological Techniques. 7th Edition, Kim Suvarna, Christopher Layton, and John Bancroft. 2012, Elsevier									
19.1. Fine Needle Aspirate									
19.1.1. Prepare Cytology Smears	5						2b	c	-
19.1.2. Prepare Touch-Preps	5						2b	c	-
19.2. Operate Equipment									
19.2.1. Centrifuge	5						2b	-	-
19.2.2. Thin Prep							2b	-	-
19.3. Perform Staining Procedures									
19.3.1. Diff Quick	5						2b	c	-
19.3.2. Pap Stain	5						2b	c	-
19.4. Prepare Cell Block	5						2b	c	-
19.5. Perform Cyto-Spin	5						2b	c	-
20. TELEPATHOLOGY TR: Telepathology, Kumar S. & Dunn E. 2009, Springer Publishing									
20.1. Telepathology Fundamentals							-	A	-
20.2. Slide Scanning							-	A	-

1. Tasks, Knowledge And Technical References	2. Core Tasks Cert ^	3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)		
		A Tng Start	B Tng Complete	C Trainee Initials	D Trainer Initials	E Certifier Initials	A 3 Skill Level Course	B 5 Skill Level OJT	C 7 Skill Level OJT
21. IMMUNOHISTOCHEMISTRY (IHC) TR: Histotechnology: A Self-Instructional Text, Freida L Carson and Christa Hladik. 2009. ASCP Press; Bancroft's Theory and Practice of Histological Techniques. 7th Edition, Kim Suvarna, Christopher Layton, and John Bancroft. 2012, Elsevier									
21.1. Immunohistochemistry (IHC) fundamentals							A	B	-

***Technical Reference (TR) Source Summary
For Commercial and Other Service Publications***

STS 4T0X2

Commercial Texts (All Skill Levels)

AFMES Toxicological Shipping Guidelines

AFRSSIR Specimen Collection Instructions; The Joint Pathology Center (JPC) Contributor's Manual

An Atlas of Forensic Pathology. Dix, J. 2000, CRC Press

An Introduction to Autopsy Technique, 2nd Edition, Kim A. Collins and Grover M. Hutchens, 2003. College of American Pathologists (CAP)

AP-LIS & CoPath plus System Manager Training Manual

Armed Forces Medical Examiner System Autopsy Diagrams and Description Sheets (from health.mil)

Autopsy Performance & Reporting, 3rd Edition, Kim A. Collins, College of American Pathologists

Bancroft's Theory and Practice of Histological Techniques. 7th Edition, Kim Suvarna, Christopher Layton, and John Bancroft. 2012, Elsevier

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AFH 36-2618, The Enlisted Force Structure
AFI 33-360, Publications and Forms Management
AFI 36-2101, Classifying Military Personnel (Officer and Enlisted)
AFI 36-2406, Officer and Enlisted Evaluation Systems
AFI 36-2502, Airman Promotion/Demotion Programs
AFI 36-2616, Technical Training Requirements Programs (Officer and Enlisted)
AFI 36-2649, Voluntary Education Program
AFI 36-2651, Air Force Training Program
AFI 36-2907, Unfavorable Information File (UIF) Program
AFI 36-2909, Professional and Unprofessional Relationships
AFI 38-201, Management of Manpower Requirements and Authorizations
AFI 41-104, Professional Board and National Certification Examinations
AFI 41-106, Medical Readiness Program Management
AFI 41-209, Medical Logistics Support
AFI 44-102, Medical Care Management
AFI 44-108, Infection Prevention and Control Program
AFI 48-158, Occupational Exposure to Hazardous Chemicals in Laboratories
AFI 65-601 Volume 1, Budget Guidance and Procedures
AFI 91-202, The US Air Force Mishap Prevention Program
AFI 91-203, Air Force Consolidated Occupational Safety Instruction
AFMAN 41-120, Medical Resource Management Operations
AFPD 41-1, Healthcare Programs and Resources
AFPD 44-1, Medical Operations; CCAF Catalog
Air Force Enlisted Classification Directory (AFECD)
American Red Cross BLS for Healthcare Providers
DoD 5500.7-R, Joint Ethics Regulation, Chapter 12
OSHA Pub 3111, Hazard Communication Guidelines for Compliance

Section B – Course Objective List

- 1. Resident Courses.** If a written list of the course objectives is required, contact the Histopathology Apprentice course training manager by using the 59 TRG/TGE, 2931 Harney Road, JBSA-Fort Sam Houston, TX 78234 or use the Customer Service Information Line, DSN:420-1080 or COMM: 210-808-1080.
- 2. Measurement.** Students are measured in both knowledge and performance elements using a written test and a performance progress check.
- 3. Standard.** The course minimum standard is 70% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructor assistance is provided as needed when permitted during the progress check and students may be required to repeat all or part of the behavior until satisfactory performance is attained.
- 4. Proficiency Level.** Most course task performance is taught to the 2b proficiency level, which means the student can do most parts of the task but does need assistance on the hardest parts of the task (partially proficient). At the 2b level, the student can also determine step-by-step procedures for doing the task.
- 5. Initial Medical Readiness Training.** As directed by AFI 41-106, *Medical Readiness Program Management*, initial medical readiness training is provided within the Expeditionary Readiness Course (EMRC), which is conducted through the 59th Training Group at JBSA Camp Bullis, TX.
- 6. Career Development Courses (CDC).** There are no CDCs associated with the 4T0X2 specialty.

Section C – Support Materials

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

Section D – Training Course Index

1. 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.

2. Air Force In-Resident Courses.

COURSE NUMBER	COURSE TITLE	DEVELOPER
L5ABJ4T032 00AA	Histopathology Apprentice	METC

NOTE: Refer to ETCA for current course numbers.

3. Exportable Courses. Not used.

4. Courses under Development/Revision. The Histopathology Apprentice course (L5ABJ4T032 00AB) is based on the STS within this CFETP and is currently being developed by METC at JBSA Ft Sam Houston TX.

NOTE: The 4T032 5-skill level and 7-skill level CDCs have been eliminated with this CFETP and will not be developed. Instead, formally developed 5-skill level and 7-skill level OJT packages will be developed for use by supervisors and trainees.

Section E – MAJCOM Unique Requirements

There are currently no MAJCOM unique requirements. This area is reserved.