DEPARTMENT OF THE AIR FORCE
Headquarters US Air Force
Washington DC 20330-5000

CFETP 43EXX
Parts I, II
13 Apr 2016

AIR FORCE SPECIALTY CODE 43EXX
BIOENVIRONMENTAL ENGINEER OFFICER

CAREER FIELD EDUCATION AND TRAINING PLAN

ACCESSIBILITY: Publications and forms are available on the Air Force e-Publishing website at http://www.e-publishing.af.mil for downloading or ordering.

RELEASABILITY: There are no releasability restrictions on this publication.

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OPR: AF/SG
Certified by: Col Kirk Phillips (HAF/SG3P)
Supersedes: N/A
Pages: 71/Distribution: F

Part I

1.1. Preface

1.1.1. The 43EXX Career Field Education and Training Plan (CFETP) is a comprehensive core training document that identifies life-cycle training and education requirements, support resources, and minimum core task requirements for the 43EXX specialty. The plan is a "training road map" for the career field, providing personnel with a clear career path to success and makes career field training identifiable, measureable, and budget defensible. The CFETP provides personnel with a defined career path and instills rigor in all aspects of career field training. It consists of two parts; supervisors use both parts to plan, manage, and control 43EXX training. **NOTE:** Civilians occupying BE positions may use Part II to support duty position qualification training.

1.1.1.1. Part I provides information necessary for overall specialty management. **Section A** explains what the CFETP is and how it should be used. **Section B** identifies career field progression information, duties and responsibilities, training strategies, and defines the career field path. **Section C** associates each skill level with specialty qualifications (knowledge, education, training, experience, and other mandatory requirements). **Section D** identifies resource constraints and impacts.

1.1.1.2. Part II provides a comprehensive list of training courses and standards available to support career field training requirements. **Section A** is entitled Course Training Standard (CTS), but highlights the Specialty Training Standard (STS) – an AF publication that describes an Air Force Specialty (AFS) in terms of tasks and knowledge an Airman in that specialty may be expected to perform or to know on the job. The STS is the foundational document for the development of formal courses. **Section B** contains the training course index supervisors can use to determine resources available to support training. Included here are both mandatory and optional courses. **Section C** identifies available support materials, e.g., AF Qualification Training Packages (AFQTPs), which are developed to support proficiency training. **Section D** 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.

1.1.2. Use of the guidance provided in this CFETP provides the foundation for effective and efficient training of individuals in the 43EXX career field at the appropriate points in their career. This plan will enable us to train today’s workforce for tomorrow’s jobs.

1.2. Section A – General Information

1.2.1. Purpose. This CFETP provides information necessary for the Biomedical Science Corps (BSC) Associate Chief, 43EXX MAJCOM Bioenvironmental Engineers, Enlisted MAJCOM Functional Managers (MFMs), Commanders (CCs), Unit Training Managers (UTMs), supervisors, trainers and the United States School of Aerospace Medicine (USAFSAM) Force Development Division (OED) to plan, develop, manage, and conduct an effective and efficient career field education and training program. The plan outlines the training individuals in this Air Force Specialty (AFS) should receive in order to develop and progress throughout their careers. For purposes of this plan, training is divided into entry level, upgrade, and proficiency training. Initial skills training is mandatory training for all officers. Normally, this training is conducted by USAFSAM. Upgrade training (UGT) identifies the mandatory courses, qualification requirements, and educational requirements for award of the intermediate (43E2X), qualified (43E3X) or staff (43E4X) level. Proficiency training is additional training provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade.

1.2.2. CFETP Use. The CFETP is maintained and certified by the 43EXX BSC Associate Chief. The USAFSAM/OED staff and MAJCOM Bioenvironmental Engineers review the plan annually to ensure currency and accuracy. USAFSAM/OED is the primary office of responsibility for facilitating CFETP maintenance. Career field training managers at all levels use the plan to ensure a comprehensive and cohesive training program is available for each individual in the career ladder.

1.2.2.1. The USAFSAM/OED staff develop and revise formal resident, nonresident, field, and exportable training based on requirements established during Utilization and Training Workshops (U&TWs). Those training offerings are documented in Part II of this CFETP. They also develop procurement and acquisition strategies to obtain resources needed to provide the identified training.

1.2.2.2. MAJCOMs must ensure that any MAJCOM-unique training programs complement the CFETP mandatory initial skill, upgrade, and proficiency requirements. For any such unique training requirements, MAJCOMs must also identify the needed AF Job Qualification Standards (AFJQSs)/AFQTPs to document unique UGT and continuation training requirements. MAJCOM-unique requirements are satisfied through On-the-Job Training (OJT), resident training, contract training, or exportable courseware/courses. The MAJCOM must identify MAJCOM-developed training to support this AFS for inclusion in this plan, and the training must not duplicate available training resources.

1.2.2.3. IAW AFI 36-2201, *Air Force Training Program*, all officers will complete advanced or supplemental education/training courses as required by the BSC Associate Chief. This includes all requirements listed in the specialty description of the Air Force Officer Classification Directory (AFOCD) and CFETP. Failure to progress in training IAW this CFETP may result in a Commander's recommendation to withdraw the member from training and from the AFSC.

1.2.2.4. The list of courses in Part II will be used as a reference to support training.

1.2.3. CFETP Coordination and Approval. The BSC Associate Chief is the approval authority. Also, the BSC Associate Chief will initiate an annual review of this document to ensure currency and accuracy. MAJCOM representatives and USAFSAM/OED training personnel will identify and coordinate on career field training requirements. Using the list of courses in Part II, they will eliminate duplicate training.

1.3. Section B – Career Field Progression Information

1.3.1. Specialty Description. The AFOCD describes the 43EXX AFS. It is the guiding document for all Air Force officer classification issues and takes precedence over this CFETP for any classification issues. Headquarters Air Force Personnel Center (HQ AFPC/DPSIDC) is the OPR for the AFOCD as well as all classification issues. The AFOCD can be found on the myPers website (https://gum-crm.csd.disa.mil/app/home). The following reflects the most current AFOCD information for the 43EXX career field. It has been republished here for your reference and information.

1.3.1.1. **43EXX Specialty Summary.** Applies engineering and scientific principles in anticipating, recognizing, and evaluating occupational and environmental health (OEH) hazards, also called OEH threats. Designs and recommends risk control measures and other courses of action that enable Risk Management (RM) decisions, and in some cases, Patient Care strategies, to ensure Force Health Protection. Constituent Office of Personnel Management (OPM) Occupational Series: 0690 (Industrial Hygiene), 0801 (General Engineering and Architecture), 0819 (Environmental Engineering), 1306 (Health Physics), and 1310 (Physics). Related OPM Occupational Series: 0089 (Emergency Management), 0415 (Toxicology), 0602 (Medical Officer), 0688 (Sanitarian), 0803 (Safety Engineering), 0840 (Nuclear Engineering), 0896 (Industrial Engineering), 1301 (General Physical Sciences), 1315 (Hydrology), 1320 (Chemistry), and 1550 (Computer Science). Related DoD Occupational Groups: 260803, 260815, 260823, and 260825.

1.3.1.2. **Duties and Responsibilities.**

1.3.1.2.1. Executes and supervises Bioenvironmental Engineering (BE) programs. Applies knowledge of engineering and the sciences to assist commanders in meeting mission objectives at home station and deployed settings. Performs and documents health risk assessments for chemical, biological, radiological, nuclear (CBRN), and physical hazards, which may compromise Force Health Protection. Advises commanders on impact of unacceptable risk to mission and provides viable courses of action to reduce and eliminate risk. Identifies and assesses effectiveness of OEH controls. Participates in installation contingency response activities, including exercises. Determines the appropriateness of personnel protective equipment to include individual protective equipment. May participate in development of policy. Directs and supervises technicians conducting base BE activities. Maintains liaison with local, state, and federal agencies on matters involving OEH standards and;

1.3.1.2.2. Advises command and staff agencies on effective RM decisions and;

1.3.1.2.3. Develops measures to control radiological hazards, including those encountered in unrestricted areas, to ensure permissible limits of radiation exposure are not exceeded. Augments medical health physics activities. Enables radiological monitoring, measurement, and control for the Nuclear Enterprise. Serves as Radiation Safety Officer where required and;

1.3.1.2.4. AFSC 43EXC (Architecture/Medical Construction): Applies knowledge of architecture and engineering to modernize and maintain health care, training, and laboratory facilities. Provides guidance on functional and technical criteria specific to medical design and construction. Programs and plans medical facilities projects; reviews plans, specifications, and other supporting data for technical, medical, and functional sufficiency.

1.3.1.2.5. AFSC 43EXG (Health Physics): Provides consultation regarding planning, designing, and constructing facilities for storage, use, and disposal of radioactive material or radiation producing devices. Guides the health risk assessment of exposure to ionizing and non-ionizing radiation; and ensures adherence to prescribed safety standards by evaluating activities involving the possession, handling, transportation, storage, use, and disposition of radioactive materials, as well as activities involving use of lasers and other non-ionizing radiation sources. Enables enhanced CBRN response capability for nuclear and radiological incidents.

1.3.1.2.6. AFSC 43EXM (Medical Physics): Develops, institutes, and sustains medical physics programs for radiotherapy, nuclear medicine, and diagnostic imaging physics services that enable safe and effective patient care. Augments radiology resident training programs. Conducts medical physics activities, research and development on medical physics related topics.

1.3.1.3. **BE Vision.** Optimize human performance through full spectrum health risk reduction.

1.3.1.4. **BE Mission.** Provide worldwide operational health risk expertise to optimize human performance, enhance commander decision making, and health services support.

1.3.1.5. **The BE Capabilities.** The five (5) BE Capabilities are:

1.3.1.5.1. Provide health surveillance: Health surveillance capability promotes force generation through sampling, identification, quantification, assessment, risk communication, control, and documentation of potential exposures.

1.3.1.5.2. Plan, prepare for, and provide real-time CBRN response: Planning, preparing for, and providing real time response is provided through intelligence, surveillance, risk assessment, decision support, protective measures, and sample preservation while operating in cold, warm and hot zones.

1.3.1.5.3. Ensure safe potable/non-potable water: Through our sampling, system analysis and field sanitation assessments, provide accurate assessments of potable and non-potable water.

1.3.1.5.4. Reduce vulnerabilities: Identify and reduce health risk through intelligence reviews and specialized vulnerability assessments including water and toxic materials/chemicals.

1.3.1.5.5. Reduce health risks: Through flexible and sustainable force health protection recommendations to predict and reduce adverse health effects in all occupational, environmental, and CBRN operations.

1.3.2. Skill and Career Progression.

1.3.2.1. Adequate training and timely progression from entry level to the qualified level play an important role in the AF's ability to accomplish its mission. It is essential that everyone involved in training does 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.

1.3.2.1.1. Entry Level (43E1A). For entry into this specialty, an officer must meet the mandatory requirements listed in the AFOCD.

1.3.2.1.2. Intermediate Level (43E2A). For award of 43E2A, completion of the BE Officer Course is required.

1.3.2.1.3. Qualified Level (43E3A). For award of 43E3A, completion of upgrade training IAW the current CFETP, completion of the BE Officer Advanced Course, and possession of AFSC 43E2A is required. NOTE: Details on applicability are described in Part I, Section C of this document.

1.3.2.1.4. Staff Level (43E4A). Education and training requirements for this level are the same as the Qualified Level (43E3A). Officer must be appointed to a planning and policy-making position above the Wing Level where the primary function is the development of policies, plans and procedures.

1.3.2.2. Specialty Shredouts. Refer to the latest version of the AFOCD for descriptions of educational requirements for each specialty shredout for 43EXX officers. Specialty shredouts include: General (A); Industrial Hygiene (B); Architecture/Medical Construction (C); Environmental Engineering and Science (D); Health Physics (G); and Medical Physics (M).

1.3.3. Training Decisions. The CFETP uses a building block approach to encompass the entire spectrum of training requirements for the 43E career field. The spectrum includes a strategy of training

requirements for when, where, and how to meet the training requirements in a specific time period. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training. Initial skills and UGT requirements were reviewed, updated, and expanded during the 43EXX U&TW held 17 November 2014 – 21 November 2014 at USAFSAM. Task and knowledge training requirements are identified in the STS (Part II, Section A of this CFETP).

1.3.3.1. Initial Skills. Initial training is developed and taught by USAFSAM. Initial training is outlined in Part I, Section C of this document.

1.3.3.2. Upgrade Requirements. Upgrade requirements are outlined in Part I, Section C of this document.

1.3.3.3. Proficiency Training. Proficiency training requirements are outlined in Part I, Section C of this document. In addition to formal training requirements, Bioenvironmental Engineering Flights should focus on a combination of OJT, in-house training, participation in the USAFSAM Individual Proficiency Analysis Testing (I-PAT) Program, and attendance of optional USAFSAM courses in order to maintain the required level of proficiency for critical tasks.

1.3.4. Career Path. This section summarizes and depicts the officer career path education and training required for each skill level and function within this specialty. Officers should strive to begin a successful career by building a *primary job proficiency* through a strong technical foundation. Follow that up by *building depth* through increased leadership opportunities. Finally, officers should focus on *building breadth* by expanding possibilities at different levels. Career progression opportunities must be carefully planned by not only considering professional goals, but personal ones as well (e.g., marriage, children, special needs, etc.).

1.3.4.1. **43EXA/B/D Career Field Pyramid.** Figure 1 below describes the typical career path for the following Specialty Shredouts: General (A); Industrial Hygiene (B); and Environmental Engineering and Science (D). Specific qualifying educational requirements for each specialty shredout are outlined in the AFOCD.

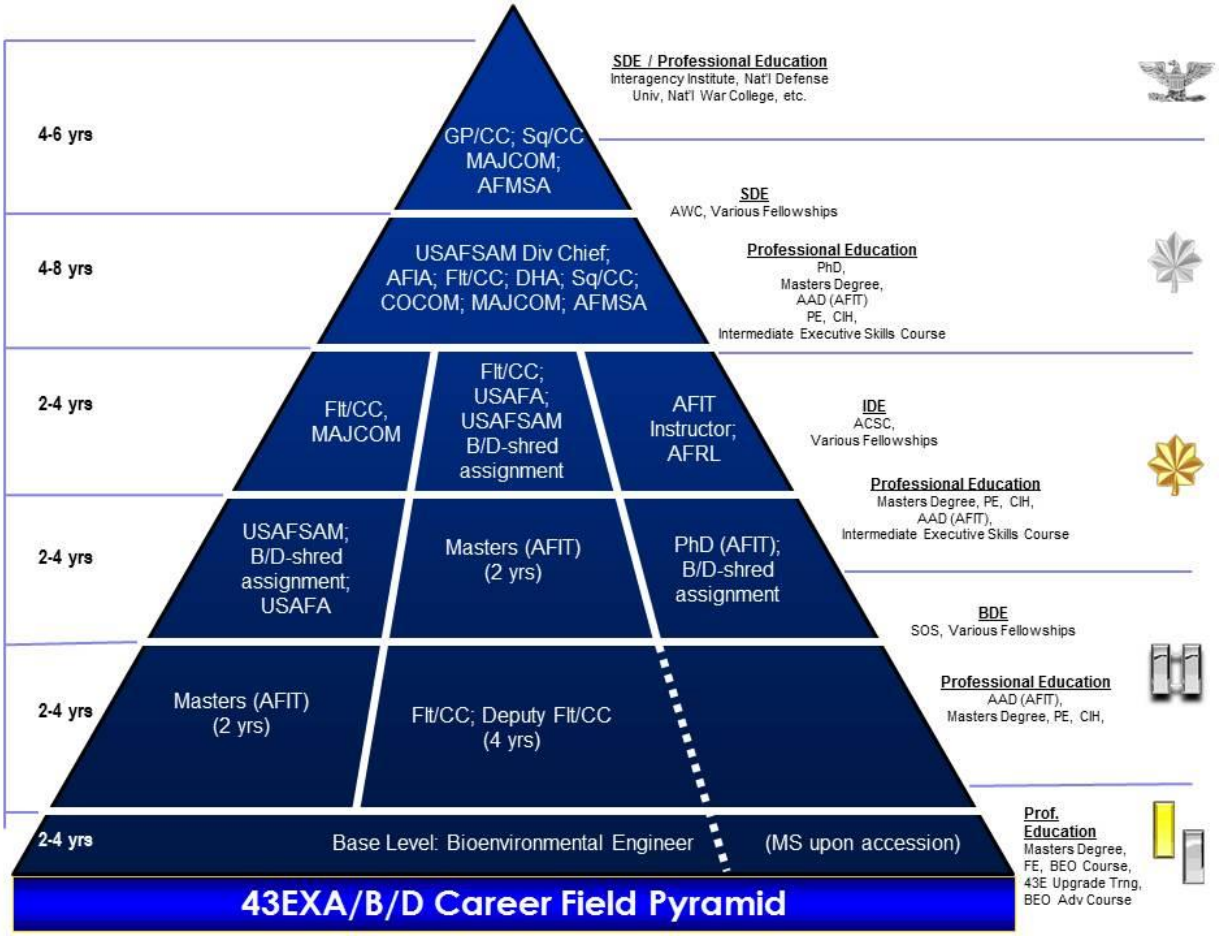

Figure 1. 43EXA/B/D Career Field Pyramid

1.3.4.2. **43EXC Career Field Pyramid.** Figure 2 below describes the typical career path for the Architecture/Medical Construction (C) specialty shredout. Specific qualifying educational requirements for each specialty shredout are outlined in the AFOCD.

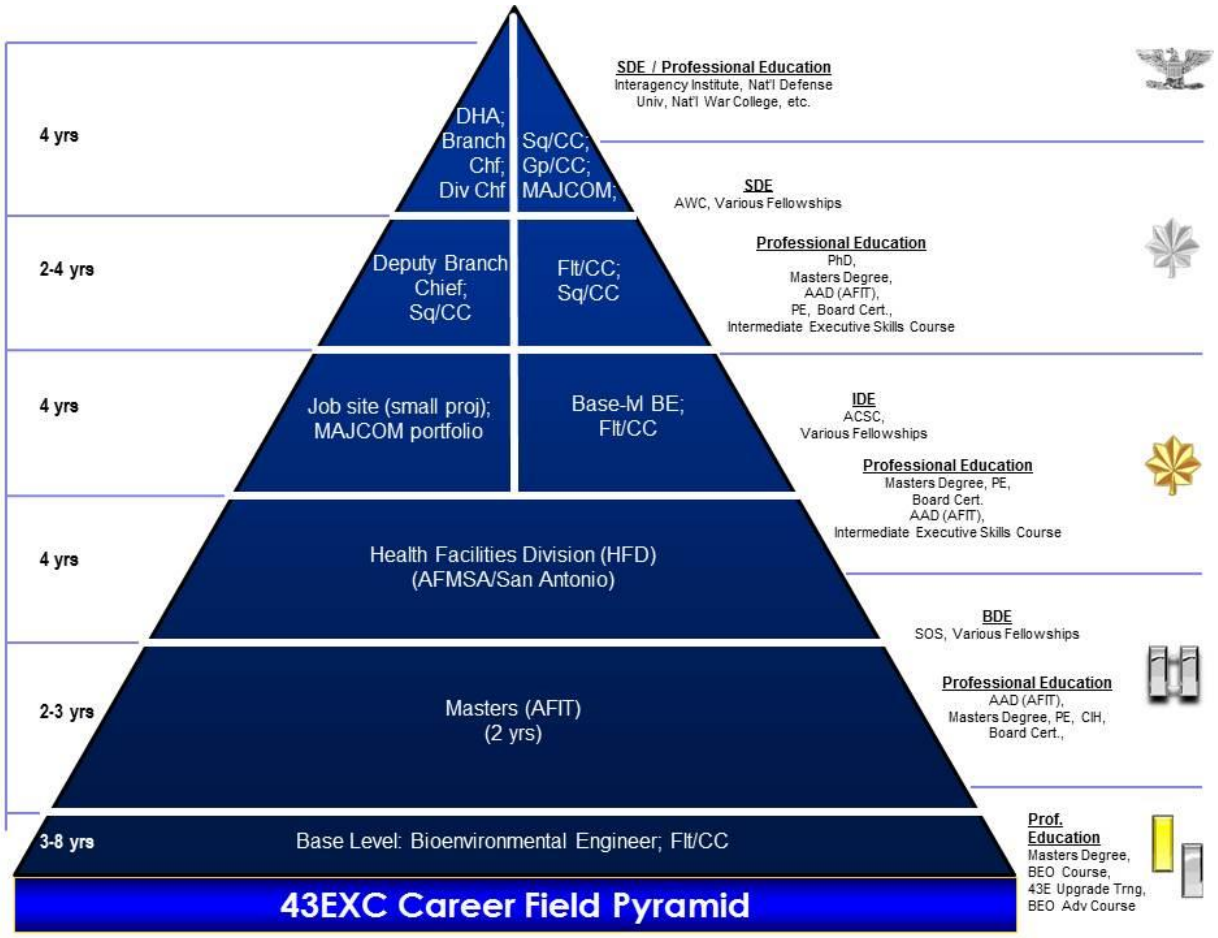

Figure 2. 43EXC Career Field Pyramid

1.3.4.3. **43EXG Career Field Pyramid**. Figure 3 below describes the typical career path for the Health Physics (G) Specialty Shredout. Specific qualifying educational requirements for each specialty shredout are outlined in the AFOCD.

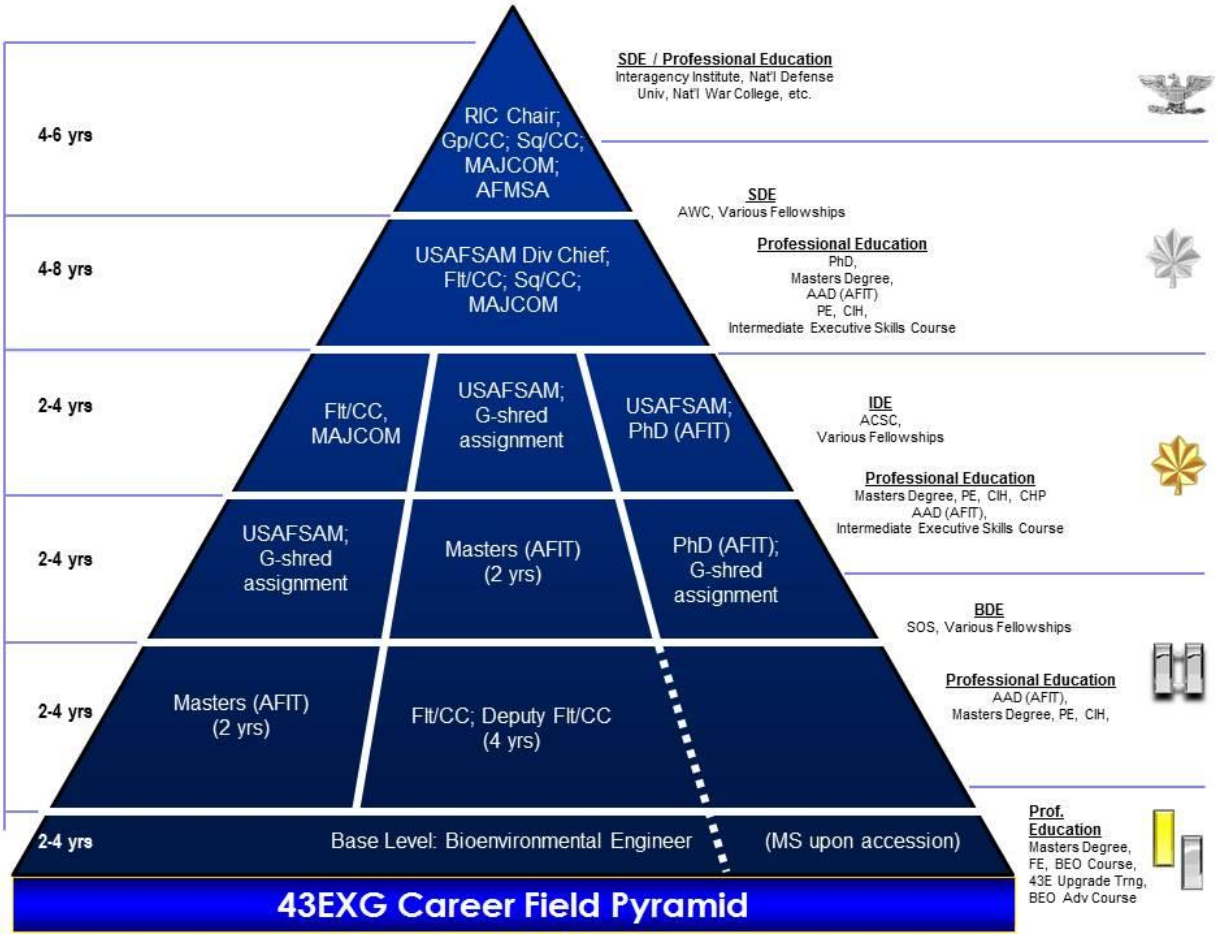

Figure 3. 43EXG Career Field Pyramid

1.3.4.4. **43EXM Career Field Pyramid.** Figure 4 below describes the typical career path for the Medical Physics (M) Specialty Shredout. Specific qualifying educational requirements for each specialty shredout are outlined in the AFOCD.

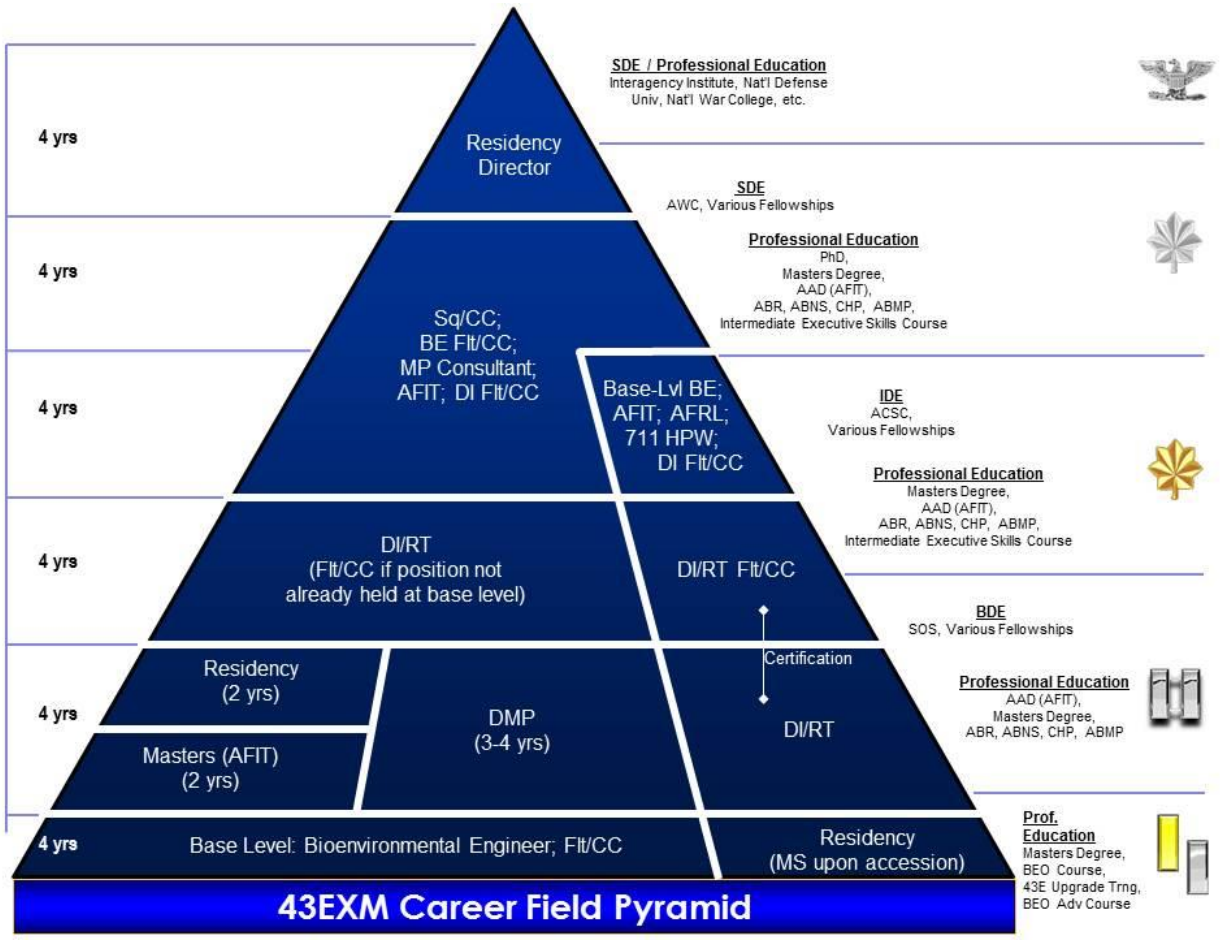

Figure 4. 43EXM Career Field Pyramid

1.3.4.5. **MyVECTOR.** In the summer of 2015, the Career Path Tool (CPT) was re-launched as MyVECTOR. MyVECTOR is an enterprise solution that supports the Air Force's goal to provide a standardized process available to all Airmen for career development and mentoring. The latest version of MyVECTOR will allow Airmen to establish mentoring relationships. Mentors will be able to see an Airman's career pyramid and duty history in order to facilitate career planning within MyVECTOR. The program is not mandatory but is encouraged. Mentors ensure all mentees under their guidance are personally and professionally developed so they can achieve their work-related personal and organizational goals, and ultimately strengthen the overall mission of the Air Force. MyVECTOR and the CPT are both located on the Air Force Mentoring website at https://afaems.langley.af.mil/afmentoring. User guides are available under the 'Help' tab upon login.

1.3.4.5.1. Mentoring. MyVECTOR enables a web-based mentoring network that allows mentees to manage their career development with the input and guidance from a mentor. Mentees will be able to, in real-time, invite participants to serve as mentors, select mentors based on preferences, chat with their mentor online, and complete a mentoring plan. Airmen with an existing mentoring relationship will likely choose the "Direct Connect" mentor option. By officially connecting to your mentor through MyVECTOR, your mentor can view your career progression and future plans.

Airmen with a specific need or who are unable to find a mentor will likely use the "Find a Mentor" function. Mentors are selected by mentees based on whom they admire/respect and who have appropriate insight into professional and personal development.

1.3.4.5.2. Career Planning. MyVECTOR allows the user to view their duty experience through career field specific experience codes. This structure also allows the user to build career plans based on real opportunities and to share these career plans with development teams and mentors. A Bullet-Tracker option allows the user to track specific events and accomplishments throughout the year for Performance Reports.

1.3.4.5.3. Knowledge Sharing. MyVECTOR provides Discussion Forums and links to resources for online books and courses that discuss mentoring benefits, the differences between coaching and mentoring and techniques for managing mentoring relationships.

1.3.5. BE Assignments. BE officers should work with their supervisors and/or mentors to inquire about assignment opportunities and determine where these opportunities may fit into the BE officer career plan. Career field authorizations and requirements can be searched at the Assignment Management System (AMS) website at https://w20.afpc.randolph.af.mil/afpcsecurenet20/CheckPortal.aspx. Authorizations are approved and funded positions listed by rank and AFSC specific to a location. Access to authorization information is available at all times. Requirements are positions which will become available in the next assignment cycle. Requirements are posted three times a year to coincide with the spring, summer, and fall move cycles. Information related to requirements is available only a few weeks prior to each assignment cycle. Not all requirements are posted on the site. The BSC Associate Chief designates a senior BE Colonel (O-6) to facilitate assignment management. This individual provides a comprehensive list of requirements at the beginning of the assignment cycle. Officers at the rank of 2nd Lieutenant (O-1) and higher should know the designated BE assignment facilitator. For specific questions about officer assignments, contact the BSC Assignment Officer assigned to the 43EXX career field at AFPC/DPAN.

1.3.5.1. **Base Level.** A BE officer's initial assignment will normally be at base level. In this assignment the BE officer will support the operational mission forming the foundation of a career. A successful BE officer can complete an entire career in operational base level assignments or can blend several educational and developmental opportunities with base level assignments. A minimum of three base level assignments is generally necessary to establish a sufficient operational experienced-based foundation. Typically, new BE officers start as an element chief or lower, then progress to a Deputy Flight Commander and then to a Flight Commander. As a general rule of thumb, a BE officer should always be within one assignment from a base level/operational job. Base level assignments can range from a small base with only one BE officer to a large Air Logistics Complex with a BE flight of 40 or more personnel. Multiple assignments as a Flight Commander should normally progress from smaller bases with smaller BE Flights to larger bases with larger BE Flights.

1.3.5.1.1. At a base level assignment, BE officers should not focus on a single area of technical expertise but seek to develop broad-based experience.

1.3.5.1.2. An overseas tour can provide invaluable experience and an opportunity to fill gaps in professional development.

1.3.5.1.3. Experience in different MAJCOMs will provide a broader view of the total Air Force mission and deeper understanding of how the pieces fit together.

1.3.5.2. **BE Officer Technical Assignments.**

1.3.5.2.1. USAFSAM Consultant. Individuals, typically with master's and/or doctoral degrees, provide reach back consultative support to Air Staff, MAJCOMs, home-station and expeditionary BE personnel. Two base level assignments are typically necessary prior to this assignment.

1.3.5.2.2. USAFSAM Faculty Assignments. Individuals with master's and/or doctoral degrees provide Team Aerospace formal education and training through course development, distance

learning tools, and in-residence instruction. Two base level assignments are typically necessary prior to this assignment.

1.3.5.3. **Developmental Assignments.** Developmental assignments provide perspective on the AF and DoD with a focus other than through an AFMS or BE lens. Adequate career field experience/knowledge is highly recommended prior to developmental assignments. BE officers (and their mentors and/or supervisors) should time/plan developmental opportunities carefully with promotion schedules. Some opportunities may make an individual less competitive at Lieutenant Colonel (O-5) and O-6 boards if not timed appropriately. The key thing to remember about any special duty or developmental assignment is that it should be accomplished at the right career point. While the exact timing will vary by individual (typically mid Capt to junior Maj), BE officers must weigh personal and professional desires for broadening with their overall development and career goals. Developmental opportunities available to BE officers include, but are not limited to:

1.3.5.3.1. USAF Academy (USAFA). USAFA is a career broadening opportunity typically filled by Captains (O-3s), and occasionally 1st Lieutenants (O-2s) and Majors (O-4s). There are instructor positions that require master's degrees, and support positions without any specific requirements. As an instructor, the commitment may cost 6-7 years away from BE career field if an advanced degree is required; however, USAFA will fund the advanced degree. For PhD, the time commitment will be near 8-9 years.

1.3.5.3.2. Air Force Institute of Technology (AFIT) Instructor. AFIT is an academic/technical opportunity to teach and manage AFIT courses at WPAFB. A PhD is required and the commitment is typically 6-7 years (3 years for PhD plus 3-4 years for the assignment).

1.3.5.3.4. Air Force Research Laboratory (AFRL). AFRL is a technical/program management opportunity focused on strategic research and development. Assignments involve developing safety and health standards for emerging technology through research, development, test and evaluation (RDT&E) activities.

1.3.5.3.5. National Center for Medical Intelligence (NCMI). NCMI is a 3-4 year career broadening opportunity typically for O-4s and O-5s. NCMI is located in the National Capital Region (DC, southern Maryland, northern Virginia) and provides chemical warfare defense analysis. This organization also prepares medical intelligence products for SECDEF, Joint Staff, other national-level policy officials and COCOMs. Officers must possess or obtain top secret clearance. (Two positions.)

1.3.5.3.6. Air Force Personnel Center (AFPC). AFPC is a 3-year career broadening opportunity for O-4s or O-5s with no academic requirement. AFPC is located at Randolph AFB. This is a 43B assignment (open to all BSCs) that works assignments for several BSC disciplines.

1.3.5.3.7. Chief of Compliance (Data Masked). The AFPC Green Door assignments team pre-screens and offers assignments to qualified officers. Two officer slots provide installation compliance for federal, state and local environmental laws. Officers must possess or obtain top secret clearance.

1.3.5.3.8. Air Force Operational Test and Evaluation Center (AFOTEC) position at Eglin AFB, FL. This position requires acquisition training as part of the assignment. The duties include leading operational testing and evaluation (OT&E) planning, execution, analysis and reporting of joint acquisition weapon systems.

1.3.5.3.9. Joint Requirements Office (JRO)-CBRN Development. This is a joint staff (J-8) position in Crystal City, Maryland. JRO is responsible for research, development, planning, and implementing joint CBRN equipment and activities.

1.3.5.3.10. Armed Forces Radiobiology Research Institute (AFRRI). This position is for 43E3G, health physics shred. AFRRI develops radiological medical response policy/guidance and teaches

Medical Effects of Ionizing Radiation (MEIR) course. Additional duty is adjunct professor at Uniform Services University of Health Sciences (USUHS).

1.3.5.3.11. International Health Specialist (IHS). BE officers with the appropriate skills and experience may serve in IHS positions and teams. IHS teams optimize military-military and military-civilian partnerships, develop mutual understandings, promote cross-cultural communications, participate in host nation exercises, facilitate international officer exchanges, and partner in international educational opportunities. The skills required to execute these missions include language proficiency, cultural competency, expertise in regional medical threats and resources, knowledge of joint and interagency coordination, and the ability to support coalition partnerships.

1.3.5.3.12. 43B Positions. Multiple 43B positions (open to all BSC officers) and multi-corps positions 4XX (open to all AFMS personnel) are available for qualified individuals. These assignments are contingent upon BE career field needs and subsequent release of an individual by the Associate Chief, BE.

1.3.5.4. **AF Staff Assignments.** Staff assignments provide an opportunity to develop policy, monitor the effectiveness as the policy is executed, and adjust policy as necessary. Staff positions in the BE career field include Air Staff (HQ USAF, AFMSA and AFMOA), AF Inspection Agency, Secretary of the Air Force for Installations, Energy and Environment (SAF/IEE), Numbered Air Forces (NAF), and MAJCOMs. There are also Joint staff positions available to BE officers at the Office of the Secretary of Defense (OSD), Defense Logistics Agency (DLA), Defense Intelligence Agency (DIA), Defense Threat Reduction Agency (DTRA), and in select Combatant Commands (COCOM). All staff assignments are leadership positions, and are typically O-4s and O-5s. BE officers should have at least two base level assignments, Flight Command, and completed PME commensurate with rank prior to Staff assignments. For Joint positions on the Joint Duty Assignment List (JDAL), Joint PME will be required to obtain Joint Duty credit. A listing of staff assignments can be found at Attachment 4.

1.3.5.5. **Joint Staff Assignments.** An update of DoDI 1300.19, *DoD Joint Officer Management (JOM) Program*, allowed non-line assets (NLA) to have positions on the Joint Duty Assignment List (JDAL). Currently there are two NLA positions on the JDAL, both 43E4A positions at Ft Belvoir and Ft Eustis respectively. Neither of these are critical positions which require a Joint Qualified Officer (JQO). Additional positions may be added in the future annually during the JDAL Validation Board in December. In 2015, the board is reviewing 30 medical positions. Any approved new JDAL positions will appear by late summer of the next year. No specific training is required for the current two NLA JDAL positions (incumbent or backfill). However, if these officers want to obtain the JQO designation they will need to complete the following: Joint PME II (10 week course in Norfolk, VA) or equivalent (SDE in-residence); be O-4 or above; have a Master's degree; have no unfavorable quality force indicators and; accrued 36 joint qualification points. These points can primarily be earned by completing a Standard-Joint Duty Assignment S-JDA 36-month tour (24-month tour for General Officers). https://gum-crm.csd.disa.mil/app/answers/detail/a_id/30397. Any commissioned officer may accrue joint duty credit which can be applied for through the Joint Qualification System (JQS) but only O-4 and above may be JQOs. Joint duty credit can also be earned through Experience-Joint Duty Assignments (E-JDA). This can be earned from joint exercises, deployments predominately however but they must be applied for within 12-months of completion. JQOs are not intended to serve in only joint assignments National Defense University (NDU) Graduates that are JQOs must be assigned to an S-JDA as their next duty assignment. At least 50% of all non-JQO graduates must be assigned to an S-JDA as their next duty assignment and all others must be assigned to an S-JDA for their second assignment following graduation. Active duty officers must be designated as a Level III JQO in order to be eligible for O-7. There are "scientific and technical" and "professional" waivers available and they are required to attend Capstone within 2 years of Senate confirmation. Officers en-route to new joint duty assignment are second highest priority for JPME II seats. JOM resources are located on MyPers, search "Total Force Joint Officer Management". The Total Force (TF) Joint Officer Management (JOM) Handbook (11 Aug 2014) was recreated and

published by the Air Force Personnel Center Joint Officer Management Section. This TF handbook will be a useful tool to help you understand the process of applying for experience joint duty credit.

1.3.5.6. **Command.** Some BE officers will have the opportunity to command a Squadron or Medical Group. It is critical for AFMS officers to understand the command application, nomination and selection process. This process is very competitive. Squadron Commanders are O-5s and O-6s, and Medical Group Commanders are O-6s. Squadron Command (O-5) or equivalent is generally required for promotion to O-6. O-5 Squadron Command is a two-step process. First, eligible O-5s (or O-5 selects) compete to be selected for consideration. The BSC Developmental Team selects 1.5 to 2 times more BSCs than vacant positions. If selected, the officer must then compete to be matched to a specific squadron. The sitting Group Commanders choose their Squadron Commanders. Additional information is located on the AFMS Knowledge Exchange at https://kx2.afms.mil/kj/kx9/MedicalSqCommand/Pages/home.aspx.

1.3.5.6.1. Command Candidate Selection. Typically, in the spring of each CY, AFPC will release a PSDM with specific information and schedule of events for the squadron commander candidate selection process. BE officers interested in applying for command should review this document in its entirety and pay particular attention to the "Health Professions Officers Specific Career Field Guidance" Appendix. This Appendix provides specific guidance for eligibility and outlines the process for BSC squadron command opportunities. Eligible officers deciding to compete for squadron command must complete a Statement of Intent (SOI) via the Airman Development Plan (ADP) and secure Senior Rater (SR, i.e. Wing CC level or higher) endorsement. The BSC Development Team will meet after the application suspense date to review applications and select the strongest candidates.

1.3.5.6.1.1. Command opportunities are rare and not to be taken lightly. When the call for candidates initially goes out, BE officers should review the accompanying list of projected vacancies to determine the type, location and mission of potential command opportunities. Not all locations are ideal matches for all candidates. "Command is about command" and "every command opportunity is a good command", therefore, the decision to apply for command should not be taken solely with location in mind. There are no guarantees a candidate will match to any command assignment (recall that the DT selects more candidates that command opportunities). Additionally, officers should consider the unique and sometimes difficult demands command places on an officer and/or his or her family. Determining "when" a command assignment is right for an officer is unique to each officer and his or her family.

1.3.5.6.1.2. After the BE Officer submits their SOI/ADP to AFPC but before the Command Candidate list is released, they should pull together their command candidate package that they will submit to those locations with projected vacancies that the candidate is interested in applying. This package typically consists of a cover letter with references, the candidate's biography or CV, their SURF, their last three to five OPRs/TRs, and their most recent fitness evaluation score. This package should be tailored to each command vacancy to which the Candidate intends to apply (i.e. the cover letter could specifically state why the Candidate is interested in that location/mission/MTF, the bio should have a photo if one is requested by the MTF/CC, etc.) or for any base that requests the candidate submit an application. It is extremely important for the candidate to have this package complete and ready to send to each MTF as early as possible with the goal of submitting these packages on the day the command candidate list is released. BE officers should ensure their applications are complete and free of errors or typos.

1.3.5.6.1.3. In addition to working on their application between the time a BE officer applies for command and until the command candidate list is released, BE officers should line up one to three references or "advocates" who are willing to call and/or email the sitting senior leaders (i.e. group commanders) of the locations for which the BE officer is most interested in matching to command. MTF CCs place considerable value in endorsements from their peers, especially other sitting and graduated Group CCs. BE officers who provide a short list of their preferences, with appropriate contact information, to their advocates early in the process are more likely to have those advocates intercede on their behalf and thus may increase their chances of matching to command. These advocates may be the BE officer's mentor(s) or current/previous commanders for whom the BE officer has had the opportunity to demonstrate their command leadership potential.

1.3.5.6.2. Command Candidate Release. In late summer/early fall, the results of the DTs' squadron commander candidate selection process will be released. Again, it is imperative that officers who are selected as candidates submit their applications to prospective command locations as close to the release date as possible. MTFs will be monitoring for the release of the command candidate list and will act quickly to fill their vacancy with those whom they perceive to be the strongest candidate. Candidates who wait to send their applications risk not matching to command or even securing an interview.

1.3.5.6.3. Interview. While the SRs are typically the hiring authority for their subordinate commanders, most SRs delegate the responsibility for vetting medical squadron command candidates to the MTF CC and place a high level of confidence in the hiring recommendation made by the MTF CC. Therefore, it is imperative the candidate understand the specific application requirements for each command they intend to apply. Most MTF CCs prefer to interview their prospective future commander but they will most likely not interview every candidate who applies. MTFs are likely to "rack and stack" the candidates based on any number of criteria but typically the strength of the candidates record, any specific skillset the MTF CC believes will come in handy (i.e. a non-clinical BSC for an AMDS command or a clinical BSC for an MDOS, etc.), and peer "word-of-mouth," etc. play a significant role in making the initial cut. Making the command candidate list does not ensure BE officers will secure an interview nor is securing an interview a guarantee that an individual will "match" to command.

1.3.5.6.4. Matching. BE officers who make the command candidate list should focus on securing a "1-to-1" match or commitment from the prospective command vacancies. This entails a commitment from both the MTF and the candidate that they will submit each other as #1 "picks." The candidate is required to submit to AFPC within three to four weeks from release of the command candidates list a "rack and stack" of their top 5 preferences. Hiring authorities will submit their rank ordered bids based on the roster of all the candidates' preferences. MAJCOMs will de-conflict any duplicate bids (i.e. multiple bases submit the same candidate as their #1 match) and provide the final bids to AFPC three to four weeks after the candidates' preferences were due. Approximately one month after the MAJCOM bids are in, AFPC will release the squadron commander select PSDM. BE officers are encouraged to secure rank ordered commitments from at least their top three choices in case there are any conflicts that may arise during the bid process.

1.3.5.6.5. Mentorship. Without a doubt, having a strong mentor is critical through squadron command selection process. Your mentor must be someone you can confide in, someone you can discuss matching strategy and someone who you can just ask "dumb" questions without fear of repercussions. Additionally, a strong mentor can help BE officers decide when command is "right" for them and their family. The matching process can be extremely frustrating but the process does work. Someone will match to command, will that someone be you? A strong mentor increases your chances that you will be that "someone."

1.3.5.6.6 Multiple Commands. Recently, BSC officers were granted the opportunity at a second squadron command. The process is the same as described above, however, only sitting or graduated squadron commanders may apply for locations designated as "second command" opportunities.

1.3.5.6.7. O-6 Squadron Commanders are matched through the Colonels Group (completely separate and distinct process).

1.3.5.7. **Airman Development Plan (ADP).** The ADP facilitates the Force Development process for officers (2Lt through Lt Col) and civilians. ADP provides raters/commanders with access to Career Briefs, Career Planning Diagrams, and eRecords (officers only: OPRs, training reports and decoration citations). Additionally, it provides officers/civilians with the capability to communicate assignment, developmental, and educational preferences, command/leadership opportunities, and career-broadening requests to their Development and Assignment/Career Field Teams. Officers must keep in mind when filling out their ADP that their assignment preferences are just that; the mission will always be the primary consideration in assignment decision. Tutorials and answers to frequently asked questions pertaining to the ADP can be found on the AFPC myPers website at https://gum-crm.csd.disa.mil/app/answers/detail/a_id/22179.

1.3.5.8. **Establishing who is vulnerable to move.** The intent of designating an officer "vulnerable" for reassignment is to alert the officer that he/she can expect to be matched with an assignment in an upcoming assignment cycle. There are three assignment cycles: spring, summer and fall. Vulnerability is determined by Date Arrived Station (DAS), tour length requirements, and current Air Force requirements. Basic eligibility for reassignment is 48 months Time on Station (TOS) by the pending departure date for moves CONUS to CONUS and 24 months TOS for moves CONUS to overseas. Although these represent the minimum requirements (per AF policy), unique career field dynamics may drive eligibility differences among Air Force specialties. For example, Rated officers have a minimum TOS for CONUS to CONUS moves of 36 months. As a result of force structure changes, the end-strength drawdown, AFSC mergers/consolidations, and manning shortages in certain grades, the minimum TOS listed above may, at times, be unattainable. Waivers must be sought in the event career field manning and requirements obligate an Officer Assignment Team (OAT) to dip beneath these minimums and should be used by exception only. In general, officers on stabilized CONUS tours or overseas with a Date Eligible for Return from Overseas (DEROS) will be identified as vulnerable to coincide with the expiration of the tour or DEROS. Officers on CONUS un-stabilized tours and overseas officers on an indefinite DEROS are eligible for assignment once they meet minimum TOS requirements or have completed the normal prescribed overseas tour length by the Projected Departure Date (PDD) of the assignment. Each AFAS cycle commences when the Vulnerable to Move List (VML) is published in AMS. Approximately 7-10 months out from PCS cycle, the OAT will generate a VML. When the Initial VML is made available, commanders must review it closely. This gives them visibility of officers assigned to their organization who are vulnerable to move. In addition, there is a small window where a commander has an opportunity to request a reclama (i.e. request to add/ remove officers to/from the VML). These requests are commander-initiated in AMS and should be based on mission needs and/or extenuating circumstances. These requests should be submitted during the reclama window; if they are not completed in conjunction with the established timelines, they may not be considered. (Source: Air Force Assignment System (AFAS) User's Guide)

1.3.6. Education. Together with training and experience, education is one of the pillars of military professionalism, particularly for AF BE officers. While the Air Force will provide some formal education, it is usually only through highly competitive processes. Ultimately, it is incumbent upon the individual officer to prioritize and manage their time, both on and off duty, to achieve his or her educational goals.

1.3.6.1. **Professional Military Education (PME).** Air Force Developmental Education (DE) programs expand knowledge and increase understanding of the role of air, space and cyberspace power in times of peace and war. Air Force education programs prepare Air Force personnel to anticipate and successfully meet challenges across the range of military operations and build a professional corps.

Further, they positively impact both recruitment and retention efforts. The objectives of PME programs are reflected in the AF Institutional Competency List and implemented through the Air University Continuum of Education. To be competitive for promotion, selective assignments, and other developmental opportunities, officers MUST complete the appropriate level of PME for their grade. Officers have a limited window of opportunity to complete PME, governed by AFI 36-2301, *Developmental Education*. Given the time constraint, officers are highly encouraged to complete the available non-resident programs at their first opportunity. Deployments, remote assignments, and other life events may hinder an officer's ability to complete non-resident or resident programs if they wait until the end of their eligibility window. PME is divided up into three sub-categories:

1.3.6.1.1. Primary Developmental Education (PDE). PDE programs are Squadron Officer School (SOS). BSC Officers are only eligible to attend the in-residence course at Maxwell AFB, AL even though there are SOS-equivalent Inter-American Air Forces Academy (IAAFA) course (Source: AFI 36-2301, *Developmental Education*) listed. The main focus of SOS is officership based on Air Force core values. SOS provides Air Force captains the leadership tools they need to build military teams and lays a foundation for critical thinking in air and space power through education on air power history and doctrine. Captains and Captain-selects are the target audience for PDE.

1.3.6.1.1.1. The PDE requirement can be met by completing SOS either in residence at Maxwell AFB, AL, or by distance learning (correspondence). However, Active Duty BSC officers are prohibited from enrolling in SOS DL until two years of time-in-grade as a captain (Source: AFI 36-2301, *Developmental Education*). The Air Force goal is for all Captains to attend in-residence SOS. Each Wing will have quotas for SOS in-residence. The Medical Groups will then have the opportunity to nominate officers when they meet eligibility requirements. It is the member's responsibility to ensure their Squadron Commander knows of their desire to obtain SOS in-residence. If there is no way to achieve in-residence attendance due to assignment or education in the eligibility window, the member will apply for a waiver to complete SOS by correspondence as an alternative. While not ideal this will meet the minimum requirement. Captains not assigned to Wing level organization should contact AFPC to obtain a limited number of BSC slots available for that population.

1.3.6.1.2. Intermediate Developmental Education (IDE). IDE programs are specified as Intermediate-Level Colleges (in the joint community and identified foreign schools) and/or Command and Staff Colleges, internships and fellowships, as well as certain graduate degree programs through Air Force Institute of Technology (AFIT), Naval Postgraduate School (NPS), Advanced Study of Air Mobility (ASAM) and National Defense Intelligence College (NDIC). Command and Staff Colleges include: Air Command and Staff College (ACSC), sister service and Joint PME-I equivalent IDE-level foreign schools. Majors and Major-selects are the target audience of IDE (Source: AFI 36-2301, *Developmental Education*).

1.3.6.1.2.1. The IDE requirement can be met by completing Air Command and Staff College (ACSC) either through distance learning, by attending an in-residence course at Maxwell AFB, AL or completing one of several equivalent in-residence IDE program options. AFPC publishes a list of IDE programs for each academic year on an annual basis. This publication can be found on either the AF Portal or on the myPers website. Non-resident distance learning is available to all officers selected for Major. Eligible officers can enroll in the distance learning course through the Air University Portal website https://www.my.af.mil/aurepmprod/auportal/welcome.AirUniversity. The availability of in-residence IDE options varies each year; in-residence slots are limited. There is potential to receive in-residence credit if IDE is completed in conjunction with a master's degree. Other options include AF Legislative Fellowship Program, AF National Laboratory Technical Fellowship Program, and Army Command and General Staff College. An officer will not be able to apply for in-residence IDE until notified by AFPC of eligibility. Completing IDE by correspondence is recommended for officers wishing to be considered to attend in-residence IDE. Completion of IDE as soon as possible after notification of selection for promotion to Major is recommended to ensure the member has the skills necessary for

positions in the next grade. Completion of IDE by correspondence can be available to boards reviewing records with early completion presenting a favorable representation of officer professionalism.

1.3.6.1.3. Senior Developmental Education (SDE). SDE programs are categorized as Senior-Level Colleges (in the joint community and identified foreign schools) and/or each Service's War College, National Defense University (NDU) programs (National War College and Industrial College of the Armed Forces), and certain fellowships. Lt Cols, Lt Col-selects, Colonels and Colonel-selects are the target audience of SDE (Source: AFI 36-2301, *Developmental Education*).

1.3.6.1.3.1. The SDE requirement can be met by completing Air War College (AWC) either through distance learning, by attending an in-residence course at Maxwell AFB, Alabama, or completing one of several equivalent in-residence SDE program options. AFPC publishes a list of SDE programs for each academic year on an annual basis. This publication can be found on either the AF Portal or on the myPers website. Non-resident distance learning is available to all officers selected for Lieutenant Colonel. Eligible officers can enroll in the distance learning course through the Air University Portal website. Selection for in-resident SDE is extremely competitive, with very limited opportunity for BSC officers. The availability of in-residence SDE options varies each year; the most common SDE option is AWC in-residence. Other options include RAND Fellowships and National Laboratory Technical Fellowship Program. An officer will not be able to apply for in-residence SDE until notified by AFPC of eligibility. Completing SDE by correspondence is generally a prerequisite for officers wishing to be considered for attending in-residence SDE. Completion of SDE as soon as possible after notification of selection for promotion to Lieutenant Colonel is recommended to ensure the member has the skills necessary for positions in the next grade. Completion of SDE by correspondence can be available to boards reviewing records with early completion presenting a favorable representation of officer professionalism.

1.3.6.2. **Advanced Academic Degrees (AAD).** Obtaining an AAD makes a BE Officer more knowledgeable/credible, may assist in promotion opportunity at the O-6 board, enhances a member's value to the Air Force, and can bolster a resume in case a member decides to separate. Currently, it is not required to obtain a Master's degree until the O-6 board. However, since historically the policy on masking degrees at promotion boards has changed, a one should still consider completing any career milestones like this at the earliest opportunity in case the policy changes. BE Officers (and their mentor / supervisor) should time/plan AAD opportunities carefully with promotion schedules; some opportunities may make an individual less competitive at O-5 and O-6 boards. Current trends show an individual to be less competitive at the O-5 board if the individual is in a Master's Degree or PhD program when considered by a board 1 year Below the Primary Zone (BPZ) or In the Primary Zone (IPZ). Therefore, it is not recommended for individuals to be enrolled in an AFIT program during that time period of their careers. When applying for in-residence AAD opportunities, officers should be mindful of the perception of being in school too long, especially while in the zone for promotion. For BE officers, there are essentially two options to obtain an AAD: 1) obtain the AAD through one of many off-duty education programs; or 2) attend a full-time education program offered through the AFIT AAD Program. Funding for the AFIT AAD Program is available either through the Air Force Medical Service (AFMS) or the Air Force Academy Instructor Program.

1.3.6.2.1. Off-Duty Education. Off-duty education is the best option for a member who desires to complete an AAD early in his/her career. Tuition assistance (TA) is available through the Base Education Office if a member elects to obtain an AAD using this option. Using TA generates an active duty service commitment (ADSC).

1.3.6.2.2. AFIT AAD. Acceptance into an AFIT AAD program is extremely competitive. Program availability varies from year to year due to AFMS funding and other requirements. Through this option, members can obtain master's and/or doctoral degrees through AFIT-sponsored education. Detailed information related to AFIT AAD opportunities can be obtained on the AFMS Knowledge

Exchange (Kx) BSC Education Branch website at https://kx2.afms.mil/kj/kx3/AFBSCEducation/Pages/home.aspx. Positions which use the newly obtained degree are preselected and should expect to go to the designated position after graduation. If the designated position is no longer available after graduation, expect to be placed in a similar position where the new education can be used. Performance in a shredded position (B, C, D, G, M) or board certification is required to earn a fully qualified status within that shred.

1.3.6.2.3. Air University AAD. A virtually no-cost (some books may need to be purchased by enrollees) opportunity for BEEs to obtain an AAD is to complete Air University's Online Distance Learning Course. Active Duty USAF Captains who have Total Active Federal Commission Service of 6 or more years, completed SOS, and do not have a master's degree may enroll into the Leadership Concentration component. Successful completion of this 33-semester-hour program yields an accredited Master's Degree in Military Operational Art and Science, which is the same degree that individuals who complete in-residence ACSC earn. Additionally, eligible O-4 selects, who currently do not possess both IDE credit and a Master's Degree, may enroll in a combined program, in which successful completion yields Joint-PME Phase I credit, IDE credit, and the same Master's Degree in Military Operational Art and Science. This combined program consists of eleven 8-week courses. More information on AU's online Master's Degree programs can be found at http://acsc.maxwell.af.mil/masters.aspx.

1.3.6.2.4. Fellowships. Fellowships are designed to develop leadership and broaden perspectives through observation and interaction with senior DoD, legislative, political, and academic leaders making strategy and policy decisions. In accordance with (IAW) AFI 36-2301, *Developmental Education*, officers who have attended, are currently attending, or who have been selected to attend programs where they were competitively selected by the AF, may be considered for IDE/SDE equivalency credit. For BSC officers, those programs are limited to fellowships that are part of either the AFMS Advanced Development Program or AFMS Executive Development Program. Notice of upcoming fellowship opportunities are posted on the AFMS Knowledge Exchange (Kx) BSC Education Branch website at https://kx2.afms.mil/kj/kx3/AFBSCEducation/Pages/home.aspx. Fellowships on this listing that are eligible for IDE/SDE equivalency credit are denoted as being open to 'Any BSC' officer. Fellowships that are restricted to a subset of BSC officers are not eligible.

1.3.6.3. **Continuing Health Education (CHE).** Officers are encouraged to continue their professional development through CHE. IAW AFI 41-117, *Medical Service Officer Education*. BSC officers must complete the minimum CHE, Continuing Medical Education (CME), or Continuing Education Unit (CEU) requirements necessary to meet or maintain licensure or certification credentials for their specialty. BSC officers who do not have a licensure or certification requirement must complete 20 CHE (any category) each year.

1.3.6.3.1. AFIT offers a variety of short courses that meet the CHE requirement. CHE opportunities are also provided by various civilian institutions through online and in-residence course offerings. BE officers, especially at the CGO level, are highly encouraged to attend short courses and technical refresher training on a regular basis. Officers should consult with their local chain of command for CME funding.

1.3.6.4. **Language Enabled Airman Program (LEAP).** The Air Force Culture and Language Center (AFCLC) is chartered to develop Airmen who can communicate, build relations, negotiate and influence across cultural boundaries in support global expeditionary operations. AFCLC runs the LEAP program to sustain, enhance and use the existing language skills and talents within the Air Force. The stated goal of LEAP is to develop a core group of general purpose force Airmen across specialties and careers possessing the capability to communicate in one or more foreign languages. To become a participant in LEAP, Airmen must already possess moderate to high levels of proficiency in a foreign language specified on the Air Force Strategic Language List. For more information, go to the website at https://cmsweb.maxwell.af.mil/Leap/jsp/VisitorsHome.jsp.

1.3.6.5. **Intermediate Executive Skills (IES) Course.** The IES course is targeted for field grade officers (Maj/Lt Col) and senior enlisted members (SMSgt/CMSgt) who are selected as healthcare executive team members at the SGA, SGB, SGD, SGH, SGN, SGP, Squadron Commander and Group Superintendent level. It is intended to bridge the gap between initial management training and advanced leadership training received prior to command. The course consists of morning core curriculum lectures and afternoon breakout sessions targeting corps-specific requirements. Distance learning modules and presentations focus on the executive skills core competencies in the areas of Military Medical, Leadership and Organizational Management, Health Law and Policy, Health Resources Allocation, Ethics in the Health Care Environment, Individual and Organizational Behavior, Clinical Understanding, and Performance Measurement and Improvement. Annually each MAJCOM BSC executive, each BSC Associate Chief, and each Medical Group are asked to nominate eligible officers. It is the member's responsibility to ensure their leadership knows of their desire to attend IES to facilitate their nomination.

1.4. Section C - Proficiency Training Requirements

1.4.1. Purpose. Proficiency training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for entry, award, and retention of each AFS level. The specific task and knowledge requirements are identified in the STS and Training Course Index in Part II, Sections A and B of this CFETP.

1.4.2. Specialty Qualification Requirements.

1.4.2.1. **Entry Level Specialty Qualification (43E1X).**

1.4.2.1.1. Knowledge. For (43EXA/B/C/D/G/M): Knowledge of all BE principles is mandatory for Force Health Protection spanning all operational environments. For (43EXC): Knowledge of medical construction or architecture principles for medical facility planning, design, and construction. For (43EXM): Knowledge of medical physics programs for radiotherapy, nuclear medicine, and diagnostic imaging physics services.

1.4.2.1.2. Education. For entry into this specialty, a baccalaureate degree, or higher, in engineering from an engineering degree program accredited by the Accreditation Board for Engineering and Technology (ABET); or for graduates of a United States Service Academy, possession of a Bachelor of Science (BS) degree in engineering, biology, chemistry, or physics. Exceptions and other educational requirements exist for cross-service transfers, prior enlisted Bioenvironmental Engineering Craftsmen, and for each specialty shredout. These requirements can be found in the most current version of the AFOCD.

1.4.2.1.3. Training. For award of AFSC 43E1A, none required. For award of 43E1B/C/D/G, possession of AFSC 43E3A and completion of the education and/or certification requirements in the respective specialty shredouts as described in the most current version of the AFOCD.

1.4.2.1.4. Experience. No experience requirement.

1.4.2.1.5. Other. Minimum qualifying criteria for accession into the 43E AFSC can be found in the most current version of the AFOCD.

1.4.2.1.6. Training Sources and Resources. None required.

1.4.2.1.7. Implementation. In accordance with AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, all newly commissioned medical officers are classified (i.e. awarded the 43EXX AFSC) by Title 10, United States Code (U.S.C.), Section 8067(a) through (f), upon commissioning.

1.4.2.2. **Intermediate Level Specialty Qualification (43E2X).**

1.4.2.2.1. Knowledge. For (43EXA/B/C/D/G/M): Knowledge of all BE principles is mandatory for Force Health Protection spanning all operational environments. For (43EXC): Knowledge of medical construction or architecture principles for medical facility planning, design, and construction. For (43EXM): Knowledge of medical physics programs for radiotherapy, nuclear medicine, and diagnostic imaging physics services.

1.4.2.2.2. Education. Education requirements are specific to specialty shredouts and are described in the most current version of the AFOCD.

1.4.2.2.3. Training. Completion of the BE Officer Course (B3OBY43E1 0A1A) is required.

1.4.2.2.4. Experience. No experience requirement.

1.4.2.2.5. Other. No other requirements.

1.4.2.2.6. Training Sources and Resources. Formal training may be obtained via a formal course offered by USAFSAM.

1.4.2.2.7. Implementation. The 43E2X AFSC is awarded upon certification by the officer's supervisor and endorsement by the officer's commander or staff agency that all requirements have been met.

1.4.2.3. **Qualified Level Specialty Qualification (43E3X).**

1.4.2.3.1. Knowledge. For (43EXA/B/C/D/G/M): Knowledge of all BE principles is mandatory for Force Health Protection spanning all operational environments. For (43EXC): Knowledge of medical construction or architecture principles for medical facility planning, design, and construction. For (43EXM): Knowledge of medical physics programs for radiotherapy, nuclear medicine, and diagnostic imaging physics services.

1.4.2.3.2. Education. Education requirements are specific to specialty shredouts and are described in the most current version of the AFOCD.

1.4.2.3.3. Training. For the award of 43E3A, completion of upgrade training IAW this CFETP, completion of the BE Officer Advanced Course, and possession of 43E2A is required.

1.4.2.3.4. Experience. For award of 43E3A, completion of 18 months in the 43E2A duty AFSC while performing the work typical of a base BE flight or element and after earning AFSC 43E2A is required. For award of 43E3B/D/C/G, possession of the respective 43E1B/D/C/G shredout AFSC for 24 months is required. For award of AFSC 43E3M, certification by the American Board of Radiology (ABR) in one of the following three specialties: diagnostic radiologic physics, therapeutic radiologic physics, or nuclear medicine physics is required.

1.4.2.3.5. Other. Upgrade requirements commence for officers accessed beginning in fiscal year (FY) 2015 and beyond. All other officers are exempt from upgrade training requirements and will obtain the fully qualified (43E3X) AFSC after a minimum of 24 months of experience in bioenvironmental engineering assignments.

1.4.2.3.6. Training Sources and Resources. Upgrade training materials that are currently in development will be provided by USAFSAM and should be available for new officers graduating from the BE Officer Course in the spring of 2016. The location of these training materials will be announced at that time. The BE Officer Advanced Course is also in development and will be a formal course offering provided by USAFSAM. This course is tentatively scheduled for a proposed start date in FY 2017.

1.4.2.3.7. Implementation. The 43E3X AFSC is awarded upon certification by the officer's supervisor and endorsement by the officer's commander or staff agency that all requirements have been met. Upgrade training tasks can be certified by a 4B071 in the BE career field if a senior BE officer is either deployed or unavailable.

1.4.2.4. **Staff Level Specialty Qualification (43E4X).**

1.4.2.4.1. Knowledge. For (43EXA/B/C/D/G/M): Knowledge of all BE principles is mandatory for Force Health Protection spanning all operational environments. For (43EXC): Knowledge of medical construction or architecture principles for medical facility planning, design, and construction. For (43EXM): Knowledge of medical physics programs for radiotherapy, nuclear medicine, and diagnostic imaging physics services.

1.4.2.4.2. Education. Education requirements are specific to specialty shredouts and are described in the most current version of the AFOCD.

1.4.2.4.3. Training. The training requirements are the same as those for the qualified AFSC (43E3X), but applied to developing broad policies, plans, and procedures. (Source: AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*)

1.4.2.4.4. Experience. The experience and skill requirements are the same as those for the qualified AFSC (43E3X), but applied to developing broad policies, plans, and procedures.

1.4.2.4.5. Other. Designation of staff level relates only to the level of functional responsibility and is restricted to positions above wing level. It does not denote additional specialty qualifications.

1.4.2.4.6. Training Sources and Resources. There are no mandatory training requirements. However, staff officers should attend appropriate supplemental training, advanced skills courses, local training courses, and professional seminars and symposiums that enhance their staff skills and expertise in their area of responsibility.

1.4.2.4.7. Implementation. This AFSC is awarded upon assignment to some staff positions above wing level. Manpower will use the staff AFSC requirements for determining applicability. The 43E4X AFSC is used to identify planning and policy-making positions above wing level IAW AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*.

1.4.3. Special Task Certification and Recurring Training. BSC Associate Chief-directed special task certification requirements are centralized as home station training (HST) (i.e. in-service training) requirements. The execution of HST requirements is decentralized (i.e. to be accomplished at individual bases). Remember that 43EXX skill level training and certification are still expected to be accomplished at the required time and frequency (when specified). It is recommended that local periodic refresher training and/or continuation training should supplement both the HST requirements and upgrade training requirements. Reference the '4B0X1 HST Calendar' found at the 'Education-Training-Force Development' section of the AF Portal BE Functional Area to align local officer and enlisted special task requirements. Special task certification and recurring training specified in this section are not the sole sources of training and certifying of an individual's currency, proficiency, and competency.

1.4.3.1. **AF IMT 1098.** BSC Associate Chief-directed requirements are established on the AF IMT 1098. The AF IMT 1098s that are to be considered part of HST for officers are listed in the table below. These forms may be found on the AF Portal BE Functional Area at https://www.my.af.mil/gcss-af/USAF/ep/globalTab.do?channelPageId=s2D8EB9D6408E0AD001414B3FCEDF1549&command=function&parentCategoryId=s2D8EB9D6408E0AD001414B3FCEDF1549.

Table 1. BSC Associate Chief-Directed Special Task Certification and Recurring Training

AF IMT 1098	Est. by:	Mandatory for:	Remarks:
43EXX BE Officer Pre-Deployment Certification	BSC Associate Chief	43EXX officers	Replaces RSV training requirements; sets additional task certification and training above minimum and MAJCOM standards; to be kept in the member's individual medical readiness folder

1.5. Section D - Resource Constraints

1.5.1. Purpose. This section identifies known resource constraints that 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, as a minimum, reviewed and updated annually.

1.5.2. Training.

1.5.2.1. **Entry Level Training – BE Officer Course.** The BE Officer Course (B3OBY43E1 0A1A) is a training course that emphasizes the protection of Air Force personnel through operational health risk assessment, communication, management, and casualty prevention from physical, radiological, chemical, and laser hazards in garrison and deployed environments. The course length is 59 training days (not to include weekends), which encompasses approximately three calendar months. Students develop skills in identifying and evaluating hazards and environmental problems and in designing control measures. Additionally, students spend three days at the Ohio Fire Academy in Columbus, Ohio, to earn certifications that comply with DoD Fire Emergency Services Certification System. The skills obtained during this course will address duties commonly encountered by BE Officers.

1.5.2.1.1. Constraints. The BE Officer Course is a well-developed course that is reviewed through the U&TW process IAW AFI 36-2201, *Air Force Training Program*. Improvements and upgrades to the course are constrained by a constantly revolving staff of officer instructors. Since USAFSAM/OED is typically staffed with instructors who have recently completed Air Force Institute of Technology (AFIT) assignments at Wright-Patterson AFB, those instructors typically experience a Permanent Change of Station (PCS) after only two years at USAFSAM. Since instructor training takes approximately 9-12 months to complete, the result is a constantly revolving staff of core officers who do not have a long learning curve to be able to develop curriculum.

1.5.2.1.1.1. Impact. The BE Officer Course is the initial skills training course for the 43EXX AFSC. Constant updates and modifications are required to stay current with changing AFMS objectives and mission requirements.

1.5.2.1.1.2. Resources Required. Aside from manning constraints, there are no resource requests at this time that require a Course Resource Estimate (CRE).

1.5.2.1.1.3. Action Required. USAFSAM would benefit from having officers from base-level assignments fill USAFSAM instructor positions. These officers would be able to stay for a full PCS cycle (3-4 years), providing up-to-date perspectives and experience with base-level matters, continuity, and staffing for curriculum development.

1.5.2.1.2. OPR and Target Completion Date. USAFSAM/OED is the OPR for course development and will continue to maintain the course.

1.5.2.2. **Qualified Level Training – Upgrade Training Materials.** Upgrade training is mandatory training that leads to the attainment of the qualified level (43E3X) AFSC.

1.5.2.2.1. Constraints. Upgrade training materials are currently under development.

1.5.2.2.1.1. Impact. Upgrade training in the 43EXX AFSC allows officers to continually develop the skills required of Bioenvironmental Engineering officers. Exposure to upgrade materials ensures that qualified officers have similar levels of expertise in concepts that are essential to the 43EXX AFSC.

1.5.2.2.1.2. Resources Required. A CRE is not required to fulfill resource requests for this training.

1.5.2.2.1.3. Action Required. Develop/implement new upgrade material content based on the STS that was generated from the November 2014 U&TW.

1.5.2.2.2. OPR and Target Completion Date. USAFSAM/OED is the OPR for developing upgrade training materials. These materials should be available for new officers graduating from the BE Officer Course in the spring of 2016.

1.5.2.3. **Qualified Level Training – BE Officer Advanced Course.** This course will focus on technical competency in Industrial Hygiene techniques and execution of the comprehensive Health Risk Assessment program. This course is separate from the BE Advanced Workshop for newly-assigned Flight Commanders and Flight Chiefs.

1.5.2.3.1. Constraints. The BE Officer Advanced Course is currently under development.

1.5.2.3.1.1. Impact. The intent of the BE Officer Advanced Course is to expand upon a BE Officer's technical knowledge and skill sets, ensuring that qualified officers have similar levels of expertise in advanced concepts that are essential to the 43EXX AFSC.

1.5.2.3.1.2. Resources Required. A CRE covering course parameters, manpower requirements, equipment, facilities requirements, and other costs was submitted to and approved by the BSC Associate Chief in January 2015.

1.5.2.3.1.3. Action Required. Develop/implement new course content based on the STS that was generated from the November 2014 U&TW.

1.5.2.3.2. OPR and Target Completion Date. USAFSAM/OED is the OPR for developing the BE Officer Advanced Course. This course is tentatively scheduled for a proposed start date in FY 2017.

Part II

2.1. Section A – Course Training Standard

2.1.1. Purpose. The Air Force uses the Course Training Standard (CTS) to identify the training students receive in a specific course. It describes course content and the standard of proficiency each student is expected to achieve in order to successfully complete the course. It is also used as the basis for the Course Resource Estimate (CRE) which describes the human, physical, and fiscal resources required to execute the course. In essence, the CTS is a contract between the BSC Associate Chief and the training provider and can only be modified through the U&TW process and/or BSC Associate Chief's policy directives. The CTS is based on the contents of the Specialty Training Standard (STS) which can be found in Attachment 2 of this CFETP.

2.1.2. Documentation. Documentation for upgrade qualification training will be documented on the AF Form 797, *Job Qualification Standard Continuation/Command JQS*. In the future, documentation may transition to a web-based information management system such as the Air Force Training Records (AFTR) program. Alternately, members may use the STS at Attachment 2 of this CFETP. As a minimum, complete the following columns at Attachment 2: Start Date, Complete Date, Trainee's Initials, and Trainer's Initials.

2.1.3. Qualitative Requirements. AETC uses standardized proficiency codes to describe the level of expertise (knowledge or performance based) required for each STS line item. Deceptively simple, the proficiency codes drive all phases of course development, from the language used in training objectives to the formulas used for the CRE. See Table 2 below for the Training Proficiency Code Key.

Table 2. Proficiency Code Key

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

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

2. A subject knowledge level 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.

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

2.1.4. Qualification Training Requirements. All formal courses and upgrade materials are offered by USAFSAM. The BE Officer Course is provided as a combination of distance learning and an in-residence course. Upgrade training materials will be accomplished via distance learning. The BE Officer Advanced Course will be offered as an in-residence course.

2.1.5. Proficiency Designator Table. Table 3 provides course requirements and experience requirements necessary for each AFS level.

Table 3. Proficiency Designator

Proficiency Designator[1]	Title	Course Requirements	Experience Requirements
43E1A	Entry Level	Attend the BE Officer Course as soon as possible after being accessed as a 43E1X	None
43E2A	Intermediate Level	Completion of the BE Officer Course.	None
43E3A	Qualified Level	1. Completion of upgrade training (and) 2. Completion of the BE Officer Advanced Course Target the completion of both course requirements for 6 – 18 months after completion of the BE Officer Course. However, note the experience requirement in the column to the right.	Completion of 18 months in the 43E2A AFSC while performing work typical of a base BE flight or element Members of the Air National Guard (ANG) or Air Force Reserve can initiate upgrade training upon completion of the corresponding in-residence increment of the BE Officer Course. Additionally, ANG or AF Reserve members can take up to 7 years in 43E2A status to obtain 43E3A status.
43E4A	Staff Level	Must be 43E3X[2]	Must be 43E3X[2]
NOTE: Possession of the shredouts below can only be obtained after the member is awarded the 43E3A (Qualified) AFSC.			
43E1B/C/D/G	Entry Level	None	Possession of 43E3A and completion of the education and/or certification requirements in the respective specialty shredout
43E3B/C/D/G	Qualified Level	None	Possession of the 43E1BC/D/G shredout AFSC for 24 months
43E1M	Entry Level	None	Possession of 43E3A and MS degree in medical physics granted from a degree program accredited by the Commission on Accreditation of Medical Physics Education Programs (CAMPEP)
43E3M	Qualified Level	None	Certification by the American Board of Radiology (ABR) in one of the following three specialties: diagnostic radiologic physics, therapeutic radiologic physics, or nuclear medicine physics

[1] The most current version of the AFOCD takes precedence over this CFETP for education, training, and experience requirements for each proficiency level and shredout.

[2] Designation of staff level relates only to the level of functional responsibility and is restricted to positions above wing level. It does not denote additional specialty qualification.

2.1.6. Recommendations. Report unsatisfactory performance of individual course graduates as well as perceived shortcomings in course content to the appropriate MAJCOM Bioenvironmental Engineers, referencing specific STS line items. MAJCOM Bioenvironmental Engineers will compile feedback for inclusion in the U&TW process. Submit notice of STS errors and recommended STS improvements and corrections to USAFSAM/OED at (937) 938-3021 (DSN 798-3021) or via email at: usafsam.oe.workflow@us.af.mil.

2.2. Section B - Training Course Index

2.2.1. Purpose. This section of the CFETP identifies training courses available for officers in the specialty. Due to the broad and varied responsibilities of the career field, a variety of 43EXX relevant training courses are offered that support developmental education. Courses at USAFSAM, AFIT School of Civil Engineering, AFIT Department of Engineering Physics, and several tri-service schools are available. The list of courses below for which 43EXX personnel may qualify is not all inclusive. Course titles that are asterisked (*) award the graduate a certification, manufacturer's certification or fulfill regulatory requirements to hold certain titles or positions.

2.2.1.1. **USAFSAM IN-RESIDENCE COURSES**

Course Number	Course Title	Location
B3OZY4XXX 0B1C	Contingency Preventive Medicine Course	USAFSAM
B3ACY4B071 0A1B	BE Occupational Health Measurements (OHM)	USAFSAM
B3XZYBERDS 0A1A	BE Readiness and Deployed Skills (BERDS)	USAFSAM
B3OZY43E1 0W1A	BE Advanced Workshop (BEAW)	USAFSAM
B3XZY4B0X1 0R1A	BE Radiation Skills Course (BERS)	USAFSAM
B3OBY43E1 0A1A	BE Officer Course	USAFSAM
TBD	BE Officer Advanced Course	USAFSAM
NOTES: Information for these courses can be found on the ESOH Service Center website at the 'Force Development Division' link. https://hpws.afrl.af.mil/dhp/OE/ESOHSC/index.cfm		

2.2.1.2. **AFMS MED+LEARN (ADLS GATEWAY)**

Course Number	Course Title	Location
N/A	HAPSITE Smart Course	DL
N/A	RADeCO High Volume Air Sampling Kit Course	DL
N/A	Electronic Personal Dosimeter (EPD) Course	DL
N/A	Civil Defense Simultest (CDS) Kit Course	DL
N/A	SAM 940 Portable Nuclide Identifier	DL
N/A	Laser Safety Officer Online Training Course*	DL
B6OZW43EXA0A1A	Radiation Safety Officer Course*	DL
NOTES: https://afms.adls.af.mil/kc/rso/login/adls_login.asp		

2.2.1.3. **AFIT – SCHOOL OF CIVIL ENGINEERING AND SERVICES COURSES**

Course Number	Course Title	Location
WENV 220	Unit Environmental Coordinator (UEC) Course	WPAFB
WENV 222	Hazardous Material Management Program (HMMP)	WPAFB
WENV 531	Air Quality Management Course	WPAFB
WENV 541	Water Quality Management Course	WPAFB
WESS 542	Environmental Quality Sampling	WPAFB

2.2.1.4. **AFIT – DEPARTMENT OF ENGINEERING PHYSICS**

Course Number	Course Title	Location
N/A	Nuclear Weapons Effects, Policy, and Proliferation (NWEPP) Certificate Program	DL
N/A	Combating Weapons of Mass Destruction Certificate Program	DL
NOTES: Both courses are graduate level; personnel must possess at minimum a bachelor's degree to attend. For a description of these courses, visit http://www.afit.edu/ENP/ certificate programs.		

2.2.1.5. **DEFENSE THREAT REDUCTION AGENCY (DTRA) – DNWS**

Course Number	Course Title	Location
J5OZD13B402DA	Nuclear Weapons Incident Response Training (NWIRT), Basic	Kirtland AFB
J5OZD32E3G00DA	Nuclear Emergency Team Operations (NETOPS)	Kirtland AFB
JBOZD21A1A00DA	Nuclear Weapons Orientation	Kirtland AFB
NOTE: AFGSC attendees may be funded through AFMOA via an approved UFR submitted by HQ AFGSC. Otherwise, these courses are unit funded.		

2.2.1.6. **DEFENSE SPECIAL WEAPONS AGENCY – ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (AFRRI)**

Course Number	Course Title	Location
N/A	Medical Effects of Ionizing Radiation (MEIR)	Varies
N/A	MEIR Regional Short Course (formerly Medical Effects of Nuclear Weapons)	Varies
NOTE: These courses are part unit funded, part AF funded.		

2.2.1.7. **U.S. ARMY MEDICAL RESEARCH INSTITUTE OF CHEMICAL DEFENSE**

Course Number	Course Title	Location
5OZA44XX 00BA	Medical Management of Chemical-Biological Casualties (MMCBC)	Aberdeen PG, MD
NOTE: This course is unit funded.		

2.2.1.8. **AF CIVIL ENGINEER CENTER (AFCEC) VIRTUAL LEARNING CENTER (ADLS GATEWAY)**

Course Number	Course Title	Location
N/A	MultiRAE Plus Course	DL
N/A	HazMat ID Course	DL
N/A	HazMat Awareness Course	DL
NOTE: https://afcec.adls.af.mil/kc/main/kc_frame.asp?blnWhatsNew=True		

2.2.1.9. **NAVAL CIVIL ENGINEER CORPS OFFICERS SCHOOL COURSES**

Course Number	Course Title	Location
A-4A-0058	Basic Environmental Law	Varies
A-4A-0067	Environmental Negotiation Workshop	Varies
A-4A-0072	Health and Environmental Risk Communication Workshop	Varies
A-4A-0078	Human Health Risk Assessment	Varies
NOTE: https://www.netc.navy.mil/centers/csfe/cecos/Default.aspx		

2.2.1.10. **ARMY INSTITUTE OF PUBLIC HEALTH BLACKBOARD LEARN – ENVIRONMENTAL COURSES**

Course Number	Course Title	Location
N/A	Direct Reading Gas & Vapor Instrumentation	DL
N/A	Environmental and Indoor Air Quality	DL
N/A	General Toxicology	DL
N/A	Pesticide Toxicology	DL
N/A	Public Affairs for the OSH Professional Communicating with the Media	DL
N/A	Radiation Math Concepts for Industrial Hygienists	DL
NOTE: An Army Knowledge Online (AKO) account is required in order to access this training. User accounts for Air Force members require the identification of an Army sponsor. https://aiph-dohs.ellc.learn.army.mil/webapps/portal/frameset.jsp?tab_tab_group_id=_157_1		

2.2.1.11. **ARMY INSTITUTE OF PUBLIC HEALTH BLACKBOARD LEARN – INDUSTRIAL HYGIENE COURSES**

Course Number	Course Title	Location
N/A	Industrial Ventilation	DL
N/A	Army Noise Measurement and Assessment	DL
N/A	Basic Epidemiology for the Industrial Hygienist	DL
N/A	Basic Industrial Hygiene Sampling	DL
N/A	Basic Noise Concepts and Math	DL
N/A	Applied Ergonomics	DL
N/A	Fundamentals of Ventilation	DL
N/A	GHS & HAZCOM Update	DL
N/A	IH & Exposure Assessment	DL
N/A	IH Management and Ethics	DL
N/A	IH Math and Chemistry Review	DL
N/A	Industrial Hygiene Noise Instrument Basics	DL
N/A	Industrial Hygiene Statistics	DL
N/A	Industrial Hygiene Survey and Sampling Etiquette	DL
N/A	Thermal Stressors	DL
N/A	Ventilation Fans	DL
N/A	Ventilation Hoods	DL
N/A	Ventilation HVAC Components and Controls	DL
N/A	Ventilation Protocols	DL
N/A	Work Environments Confined Spaces	DL

NOTE: An Army Knowledge Online (AKO) account is required in order to access this training. User accounts for Air Force members require the identification of an Army sponsor. https://aiph-dohs.ellc.learn.army.mil/webapps/portal/frameset.jsp?tab_tab_group_id=_157_1

2.2.1.12. **ARMY MEDICAL DEPARTMENT CENTER AND SCHOOL**

Course Number	Course Title	Location
047-20160502	Laser & Radio Frequency Hazards Course	Aberdeen Proving Ground South, MD
NOTE: http://phc.amedd.army.mil/Pages/Training.aspx		

2.2.1.13. **MEDICAL EDUCATION & TRAINING CAMPUS (U.S. AIR FORCE)**

Course Number	Course Title	Location
L5OXO42XX 08AA	Biomedical Officer Management Orientation (BOMO)	JBSA – Fort Sam Houston
NOTE: Open to all BSC AFSCs. Recommended 6 months to 2 yrs in the career field and be eligible for assignment to a management position. https://etca.randolph.af.mil/showcourse.asp?as_course_id=L5OXO42XX%20%2008AA		

2.2.1.14. **CENTER FOR DOMESTIC PREPAREDNESS (DEPT OF HOMELAND SECURITY)**

Course Number	Course Title	Location
Q	Incident Command: Capabilities, Planning and Response Actions for All Hazards; Hands-On Training for CBRNE Incidents	Anniston, AL (Former Fort McClellan)
M	Respiratory Protection: Program Development and Administration	Anniston, AL (Former Fort McClellan)
FF	Crime Scene Management for Chemical, Biological, Radiological, Nuclear, or Explosive Incidents; Hazardous Materials Evidence Collection for CBRNE Incidents; Hands-On Training for CBRNE Incidents	Anniston, AL (Former Fort McClellan)
HH	Environmental Health Training in Emergency Response Operations	Anniston, AL (Former Fort McClellan)
WW	Radiological Emergency Response Operations	Anniston, AL (Former Fort McClellan)
Z	Radiological Emergency Preparedness (REP) Core Concepts	Anniston, AL (Former Fort McClellan)
NOTES: https://cdp.dhs.gov/training/program/		

2.2.1.14. Other Courses. The Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), and the Environmental Protection Agency (EPA) offer a variety of courses relevant to the 43EXX specialty. These courses are often tuition-free

for government employees; however, travel and per diem expenses are not free. Funding for EPA courses may be available through AFIT. **NOTE:** Refer to the Education and Training Course Announcement (ETCA) website (https://etca.randolph.af.mil/) for information on courses listed in this index. If unable to locate in ETCA, seek assistance from your supervisor, as not all courses are listed.

2.2.1.15. Professional Certifications. Professional certifications assist the professional development of our Airmen and civilians by broadening their knowledge and skills. Obtaining professional certifications also helps Airmen to better prepare for transition to civilian life. A list of Corp specific certifying agencies is also available on the AFMS Knowledge Exchange Site at https://kx2.afms.mil/kj/kx5/AFMedicalCorps/Pages/AFI-41-104-List-of-Certifying-Agencies.aspx. A table of professional certifications recognized by the BE career field can be found at Attachment 3 of this CFETP.

2.2.1.15.1. AFI 41-104, *Professional Board and National Certification Examinations.* This AFI describes the approval process and options for taking professional, board or national certification examinations in the Medical Service. It also describes the criteria for reimbursement of fees and expenses, and identifies documentation requirements.

2.2.1.16. Other Certifications. A variety of State-level certifications exist in areas such as asbestos, lead-based paint, and drinking water analysis. Some certifications are Federal or State requirements governing the certification of BE personnel and certain operator functions. Contact your MAJCOM or career field AFMOA representative to inquire about the use of Environmental Health Training Funds to assist you and your BE Flight in obtaining local trainings/certifications of this nature.

2.2.1.17. HAZMAT Operations Certification via Reciprocity. IAW paragraph 4.8 of DoDI 6055.06M, *DoD Fire and Emergency Services Certification Program*, the DoD certification program recognizes and accepts certificates from any entity accredited by the International Fire Service Accreditation Congress (IFSAC) or the Pro-Board. Individuals successfully completing the IFSAC or Pro-Board accredited training may request DoD equivalent certification under the reciprocity provision if the certificates submitted have the appropriate IFSAC or Pro-Board seal. You must receive a certificate with the IFSAC or Pro-Board seal and submit the request for credit under the reciprocity clause to the DoD Fire and Emergency Services (FES) Certification Program Administration Center. The DoD certification program does not issue certificates for non-accredited training (i.e. certificates without the appropriate seal will not be accepted). Online HAZMAT Operations level refresher Training is available at the Total Force Virtual Learning Center at http://totalforcevlc.golearnportal.org/ under the 'Fire & Emergency Services Training' link.

2.3. Section C - Support Material

2.3.1. OJT Support Materials. Support materials enhance the base-level OJT Program and help standardize the program across the Air Force. As new BE OJT support materials are developed and released, notice is posted in the discussion portion of the AF BE Portal Groups: 43E Bioenvironmental Officers and 4B0 / 43E / Civ - Bioenvironmental Engineering. Posts to these groups disseminate messages via email to all members. To join the AF Portal Groups, ensure the individual user profile is complete and up-to-date and request membership to this closed group. Additionally, relevant career field announcements and resources may be viewed in the AF Bioenvironmental Engineering Functional Area in the AF Portal.

2.3.1.1. Access the 4B0 / 43E / Civ - Bioenvironmental Engineering AF Portal Group at the following URL:

https://www.my.af.mil/gcss-af/USAF/group?groupId=g88B4F00B39C751FD013A1D10D7F600E9

2.3.1.2. Access the AF BE Functional Area location at the following URL: https://www.my.af.mil/gcss-af/USAF/ep/globalTab.do?channelPageId=s2D8EB9D6408E0AD001414B3FCEDF1549&command=function&parentCategoryId=s2D8EB9D6408E0AD001414B3FCEDF1549

2.3.1.3. **AF Qualification Training Package (AFQTP).** The AFQTP is 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 (reference AFI 36-2201, *Air Force Training Program*). Established to provide standardized OJT Program qualification and certification standards, AFQTPs are mandatory for use during UGT and periodic certification for 4B0X1 enlisted members in the BE Career Field. Some of the same AFQTPs will be referenced and used to fulfill 43EXX officer upgrade training requirements. The AFQTPs are accessible in the AF e-Publications Site at http://www.e-publishing.af.mil/ and can be found by typing 'QTP' in the 'Search Products' window. Specific guidance on the use of AFQTPs for officer UGT will be released when the development process for these materials is finalized.

2.4. Section D - MAJCOM-unique Requirements

2.4.1. The following list of MAJCOM-unique requirements is not all-inclusive; however, it covers the most frequently referenced areas.

2.4.1.1. **Air Force Global Strike Command (AFGSC):** Personnel attend the NETOPs at the DNWS, Kirtland AFB, New Mexico, as required by AFI 10-2501, AFGSC Supplement 1, Table 6.1.

2.4.1.2. **Air Force Materiel Command (AFMC):** Primary Unit Type Code (UTC) assigned Air Force Radiation Assessment Team (AFRAT) members attend a variety of position qualification training courses to provide rapid, global response to radiological and nuclear accidents and incidents. All personnel assigned to AFRAT must complete the AFRAT Basic course and core Mission Essential Task List (METL) training as defined in AFTTP 3-42.34, *Air Force Radiation Assessment Team (AFRAT)*.

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Abbreviations and Acronyms

ABET – Accreditation Board for Engineering and Technology

AD – Active Duty

AF – Air Force

AFCLC – Air Force Culture and Language Center

AFOCD – Air Force Officer Classification Directory

AFI – Air Force Instruction

AFIT – Air Force Institute of Technology

AFMOA – Air Force Medical Operations Agency

AFMS – Air Force Medical Service

AFMSA – Air Force Medical Support Agency

AFOCD – Air Force Officer Classification Directory

AFOTEC – Air Force Operational Test & Evaluation Center

AFPC – Air Force Personnel Center

AFPD – Air Force Policy Directive

AFRAT – Air Force Radiation Assessment Team

A&FRC – Airman & Family Readiness Center

AFRL – Air Force Research Laboratory

AFRRI – Armed Forces Radiobiology Research Institute

AFS – Air Force Specialty

AFSC – Air Force Specialty Code

AFTR – Air Force Training Record

AFVEC – Air Force Virtual Education Center

AIHA – American Industrial Hygiene Association

ANG – Air National Guard

AT/FP – Anti-Terrorism/Force Protection

AU – Air University

BE – Bioenvironmental Engineering (formal acronym for official documents)

BEAW – Bioenvironmental Engineering Advanced Workshop

BEF – Bioenvironmental Engineering Flight

BEO – Bioenvironmental Engineering Officer

BSC – Biomedical Service Corp

CBRN – Chemical, Biological, Radiological, Nuclear

CC – Commander

CCAF – Community College of the Air Force

CDC – Career Development Course

CE – Civil Engineering

CFETP – Career Field Education and Training Plan

CPT – Career Path Tool

DE – Developmental Education

DL – Distance Learning

DoD – Department of Defense

DoDI – Department of Defense Instruction

DMRTI - Defense Medical Readiness Training Institute

DNWS – Defense Nuclear Weapons School

DOEHRS – Defense Occupational and Environmental Health Readiness System

DTRA – Defense Threat Reduction Agency

DT – Developmental Team

EPA – Environmental Protection Agency

ETCA – Education & Training Course Announcement

FY – Fiscal Year

HAF – Headquarters Air Force

HAZMAT – Hazardous Material

HRA – Health Risk Assessment

IAW – In Accordance With

IHS – International Health Specialist

ITP – Individual Transition Plan

MAJCOM – Major Command

MFM – MAJCOM Functional Manager

OEH – Occupational & Environmental Health

OEH-MIS – Occupational & Environmental Health-Management Information System

OEHSA – Occupational & Environmental Health Site Assessment

OHM – Occupational Health Measurements

OJT – On-the-Job Training

ORM – Operational Risk Management

OSHA – Occupational Safety and Health Administration

PACAF – Pacific Air Forces

PAT – Proficiency Analytical Test

PCS – Permanent Change of Station

PD – Presidential Directive

QNFT – Quantitative Fit-Testing

AFQTP – Air Force Qualification Training Package

RAC – Risk Assessment Code

RP – Respiratory Protection

RSO – Radiation Safety Officer

SG – Surgeon General

STS – Specialty Training Standard

TA – Tuition Assistance

TDY – Temporary Duty

TIC/TIM – Toxic Industrial Chemical/Toxic Industrial Material

TLD – Thermo-Luminescent Dosimeter

UGT – Upgrade Training

UMD – Unit Manning Document

USAFSAM – United States Air Force School of Aerospace Medicine

USUHS – Uniformed Services University of Health Sciences

UTC – Unit Type Code

UTM – Unit Training Manager

U&TW – Utilization & Training Workshop

VA – Vulnerability Assessment or Veterans Administration

WPAFB – Wright-Patterson Air Force Base

Terms

Advanced Distributed Learning Service (ADLS). ADLS is the system that delivers ADL content and tracks and reports student progress. (AFI 36-2201, *Air Force Training Program*)

Air Force Officer Classification Directory (AFOCD). The directory that contains the official specialty descriptions for all military classification codes and identifiers which are used to identify each Air Force job (valid requirement) and describe the minimum mandatory qualifications of personnel to fill these jobs. These standards are used to procure, classify, and employ personnel; to develop career programs for initial training, retraining, and skill upgrade; and to structure unit manpower document (UMD).

Air Force Medical Service (AFMS) Flight Path. The Flight Path was designed to improve the platform for deliberately developing AFMS personnel and delivering health care at home-station and deployed locations. It delineates the organizational structure in the AFMS. The Objective Medical Group implemented in 1993 provided for greater integration of operational and support functions with the LAF. A major focus of the AFMS Flight Path is the functional expertise and experience of leadership of the MTF: SGH, SGN, SGA, SGP, SGD, SGB, and the Group Superintendent. The military treatment facility will be organized around service lines with squadrons delivering health care and support to beneficiaries. A clear chain of command exists for all personnel and the role of each squadron is clearly defined.

(https://kx2.afms.mil/kj/kx5/FlightPath/Documents/Tab%201_2013%20Flight%20Path%20Special%20Instruction.pdf)

Air Force Specialty (AFS). A group of positions (with the same title and code) that require common qualifications. (AFI 36-2201, *Air Force Training Program*)

BSC Associate Chief (Air Force Career Field Manager). A representative appointed by the respective HQ USAF Deputy Chief of Staff or Under Secretariat, to ensure that assigned AF specialties are trained and used to support AF mission requirements. BSC Associate Chief is the OPR; however, works in concert with MAJCOM Functional Managers (MFMs) as required. (AFI 36-2201, *Air Force Training Program*)

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive core training document that identifies: life-cycle education and training requirements; training support resources, and minimum core task requirements for a specialty. The CFETP aims to give personnel a clear path and instill a sense of industry in career field training. (AFI 36-2201, *Air Force Training Program*)

Career Path Tool (CPT). The CPT is a dynamic, web-based career planning and force development tool for all Airmen (Officer, Enlisted, Guard and Reserve). It is also a mechanism for the Career Field Management (CFM) teams to communicate specific job information to their members by providing job descriptions, typical job duration estimates, and typical follow-on job recommendations from each of the job "buckets" defined on their members' pyramids. Through the combination of an Airman's specific duty history information and the CFM team-defined general recommendations, CPT provides Airmen the ability to fully develop a career plan.

Certification. A formal indication of an individual's ability to perform a task to required standards. (AFI 36-2201, *Air Force Training Program*)

Certification Official. A person whom the commander assigns to determine an individual's ability to perform a task to required standards. (AFI 36-2201, *Air Force Training Program*)

Course Training Standard (CTS). A training standard that identifies the training members will receive in a specific course. (AFI 36-2201, *Air Force Training Program*)

Developmental Education (DE). An array of educational opportunities including: Professional Military Education, Advanced Academic Degree Education and Professional Continuing Education, AFPD 36-23, Military Education. (AFI 36-2301, *Developmental Education*)

Education and Training Course Announcement (ETCA). Contains specific MAJCOM procedures, fund site 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, DoD, other military services, government agencies, and security assistance programs. (AFI 36-2201, *Air Force Training Program*) *Located at https://etca.randolph.af.mil

Exposure Informatics. The science-based collection, analysis, and long-term management of quality CBRN, OEH, and ergonomic exposure data, along with associated derivative information and knowledge, to support decision-making for continuous health threat assessment, health risk management and human performance enhancement, as well as service-connected disability claims.

Functional Manager (FM). Senior leaders, designated by the appropriate functional authorities, who provide day-to-day management responsibility over specific functional communities. While they should maintain an institutional focus with regard to resource development and distribution, FMs are responsible for ensuring their specialties are equipped, developed, and sustained to provide AF capabilities. (AFI 36-2640, *Executing Total Force Development*)

Informatics. Information science; the collection, classification, storage, retrieval, and dissemination of recorded knowledge.

Initial Skills Training. A formal school course that results in an AFSC 1-skill level award for officers in the 43EXX career field.

Major Command (MAJCOM). Usage of this term refers to all Major Commands (MAJCOM), Forward Operating Agencies (FOA), DRU, Air National Guard (ANG), and Air Force Reserve Command (AFRC) unless otherwise indicated. (AFI 36-2201, *Air Force Training Program*)

On-the-Job Training (OJT). Hands-on, "over-the-shoulder" conducted to certify personnel in both upgrade (skill-level award) and job qualification (position certification training). (AFI 36-2201, *Air Force Training Program*)

Proficiency Training. Additional training, either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. (AFI 36-2201, *Air Force Training Program*)

Qualification Training (QT). Hands-on performance training designed to qualify Airmen in a specific position. This training occurs both during and after upgrade training to maintain up-to-date qualifications. (AFI 36-2201, *Air Force Training Program*)

Air Force Qualification Training Package (AFQTP). 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. (AFI 36-2201, *Air Force Training Program*)

Specialty Training Standard (STS). An AF publication that describes an AFS in terms of tasks and knowledge an Airman in that specialty may be expected to perform or to know on the job. Also identifies the training provided to achieve a 1-, 2-, 3-, and 4-skill level within the 43EXX officer 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. (AFI 36-2201, *Air Force Training Program*)

Task Certifier. See Certification Official. (AFI 36-2201, *Air Force Training Program*)

Total Exposure Health (TEH). A strategy integrating occupational health, lifestyle health (health promotions), Environmental Health, and Hobby Health to support total health by preventing illness and advancing health and well-being. TEH incorporates all "exposure" aspects of National Institute for Occupational Safety and Health (NIOSH) Total Worker Health (TWH) and National Institute of Health (NIH) Total Community Health. (http://www.cdc.gov/niosh/TWH/)

Upgrade Training (UGT). Mandatory training that leads to attainment of a higher level of proficiency. (AFI 36-2201, *Air Force Training Program*)

Utilization and Training Workshop (U&TW). A forum of AFSC MAJCOM Functional Managers (MFMs), Subject Matter Experts (SMEs), and AETC (USAFSAM for 4B0X1 AFS) training personnel that determines career ladder training requirements. (AFI 36-2201, *Air Force Training Program* & AFI 36-2251 *Management of Air Force Training Systems*)

Attachment 2

43EXX SPECIALTY TRAINING STANDARD (STS)

1. Line Item	2. Tasks, Knowledge, and Technical References	3. Certification for OJT					4. Proficiency Codes Used to Indicate Required Training Level (see the Proficiency Code Key)[1]					
		Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	2-Skill Level	3-Skill Level				3-Level
							2-level Course	3-level CDC	3-lvl OJT	QTP[2]	Advanced Tng CRS[3]	Advanced Workshop[4]
1. The Proficiency Code Key is located in Part II, Section A of the Career Field Education & Training Plan (CFETP) *2. 'Y' stands for "Yes", indicating the presence of a Qualification Training Package (QTP)* *3. The Advanced Training Course column only includes material covered in the BE Officer Advanced Course* *4. An 'X' in the Advanced Workshop column indicates that the material is covered in the BE Advanced Workshop. No proficiency codes are assigned since this is an optional course.*												
1	**Mission and Organization of the USAF Medical Service**											
1.1	**Medical Service**											
	(HQ USAF/SG Ltr, Air Force Medical Service (AFMS) Strategic Plan, 26 Mar 07; AFPD 48-1, Aerospace Medicine Program, 23 Aug 11; HQ USAF/SG1/SG8, Flight Path Implementation Guide For The Combat Wing Organization-Medical, 14 Feb 08)											
1.1.1	Purpose and organization						B					
1.1.2	Understand Department of Defense, Joint Service, Headquarters Air Force staff roles											X
1.1.3	Aerospace Medical Program						B					
1.2	**Bioenvironmental Engineering**											
	(AFMOA/SG3PB, Bioenvironmental Engineering Operational Execution Plan 2008; AFMSA/SG3PB, Bioenvironmental Engineering (BE) Capabilities Execution, 21 Jan 09; Concept Of Operations for UTCs)											
1.2.1	Mission and Organization of BE						B					
1.2.2	Roles and interactions of BE with other agencies (state, local, federal, and base)						B					
1.2.3	BE UTCs						B					
1.2.4	Joint Basing Considerations (deployed and home-station)							A				
1.2.5	Identify ethical tenets of certifying organizations (CIH, CHP, PE)						A	B				
1.2.6	Understand research request process/research programs							A				
1.2.7	Understand non-traditional missions and building partner capacity							A				
2	**General Administration and Office Management**											

2.1	**Resource Management** (The Planning, Programming, Budgeting and Execution (PPBE) System & The Air Force Corporate Structure (AFCS) Primer, 2003; AFI 41-120, Medical Resource Operations, 18 Oct 01; AFI 65-601V1, Budget Guidance and Procedures, 16 Aug 2012; Local Cost Center Management Guide, if available)											
2.1.1	**Planning, Programming, Budgeting, and Execution System**											
2.1.1.1	Planning, Programming, Budgeting, and Execution, MPPG						B					X
2.1.1.2	Draft budget requirements							b				X
2.1.1.3	Develop Fin Plans							b				X
2.1.1.4	Budget Execution							b				X
2.1.2	**Contracting**											
2.1.2.1	Managing contractor support							a				
2.1.2.2	Reviewing base contracts						b	b	2b	Y	3c	
2.1.3	**Manpower Resources**											
2.1.3.1	Understand BE manning process							B				X
2.1.3.2	Develop and evaluate work schedules						2b					X
2.1.3.3	Review BE Mgmt guide (as applicable)											
2.2	**Program Management** *(AFI 90-201, The Air Force Inspection System, 21 Apr 15; AFI 25-201, Intra-Service, Intra-Agency, and Inter-Agency Support Agreements Procedures, 18 Oct 13)*											
2.2.1	Internal and external inspections/assessments (UEI, AFIA Permit Control, OSHA, EPA, NRC, self-inspections, etc)						A					X
2.2.1.1	Execute Commanders Inspection Program							b	2b	Y		X
2.2.1.2	Understand OEH management systems						A	B				
2.2.1.3	Conduct PMR							b	2b	Y		X
2.2.2	BE requirements of support agreements							A				
2.2.3	Review construction design plans						b	b	2b	Y	3c	
2.2.4	Review local work order requests						b	b	2b	Y	3c	
3	**Fundamental Skills**											
3.1	**Communication**											
3.1.1	Fundamentals of risk communication						2b					X
3.1.2	Prepare and conduct oral and written communication						2b					
3.1.3	Brief CBRN (and physical) hazards/risks to personnel (shop personnel, commanders, IC, etc.)						3c					

3.1.4	Prepare health risk assessment reports						2b					
3.1.5	Understand upgrade training program						B					
3.1.6	Use field communication systems						B					
3.1.7	Delivering the strategic message											X
3.2	**Basic Mathematics**											
3.2.1	Use basic statistics						b					
3.3	**Chemistry**											
	(Basic Chemistry, 7th Ed.)											
3.3.1	Describe Composition of matter						B					
3.3.2	Describe Physical Characteristics of solids, liquids, and gases						B					
3.3.3	Understand Periodic table of elements						B					
3.3.4	Describe Compounds						B					
3.3.5	Describe Acids and bases						B					
3.3.6	Understand the difference between organic/inorganic functional groups						B					
3.3.7	Identify chemical incompatibilities						B					
3.3.8	Calculate gas laws						b					
3.4	**Anatomy and Physiology**											
	(Anatomy and Physiology, 7th Ed.)											
3.4.1	Basic structure and functions of the cell						B					
3.4.2	Basic structure and functions of tissues						B					
3.4.3	Basic structure and functions of organ systems						B					
3.5	**Toxicology**											
	(Toxicology: The Basic Science of Poisons, 7th Ed.; The Dose Makes the Poison)											
3.5.1	Dose response relationships						B				C	
3.5.2	Basic toxicological terms						B					
3.5.3	Biological response factors						B					
3.5.5	Exposure routes						B					
3.5.6	Classification of toxic materials						B					
3.5.7	Physiological effects						B					
3.5.8	Physical forms of toxic agents						B					
3.5.9	Chemical forms of toxic agents						B					
3.6	**Ecology and Environmental Toxicology**											
	(Environmental Science: The Way the World Works, 7th Ed.; Toxic Substances in the Environment; Toxic Air Pollution Handbook; Chemical Fate and Transport in the Environment, 2nd Ed.)											
3.6.1	Biosphere						B					
3.6.2	Ecological life forms						B					

3.6.3	Toxic substances in the environment						B					
3.6.4	Effects of pollution on humans						B				C	
4	**Occupational and Environmental Health (OEH) Program**											
4.1	**OEH Program Overview**											
	(AFI 48-145, Occupational and Environmental Health Program, 22 Jul 14; AFMAN 48-146, Occupational and Environmental Health Program Management, 9 Oct 12; AFMAN 48-155, Occupational and Environmental Health Exposure Controls, 1 Oct 08; Fundamentals of Industrial Hygiene, 5th Ed.; AIHA, The Occupational Environment: Its Evaluation, Control and Management, 3 Ed.; Bioenvironmental Engineering Field Manual, 2008; AFIOH Environmental Health Site Assessment Guide (IERA-RS-BR-TR-2003-002); AFIOH Assessment Methodology for Toxic Industrial Chemicals/Toxic Industrial Materials (TICs/TIMs), 2006; ACGIH TLVs and BEIs; NIOSH Pocket Guide; AFI 91-203, Air Force Consolidated Occupational Safety Instruction, 15 Jun 12; DOEHRS Student Guide/User Manual											
4.1.1	OEH Program						B					
4.1.2	Complete Occupational and Environmental Health Site Assessment						B	C			3c	
4.1.2.1	Conduct site selection						2b	C			3c	
4.1.2.2	Complete Conceptual Site Model						2b	C			3c	
4.1.2.3	Determine Exposure Assessment Strategies						2b	C			3c	
4.1.2.4	Evaluate Exposure Pathways						2b	C			3c	
4.1.2.5	Evaluated Total exposure health risk (additive, synergistic, multiple routes, etc.)						b	c			3c	
4.1.2.6	Recommend OEH exposure controls						b	c			3c	
4.1.2.7	Conduct predictive exposure assessments using data and intel						b	c			3c	
4.1.2.8	Perform exposure modeling calculations						2b	c			3c	
4.1.2.9	Associate exposure with affected personnel using spatial and temporal reference marks						b					
4.1.2.10	Use GPS (coordinates)						2b	C				
4.1.3	Toxic industrial chemical/toxic industrial material (TIC/TIM) vulnerability assessments						B	C				
4.1.4	Perform TIC/TIM vulnerability assessment						2b				3c	
4.1.4.1	Collect data required in TIC/TIM vulnerability assessment						b	c				
4.1.5	Emergency Planning and Community Right-to-Know Act (EPCRA)						B					
4.1.6	Federal, DOD, AF directives and technical orders						B					

4.1.7	Defense Occupational and Environmental Health Readiness System (DOEHRS)						B					X
4.1.8	Utilize DOEHRS						2b					
4.1.9	Review DOEHRS input						2b	c				
4.1.9.1	Document incident reports in DOEHRS							b	2b	Y		
4.1.9.2	QA/QC incident reports in DOEHRS							b	2b	Y		
4.1.9.3	Document OEHSA in DOEHRS							b	2b	Y		
4.1.9.4	QA/QC OEHSA in DOEHRS							b	2b	Y		
4.1.9.5	Review/Understand DOEHRS reports							b			c	
4.1.10	Health risk assessment						2b	c			3c	
4.1.11	Evaluate Roles and interaction in personal protective equipment (PPE)						2b	c			3c	
4.1.12	Consider use, selection and limitations of PPE/Recommend PPE						2b	c			3c	
4.1.13	Medical Exam Source Documents						A					
4.1.14	Total Exposure Health							A			B	
4.1.15	Sample result interpretation						2b	c			3c	
4.2	**OEH Process Assessment**											
4.2.1	Workplace categorization						B					
4.2.2	Perform routine assessments						2b	c	3c	Y		
4.2.2.1	Review routine assessments						2b	c	3c	Y		
4.2.3	Prioritize special assessments						2b	c	3c	Y		
4.2.4	Investigate occupational illness/injury						2b	c	3c	Y		
4.2.5	Conduct pregnancy profile evaluations						2b	c	3c	Y		
4.3	**Hazard Abatement Program**											
4.3.1	Risk assessment codes						B					
4.3.2	Assign occupational health risk assessment codes (RACs)						2b	c			3c	
4.4	**Hazard Communication**											
4.4.1	Program overview						B					
4.4.2	Key player(s) responsibilities						B					
4.4.3	Evaluate shop hazard communication (HAZCOM) programs and lab chemical hygiene programs						2b	c	3c	Y		
4.4.4	Laboratory chemical hygiene programs						B					
4.5	**Sampling**											
4.5.1	**Sampling Overview**											
4.5.1.1	Sampling methodology (solid, liquid, gas)						B					

4.5.1.2	OEH sample guide (include USAPHC guide)						B					
4.5.1.3	Prepare and/or preserve samples for shipment						b	b	2b	Y		
4.5.1.4	Decontaminate equipment						b	b	2b	Y		
4.5.1.5	Occupational and Environmental Exposure Limits						B	C				
4.5.1.5.1	Select appropriate occupational and environmental exposure limit (OEEL) (TLV, MCL, SPEGL, MEG, STEL, CEILING, PEL, Excursion Limits, etc.)						2b				3c	
4.5.1.6	Sample collection quality assurance/quality control program						B					
4.5.2	**Occupational and Environmental Air/Gas Sampling**											
4.5.2.1	Types of air samples (integrated and grab)						B					
4.5.2.2	Air sampling devices (direct reading instruments, pumps, passive dosimeters, etc.)						B					
4.5.2.3	Air sample collection (media and samplers--i.e. Cyclone, IOM)						B	C				
4.5.2.4	Establish air sampling strategies						2b	c			3c	
4.5.2.5	Calculate sampling rates and volumes						2b	c	3c	Y		
4.5.2.6	Calibrate and Operate Direct reading instruments						2b	b	3b	Y		
4.5.2.6.1	Detector Tubes or Chips (e.g. Drager CDS Kit)						2b	b	3b	Y		
4.5.2.6.2	Portable GC-MS (e.g. HAPSITE)						2b	b	3b	Y		
4.5.2.6.3	Multi Gas Meters						2b	c	3c	Y		
4.5.2.7	Calibrate air sampling pumps						2b	c	3c	Y		
4.5.2.8	Collect area air samples						2b	c	3c	Y		
4.5.2.9	Collect breathing zone air samples						2b	c	3c	Y		
4.5.2.10	Calculate equivalent OEELs						2b	c			3c	
4.5.2.11	Convert raw concentrations (i.e. grams to mg/m3)						2b	c			3c	
4.5.2.12	Calculate time weighted averages (TWA)						2b	c	3c	Y		
4.5.2.13	Calculate upper and lower confidence limits						2b	c			3c	
4.5.2.14	Calculate compliance factors (unity)						2b	c			3c	
4.5.2.15	Correct results for atmospheric conditions						2b	c			3c	
4.5.2.16	Interpret air sample results						2b	c			3c	
4.5.2.16.1	Utilize Bayesian Stats in accordance with AIHA Methodology							b			2b	

4.5.2.17	DOEHRS data entry/quality control						2b					
4.5.3	**Swipe/Solid/Bulk/Soil Sampling**											
4.5.3.1	Sampling methods for soil and solids						B					
4.5.3.2	Determine or establish soil / solid sampling strategies						2c	c			3c	
4.5.3.3	Collect soil / solid samples						3c					
4.5.3.4	Operate Soil / Solid sampling devices (DRI, XRF, etc.)						b	b	3b	Y		
4.5.3.4.1	Operate FT-IR (e.g. HAZMAT ID)						b	b	3b	Y		
4.5.3.5	Field analyze soil / solid samples						B					
4.5.3.6	Interpret soil sample results						B				3c	
4.5.3.7	Conduct DOEHRS data entry						2b					
4.6	**Chemical Health Hazards**											
4.6.1	Chemical hazards (industrial, etc)						B					
4.6.2	Substance specific standards						B					
4.6.3	Identify substance specific standard compliance requirements						b	c			3c	
4.6.3.1	Determine substance specific standard compliance						b	c			3c	
4.6.4	Identify / Analyze chemical hazards based on routes of entry (inhalation, injection, ingestion, absorption, contact ototoxins)						b	c			3c	
4.6.5	Determine regulated areas for chemical hazards						b	c			3c	
4.6.6	Chemical hazard controls						2b	C			3c	
4.6.6.1	Understand occupational exposure banding							B				
4.6.7	Protective clothing concepts (permeation, breakthrough, etc.)						B					
4.6.8	HAZMAT request (AF Form 3952 or equivalent)						B					
4.6.9	Safety Data Sheet (SDS)						B					
4.6.10	HAZMAT reports and inventories						B					
4.6.11	Conduct DOEHRS data entry						2b					
4.6.12	Decontamination of military assets and disposal of chemical waste						a	b			c	
4.7	**Biological Health Hazards**											
4.7.1	Biological hazards (viruses, bacteria, fungi, protozoa; industrial, WMD, etc.)						C				C	
4.7.2	Identify / Evaluate biological health hazards						3c				C	
4.7.2.1	Operate Hand-Held Assays (e.g. HHA Kits)						3c					
4.7.2.2	Operate High Volume Biological Air Samplers (e.g. XMX)						2b	b	3b	Y		

4.7.3	Biological hazard controls (pre/post)						C				C	
4.7.4	Conduct Indoor air quality evaluations						2b	c	3c	Y		
4.7.5	Determine or establish biological sampling strategies						3c	c			3c	
4.7.6	Lab Coordination						B					
4.7.6.1	Identify laboratory response capabilities (AF/local/CST) (i.e. JBAIDS, RT/PCR)							B				
4.7.7	Conduct DOEHRS data entry						2b					
4.7.8	Recommend Decontamination of military assets and disposal of biological waste						a	b			c	
4.8	**Confined Spaces**											
4.8.1	Roles and interactions in Confined Space Program						B					
4.8.2	Classify confined spaces (permit/non-permit)						2b	c			3c	
4.8.3	Test confined space atmospheric conditions and interpret results						2b	c	3c	Y		
4.8.4	Confined space hazard controls						B					
4.8.5	Operate atmosphere monitoring equipment (multigas meter, PID)						2b					
4.8.6	Provide atmosphere monitoring equipment training (multigas meter, PID)							b			c	
4.8.7	Certify organizational personnel to test confined spaces							b			c	
4.8.8	Review confined space master entry plans and non-routine entry permits						2b	c			3c	
4.8.9	Approve confined space master entry plans and non-routine entry permits						2b	c			3c	
4.8.10	Confined Space master entry permits						B					
4.9	**Radiation**											
4.9.1	**Radiation Overview**											
4.9.1.1	Roles and interactions in Radiation Safety Program Management						B					
4.9.1.2	Fundamental concepts of energy and mass						B					
4.9.1.3	Electromagnetic spectrum						B					
4.9.1.4	Types of radiation						B					
4.9.1.5	RSO Course or equivalent						B					
4.9.2	**Management of Radiation Program (non-permitted sources)**											
4.9.2.1	OSHA Requirements							B				
4.9.2.2	DOE Requirements							B				

4.9.2.3	NRC Requirements							B				
4.9.2.4	Radiation Material Requirements							B				
4.9.2.5	Radiation producing devices Requirements							B				
4.9.3	**Ionizing Radiation**											
4.9.3.1	Radioactive decay						B					
4.9.3.2	Radiation and radioisotopes (quantities and units)						B					
4.9.3.3	Interactions with matter						B					
4.9.3.4	Biological effects of ionizing radiation						B				C	
4.9.3.5	Sources, use and production of X-rays						B					
4.9.3.6	Identify radiological/nuclear hazards						b	c				
4.9.3.6.1	Uses and hazards of depleted uranium						B					
4.9.3.6.2	Decay, monitoring mitigation of radon gas						B					
4.9.3.7	Radioisotope permit programs						B					
4.9.3.8	Perform RAM storage and use surveys						2b	c	3c	Y		
4.9.3.9	Perform medical and industrial diagnostic X-ray scatter surveys						2b	c	3c	Y		
4.9.3.10	Perform swipe tests of radiological sources						2b	c	3c	Y		
4.9.3.10.1	Perform field analysis of samples (utilizing probe efficiency)						2b	c	3c	Y		
4.9.3.10.2	Identify common isotopes and determine types of decay						b					
4.9.3.11	Calibrate/Operate radiation detection equipment (i.e. 886H Allowance Standard Items)											
4.9.3.11.1	Ion Chamber (i.e. Victoreen 451P)						2b	b	3b	Y		
4.9.3.11.2	Gamma Spec (i.e. SAM-940)						2b	b	3b	Y		
4.9.3.11.3	Geiger-Mueller (i.e. ADM-300)						2b	b	3b	Y		
4.9.3.11.4	EPD (i.e. MK-2 & N-2)						2b	b	3b	Y		
4.9.3.11.4.1	Establish EPD Alarm levels						2b				3c	
4.9.3.11.5	High Volume Air Sampler (i.e. RADēCO)						2b	b	3b	Y		
4.9.3.11.6	Operate Radon Gas Meters						2b					
4.9.3.11.7	Radiation detection equipment (theory of operation, capabilities, limitations for each)						B					
4.9.3.12	Investigate suspected ionizing radiation overexposures/abnormal exposures						b	c			3c	

4.9.3.13	Perform ionizing radiation calculations (dose, dose rate, stay time, protection factors, decay, etc.)						b	c			3c	
4.9.3.14	Ionizing radiation hazard controls						B	C			3c	
4.9.3.15	As-low-as-reasonably achievable (ALARA) training						B					
4.9.3.16	Survey radioactive materials for shipment or transport						b	c			3c	
4.9.3.17	Disposal methods for radioactive material with Air Force Radiation and Radioactive Recycling and Disposal (AFRRAD) office (include INRAD/91B waste)						B/2b					
4.9.3.18	Heritage (museum & static displays)						B					
4.9.4	**Nuclear Enterprise**											
4.9.4.1	Role of BE in the Nuclear Enterprise						B					
4.9.4.2	Theory and operation of Nuclear weapons						B					
4.9.4.3	Fission and fusion of nuclear materials						B					
4.9.4.4	Types of Nuclear weapons						B					
4.9.4.5	Nuclear weapons incidents						B					
4.9.4.5.1	Differentiating between NUDET, Broken Arrow, Faded Giant, Bent Spear, PSRE (include NORM)						B					
4.9.4.5.2	Blast Hazards						B	C				
4.9.4.5.3	Radiation hazards						B	C				
4.9.4.5.4	Thermal Hazards						B	C				
4.9.4.5.5	Secondary Hazards (weapon specific)						B	C				
4.9.4.6	Common isotopes						B					
4.9.4.6.1	Radioactive half- life						B					
4.9.4.6.2	Biological half- life						B					
4.9.4.6.3	Effective half- life (establish relationships)						b					
4.9.4.7	Medical countermeasures (Potassium Iodide, Prussian Blue, Chelating Agents)						B					
4.9.4.7.1	Recommend countermeasures						b					
4.9.4.8	Communicate protective/precautionary measures (coordinate w/ PA)						2b					
4.9.4.9	Units of radiation (dose / dose Rate / counts)						B					
4.9.4.9.1	Convert units of radiation						2b				3c	
4.9.4.10	Define radiation dose						B					

4.9.4.11	Define radiation contamination						B					
4.9.4.12	Calculate stay times						2b				3c	
4.9.4.13	Measure nuclear radiation intensity and dose						2b					
4.9.4.14	Correct use, selection & limitations of PPE						B					
4.9.4.15	Determine contaminated food/water						b					
4.9.4.16	Contamination control/management of contaminated equipment						B					
4.9.4.17	Recommend decontamination procedures (personnel, equipment, vehicles, aircraft, buildings)						2b				3c	
4.9.4.18	Recommend contamination control of contaminated patients/casualties						2b				3c	
4.9.4.18.1	Recommend Control of contaminated remains						2b				3c	
4.9.4.19	Perform Weapons Storage Area Surveys						2b					
4.9.4.20	Utilize nuclear dispersion hazards (plots)						2b					
4.9.4.21	Overall health risk documentation						B					
4.9.4.22	Evaluate personnel exposure / risk assessment						2b				3c	
4.9.4.22.1	Document exposure in DOEHRS						2b					
4.9.4.23	INRAD requirements						B					
4.9.5	**USAF Personnel Dosimetry Program**											
4.9.5.1	Roles and interaction in the USAF Personnel Dosimetry Program (reporting)						B					
4.9.5.2	Types of personal dosimeters						B					
4.9.5.3	Enroll/Disenroll personnel							b				
4.9.5.4	Exchange/ship dosimeters							b				
4.9.5.5	TLD results and histories of occupational exposure to ionizing radiation						2b				B	
4.9.6	**EMF Radiation**											
4.9.6.1	Principles of EMF						B					
4.9.6.2	Health risks of EMF exposure						B					
4.9.6.3	Types/management of EMF emitters						B	C				
4.9.6.4	Perform EMF risk assessment						2b				3c	
4.9.6.5	Determine radio frequency radiation (EMF) permissible exposure limits (PELs) (MPE)						2b				3c	
4.9.6.6	Calculate EMF hazard distances						2b				3c	
4.9.6.7	Perform *(Review)* EMF measurement surveys						2b				3c	
4.9.6.8	EMF controls						B					

4.9.6.9	Investigate potential EMF overexposures or accidents						2b				3c	
4.9.6.10	Use EMF instrumentation						2b					
4.9.6.11	Calculate probe burnout						2b					
4.9.6.12	Document EMF emitters in DOEHRS						2b					
4.9.7	**Lasers**											
4.9.7.1	Laser fundamentals						B					
4.9.7.2	Perform laser inventory							b	2b	Y		
4.9.7.3	Biological effects of lasers						B					
4.9.7.4	Identify and analyze laser sources / hazards						B					
4.9.7.5	Maximum permissible exposures						B					
4.9.7.6	Nominal hazard zone						B					
4.9.7.7	Nominal ocular hazard distance						B					
4.9.7.8	Perform theoretical laser hazard (LHAZ) evaluations						2b	c	3c	Y		
4.9.7.9	Laser controls						B	C				
4.9.7.10	Investigate potential Laser overexposures or accidents						2b				3c	
4.9.7.11	Document lasers in DOEHRS						2b					
4.9.8	**Other nonionizing radiation hazards and controls (UV/IR)**											
4.9.8.1	UV/IR sources, hazards and controls (water treatment, medical use, welding, etc.)						B					
4.9.8.2	Perform UV/IR Assessments (includes UV/IR calculations)						2b					
4.9.8.3	Recommend UV/IR controls						2b					
4.10	**Noise**											
4.10.1	Roles and interactions in the Occupational Noise and Hearing Conservation Program						B					
4.10.2	Physical properties of sound						B					
4.10.3	Quantities and units of sound						B					
4.10.4	Effects of noise exposure						B					
4.10.5	Perform noise calculations						2b				3c	
4.10.6	Hazardous noise sources and areas						B				C	
4.10.7	Perform noise source surveys (dBA, impact, impulse, speech interference)						2b				3c	
4.10.8	Perform worker exposure surveys (dosimetry)						2b				3c	
4.10.9	Perform octave band noise surveys						2b				3c	
4.10.10	Perform audiometric booth surveys						2b				3c	
4.10.11	Recommend noise controls at source, path, and receiver						2b				3c	

4.10.12	Conduct DOEHRS data entry						2b					
4.10.13	Verify adequacy of hearing protection devices (calculate attenuation factor)						2b				3c	
4.11	**Ergonomics**											
4.11.1	Ergonomic Hazards						B	C				
4.11.2	Identify and analyze ergonomic hazards (screening or calculation)						2b				3c	
4.11.3	Ergonomic controls						B	C				
4.11.4	Recommend controls						2b				3c	
4.11.5	Conduct DOEHRS data entry						2b					
4.12	**Thermal**											
4.12.1	Roles and interactions in the Thermal Stress Program						B					
4.12.2	Thermal stress hazards						B					
4.12.3	Analyze thermal stress hazards (i.e. WBGT)						3c					
4.12.4	Recommend thermal stress controls						2b					
4.12.5	Health/medical effects of extended IPE/GCE wear						B					
4.12.6	Conduct DOEHRS data entry						2b					
4.13	**Mechanical Ventilation Systems**											
4.13.1	Types of pressure						B					
4.13.2	Pressure losses						B					
4.13.3	Velocity						B					
4.13.4	Mass flow						B					
4.13.5	Ventilation system design reviews						2b	c			3c	
4.13.6	Principles of dilution ventilation						B					
4.13.7	Principles of local exhaust ventilation						B					
4.13.8	Types of hoods						B					
4.13.9	System advantages and disadvantages						B					
4.13.10	Ventilation survey requirements (initial, baseline, routine)						B	C				
4.13.11	Perform ventilation calculations						2b				3c	
4.13.12	Perform face velocity ventilation survey						2b				3c	
4.13.13	Perform capture velocity survey						2b				3c	
4.13.14	Perform pitot traverse ventilation survey						2b				3c	
4.13.15	Perform medical dilution ventilation survey						2b				3c	
4.13.16	Perform static pressure checks						2b				3c	
4.13.17	Identify placement of pressure sensors (manometers, aneroid/magnehelic gauges)										B	

4.13.18	Conduct DOEHRS data entry						2b					
4.13.19	Follow up actions for deficient ventilation systems						2b				3c	
4.14	**Respiratory Protection**											
4.14.1	Roles and interactions in the Respiratory Protection (RP) Program						B					
4.14.2	Types and classes of respirators						B					
4.14.3	Operating principles of respirators						B					
4.14.4	Work area RP program evaluation						B					
4.14.5	Select RP equipment						2b	c			3c	
4.14.6	Approve RP equipment						2b	c			3c	
4.14.7	Perform qualitative fit tests						2b					
4.14.8	Perform quantitative fit tests						2b					
4.14.9	Conduct RP training						2b					
4.14.10	Use, care and maintenance of respirators						B					
4.15	**Environmental Health Program**											
4.15.1	**Potable Water Program**											
4.15.1.1	Regulatory requirements of the Safe Drinking Water Act (SDWA) and applicable Air Force Instructions (include annual PMR)						B				B	
4.15.1.2	Sources and characteristics of potable water						B					
4.15.1.3	Groundwater hydrology						B					
4.15.1.4	Drinking water treatment						C	C				
4.15.1.5	Drinking Water Systems						B	C				
4.15.1.6	Field Drinking water						C	C				
4.15.1.7	Disinfection of new water mains, water main breaks, or repairs						B	C				
4.15.1.8	Compliance and noncompliance reporting requirements						2b				B	
4.15.1.9	Consumer confidence reports (CCRs)						2b					
4.15.1.10	Health risk ratings for backflow or cross connection areas						B					
4.15.1.11	Assign Health Risk ratings for backflow or cross connection areas						2b					
4.15.1.12	Recommend "fixes" for lead contamination control act and lead & copper rule						b				3c	
4.15.1.13	Base sanitary surveys						B	C				
4.15.1.14	Perform base sanitary surveys						2b				3c	
4.15.1.15	Water vulnerability assessment						B	C				
4.15.1.16	Perform water vulnerability assessments						2b				3c	

4.15.1.17	Perform aircraft watering point surveys						2b					
4.15.1.18	Conduct DOEHRS data entry (drinking water system survey and water samples)						2b					
4.15.2	**Nonpotable Water Program**											
4.15.2.1	Preseason or postseason inspections of swimming pools, hot tubs, or spas						B					
4.15.2.2	Natural bathing area sanitary survey						B					
4.15.3	**Water/Liquid Sampling**											
4.15.3.1	Sampling Analysis and Monitoring Plan						B	C				
4.15.3.2	Develop a water/liquid sampling strategy						3c				3c	
4.15.3.3	Collect water samples from swimming pools, hot tubs, spas, natural bathing areas or other nonpotable sources						2b					
4.15.3.4	Water/Liquid sampling devices equipment (i.e. DRI, HACH, DPD, etc.)						B					
4.15.3.4.1	Portable GC/MS (e.g. HAPSITE)						2b	b	3b	Y		
4.15.3.4.2	Portable laboratory analysis kit (e.g. DREL)						2b	c	3c	Y		
4.15.3.4.3	FT-IR (e.g. HAZMAT ID)						2b	b	3b	Y		
4.15.3.5	Calibrate / operate water sampling equipment						2b	b	3b	Y		
4.15.3.6	Water sample collection equipment / containers						B					
4.15.3.7	Perform chlorine analyses						2b				2b	
4.15.3.8	Perform pH analyses						2b				2b	
4.15.3.9	Perform fluoride analyses						2b				2b	
4.15.3.10	Collect potable water samples						2b				2b	
4.15.3.11	Perform presence-absence method (bacteriological / E.coli)						2b				2b	
4.15.4	**Environmental Health Topics (other)**											
4.15.4.1	Case Studies of Environmental Pollution on Military Population (e.g., burn pits, water contamination, CBRN agent contamination, rad incidents)							B			C	
4.15.4.2	Recognize Vapor Intrusion Hazards							A				
4.15.4.3	Emerging TEH Hazards (e.g., nanohazards, unregulated contaminant monitoring rule)											X
4.16	**Trend Analysis**											
4.16.1	Develop trend analyses from results of Environmental Health Data						b					

4.16.2	Develop trend analyses from Occupational Health Data						2b	c			3c	
4.16.3	Basic Epidemiology						B					
5	**Response Operations**											
5.1	Air Force Emergency Management Program						C					
5.1.1	Complete DoD HazMat (NFPA) Awareness						B					
5.1.2	Complete DoD HazMat (NFPA) Operation Certification Course						B					
5.1.3	Complete DoD HazMat (NFPA) Operation Certification Course (Hands-on Level A protection)						2b					
5.1.4	Roles and interactions in response operations (AFIMS)						B/C					
5.1.5	Mission specific competencies (crime scene & air monitoring)						B					
5.1.5.1	Chemical hazards (industrial, WMD, etc.)						C					
5.1.5.2	Radiological hazards (RDD, RED, FADED GIANT)						C					
5.1.5.3	Biological hazards						C					
5.2	Emergency response material and sources						C					
5.2.1.	Review of response publications and intelligence						C					
5.2.1.1	POEMS, MESL, SPINS, ILER						B					
5.2.2.	Input and interpret risk assessment tools / dispersion models (i.e. CHEMRAT, CHART or equivalent)						3c					
5.2.3.	Use emergency management response plans and checklists						3c					
5.2.4.	Develop emergency management response plans and checklists						3c					
5.3	Shelter operations						B					
5.4	Perform level A and B dressout (i.e. suits and SCBA)						2b					

Attachment 3

43EXX RECOGNIZED PROFESSIONAL CERTIFICATIONS

BE Skill Set	Certification/ Specialty	Applicability	Specialty Certifying Organization	Organization Contact Information
Occupational and Environmental Health	Certified Industrial Hygienist*	43EXB	American Board of Industrial Hygiene (ABIH)	http://www.abih.org/
	Certified Safety Professional*	43EXA/B	Board of Certified Safety Professionals (BCSP)	http://www.bcsp.org/
	Certified Safety and Health Manager	43EXA/B	Institute for Safety and Health Management	http://www.ishm.org/
	Certified Hazardous Materials Manager	43EXA/B/D	Institute of Hazardous Materials Management (IHMM)	http://www.ihmm.org/
	Registered Environmental Health Specialist/Registered Sanitarian	43EXA/B/D	National Environmental Health Association (NEHA)	http://www.neha.org/credential/index.shtml
	Certified Environmental Professional	43EXA/B/D	Academy of Board Certified Environmental Professionals (ABCEP)	http://www.abcep.org/
	Qualified Environmental Professional	43EXA/B/D	Institute of Professional Environmental Practice (IPEP)	http://www.ipep.org/
	Board Certified Environmental Engineer*	43EXB/D	American Academy of Environmental Engineers	http://www.aaee.net/
Engineering	Engineer-in-Training*	43EXA/C/D/G	National Council of Examiners for Engineering and Surveying (NCEES) and state engineering registration boards	http://www.ncees.org/
	Professional Engineer (PE)*	43EXA/C/D/G	National Council of Examiners for Engineering and Surveying (NCEES) and state engineering registration boards	http://www.ncees.org/
Medical/ Health Physics/ Radiation Safety	Certified Health Physicist*	43EXG/M	American Academy of Health Physics/American Board of Health Physics American Board of Radiology American Board of Medical Physics American Board of Science in Nuclear Medicine	http://www.hps1.org/aahp/ http://www.theabr.org/ http://abmpexam.com/ http://www.snm.org/absnm/
Emergency Mgmt	Certified Emergency Manager	43EXA/B/D/G	International Association of Emergency Managers (IAEM)	http://www.iaem.com/
	Associate Emergency Manager	43EXA/B/D/G	IAEM	http://www.iaem.com/

*Approved for award of "M" prefix to an AFSC under AFI 41-104, *Professional Board and National Certification Examinations.* Reference the AFI for a listing of approved certifying agencies.

Attachment 4

BE STAFF ASSIGNMENT JOB DESCRIPTIONS

[Bethesda MD] Armed Forces Radiobiology Research Institute (AFRRI) Bethesda, MD [Note: AFSC=43E3G] [Pos # 3V0077538] [Auth Grade = Capt]

[Crystal City VA] AFELM JRO-CBRND Joint Requirements Office (JRO) for CBRN Defense Joint Staff/J-8, Pentagon, Washington DC (AD) [Crystal City] [Note: Two slots: 1=43E3A, 1=43E3G] [43E3A= Pos # 380074343, 43E3G=Pos# 380074344; Auth Grade=O5]

[Data Mask] Chief of Compliance [Pos# 1M0018593] By name selection only. Must have or get TS clearance. [2nd BE officer position added in 2012]

[Edwards AFB] Air Force Research Laboratory, Detachment 7 (AFMC) Edwards AFB CA (AD) [43E3A Pos# 1M0020175; Auth Grade=O4]

[Eglin AFB] Det 2, Air Force Operational Test and Evaluation Center (AFOTEC) Eglin AFB FL (AD) [43E3A Pos# = 0030002039; Auth Grade=O4]

[Falls Church VA] Ranges & Airspace Division, Directorate of Air Operations, DCS, Operations, Plans & Requirements, Pentagon, Washington DC [43E3D; Auth Rank=O5; Pos # 3V0074823]

[Falls Church VA] AIR FORCE MEDICAL SUPPORT AGENCY (MSA) [Pos # 2F0038231] [Auth= 43E4A O5]

[Falls Church VA] Air Force Medical Support Agency (MSA), AFMSA/SG3PB [43E4A Auth Grade=O6; POS# 2F0038369] [Note: This position is the BE Associate Chief.]

[Falls Church VA] Air Force Medical Support Agency, AFMSA/SG3PB [43E4A; Auth Rank=O5; POS# 2F0038360] [Note: This position works directly for the BE Associate Chief.]

[Falls Church VA] Air Force Medical Support Agency, AFMSA/SG3PB [43E4A; Auth Rank=O5; POS# 2F0038359] [Note: This position works directly for the BE Associate Chief.]

[Falls Church VA] Air Force Medical Support Agency, AFMSA/SG3PB [2 positions= 43E4A; Auth Rank=O4; POS# 2F0038287 & 2F0038326]

[Falls Church VA] AIR FORCE MEDICAL SUPPORT AGENCY (MSA) [Auth Grade=O6; Pos# 2F0038265] CHIEF, RADIATION PROTECTION PROGRAMS [Chief HP Consultant and USAF RIC]

[Falls Church VA] AIR FORCE MEDICAL SUPPORT AGENCY (MSA) [3 43E3G positions; Auth Grade=O4; Pos#s 2F0038306 & 2F0038307 & 2F0038373]

[FT Belvoir VA] Chief, Occupational Health and Safety, AFELM DLA HQ DLA [Auth= 43E4D O5] [Pos# 330064960]

[Ft Belvoir VA] HQ Defense Threat Reduction Agency (DTRA) (AFELM) (AD), Consequence Management Plans and Operations Office [Pos# 370074188] [Auth= O4 43E3A]

[Ft Belvoir VA] HQ Defense Threat Reduction Agency (DTRA) (AFELM) (AD) [Pos# 370073789] [Auth= O4 43E3G Health Physicist]

[Ft Belvoir VA] HQ Defense Threat Reduction Agency (DTRA) (AFELM) (AD), BSC S&T/R&D Management [Pos# 370025452] [Auth= O4 43E3G]

[Ft Belvoir] US Strategic Command, JQ US Strategic Command (SAJ), USSTRATCOM Center for Combating Weapons of Mass Destruction, Chief, Global Synchronization Branch [Pos# 3Q0000083; O5 43E3A]

[Ft Detrick MD] Medical Science and Technology Analyst, AFELM Defense Intelligence Agency [Pos# 350028864; Auth=O4 43E3A]

[Ft Eustis] US NORTH COM JV [Pos # 4D0001234] Joint Exercise Plans Officer, Bioenv Engr Staff Officer [Auth= O4 43E4A] (New position Jan 2012)

[Ft Sam Houston] 711th Human Performance Wing, Detachment 5 (AFMC), Ft Sam Houston [Pos # 1M009584] Chief, Basic Science Operations [Auth= O4 43E3A]

[Ft Sam Houston] 711th Human Performance Wing, Detachment 5 (AFMC) Ft Sam Houston [Pos# 1M0007374] CHIEF, OPTICAL RADIATION SAFETY [Auth= O4 43E4G Health Physicist]

[Ft Sam Houston] 711th Human Performance Wing, Detachment 5 (AFMC) Ft Sam Houston [Pos# 1M0164016] PROGRAM MANAGER, DIRECTED ENERGY PROTECTIVE EQUIPMENT [Auth= O4 43E4A]

[Ft Sam Houston] 711th Human Performance Wing, Detachment 5 (AFMC), Ft Sam Houston [Pos# 1M0156617] CHIEF, RADIO FREQUENCY RADIATION BRANCH

[Hickam JB Pearl Harbor] Hickam Air Force Base, Hawaii (AD) [Pos# 0R0280465] PACAF/SG Staff position

[Hulburt Field] HQ Air Force Special Operations Command (AFSOC), Hurlburt Field, FL [Pos# 0V0026929] Chief, Modernization Division [43E4 O5-LtC position]

[Kelly-Lackland JBSA, TX] Air Force Medical Operations Agency AFMOA [Auth Grade= O4; Pos# 2Z0000747]

[Kelly-Lackland JBSA, TX] Air Force Medical Operations Agency AFMOA [Auth Grade= O5; 43E4A, Pos# 2Z0000745]

[Kelly-Lackland JBSA, TX] Air Force Medical Operations Agency AFMOA [Auth Grade= O4; 43E4A, Pos# 2F0000746]

[Kelly-Lackland JBSA, TX] Air Force Medical Operations Agency AFMOA [Auth Grade= O5; 43E4A, Pos# 2F0000744]

[Kirtland AFB] Headquarters Air Force Inspection Agency (AFIA), Kirtland AFB NM Air Force Inspector General Medical Inspector [2 positions; 43E3A]

[Kirtland AFB] Headquarters Air Force Inspection Agency (AFIA), Kirtland AFB NM Air Force Inspector General Medical Inspector [Health Physicist 43E3G Position]

[Kirtland AFB] Directed Energy & Ionizing Radiation Policy Officer; Headquarters Air Force Safety Center, Kirtland AFB NM [Pos# 2T0000404] [Auth = 43E3G O3]

[Kirtland AFB] Headquarters Air Force Safety Center, Kirtland AFB NM; Chief, Radiation Safety/Policy Consultant [Pos# 2T0000210] [Auth = 43E3G O3]

[Maxwell AFB] AFELM MED DOD ME FFC9M0 (ELM), Maxwell AFB AL w/duty at Spaatz Center for Officer Education, (AETC), Maxwell AFB AL [Pos# 3V0075815] DEPUTY DIRECTOR, USAF COUNTERPROLIFERATION CENTER [Note: This is usually an in-residence SDE follow-on assignment.]

[Pentagon] Director of Occupational Health Policy, Asst Sec Air Force (Installations, Environment & Logistics), (HAF), Pentagon, Washington DC [Pos# 3V0074442] [Auth= O5 43B4]

[Pentagon] Assistant Secretary of the Air Force (Installations, Environment & Logistics), (HAF), Pentagon, Washington DC [Pos # 3V0074442] Director for EESOH Integration [Auth= 43E3D O6]

[Pentagon] Assistant Secretary of the Air Force (Installations, Environment & Logistics), (HAF), Pentagon, Washington DC [Pos# 3V0074441] Director, Force Health Protection Policy

[Pentagon] Logistics Directorate, J-4, Joint Staff, Pentagon, Washington, D.C Joint Operations Environmental Health Officer [Pos# 380074299]

[Pentagon] Dep Chief, Defense Support to Civil Authorities (DSCA) Branch, HQ USAF/A30-AH [Pos# 130001964] [Auth= 43E3A O5]

[Peterson AFB, CO] FORCE HEALTH PROTECTION / MEDICAL CBRNE OFFICER OL SGHP AFELM HQ USNORTHCOM JV FF4SG0 (NCD) Peterson AFB CO (AD), NORTHCOM BEE

[Quantico VA] OL BA AFELM MED USUHS ME FF15M0 (ELM) QUANTICO CTY VA [Pos# 3V0076095] CHIEF, HUMAN EFFECTS DIVISION

[Washington, DC] Dept of Energy, Technical Lead Radiation Protection Programs [Pos# 3V0051941], AFELM DOE, (Note: AFSC 43E4G & TS clearance required; Education= M. S. or higher in health physics, nuclear engineering, or related radiological sciences background highly desired. Board certification in health physics is also recommended.)

[EUCOM] AFELM MED DOD ME FF1LF0 (ELM) WITH DUTY LOCATION AT HQJ4 (EUC) STUTTGART-VAIHINGEN, GERMANY (AD); DEPUTY CHIEF, MEDICAL READINESS DIVISION; [Pos # 3V0075920]

[SHAW AFB, SC] UFS AF AIR COMBAT COMMAND, AF CENTRAL COMMAND, Command Bioenvironmental Engineer; [Pos# 1C0995048]

[Tyndall AFB, FL] AFELM MED DOD ME (ELM), EESOH-MIS Medical Program Manager, AFCESA, [T43E3A Maj O4] [Pos# 3V0073136]

[Wright-Patterson AFB, OH] AF Research Lab (AFMC), ESOH Manager, AFRL, [43E3D, Capt O3] [Pos# 1M0184671]

[Wright-Patterson AFB, OH] 711 Human Performance Wing, AF Research Lab (AFMC), ESOH Manager, AFRL, [43E3D, Capt O3] [Pos# 1M0007740]

[Wright-Patterson AFB, OH] 711 Human Performance Wing, AF Research Lab, Det 1 (AFMC), Senior Program Manager, Environmental Technology, [43E4A, LtC O5] [Pos# 1M0184621]

Attachment 5

BE OFFICER CAREER MANAGEMENT GUIDE

A5.1. History & Knowledge.

A5.1.1. Bioenvironmental Engineering History. A historical summary of Bioenvironmental Engineering can be found at the site https://www.milsuite.mil/wiki/Bioenvironmental_Engineering. The paragraphs below are an excerpt from the above-referenced site.

A5.1.1.1. Bioenvironmental Engineering Career Field Origins. During the Civil War there were 1.6 casualties from non-combat diseases to every 1 combat casualty. To address this non-effectiveness rate due to non-combat diseases during World War I (WWI) the Army Surgeon General, General William Gorgas, created the Army Sanitary Corp on 30 June 1917 under War Department General Order No. 80. The Army Sanitary Corp was comprised of Sanitary Engineers, Industrial Hygienists, Clinical Laboratory Officers, Entomologists, and Aviation Physiologists.

A5.1.1.2. Creation of the Bioenvironmental Engineer (BEE) Officer. Following WWII there was a great need for Army-Air Force Environmental Sanitary Engineers in Europe as the U.S. rebuilt Germany's infra-structure and constructed U.S. military installations overseas. Also, intermediate maintenance on aircraft was shifting from being done only at depots to more and more being done at operational Air Force Bases (AFB). Commands began to recognize the need for Industrial Hygienists (IH) to be located at all their AFBs and incorporated requirements for them into manning documents. The need for IHs continued to grow at operational AFBs as the Air Force upgraded its weapons system technology to jet aircraft and missiles. It became obvious that these technological leaps also drove more hazardous maintenance operations (i.e. noisier, radiation and industrial chemical usage). These operations were potentially hazardous to AF personnel as well as to the public outside our fences. It was after the creation of the Air Force and prior to the Korean conflict that the idea of marrying Environmental Sanitary Engineers with the Industrial Hygienists was born. The merging of these two specific areas of expertise to create AF Sanitary/Industrial Hygiene Engineers is the main reason the AF requires engineering degrees of its IHs, unlike the Army. In 1964, AF Sanitary/IH Engineers were renamed Bioenvironmental Engineers to better reflect our affiliation with the Biomedical Science Corp and the preventive medicine community.

A5.1.1.3. History of Bioenvironmental Engineering and Public Health. From the 1960s until 1983, the Air Force had "preventive medicine" functions called Environmental Medicine at every AFB, generally composed of an Environmental Health Nurse, a BEE Officer, and several Preventive Medicine Technicians (became Environmental Health Technicians in 1973). Environmental Medicine tracked communicable disease prevalence, trained on disease prevention, and monitored industrial workplaces, environmental sanitation, and disease vectors to prevent environmentally caused diseases. The Air Force also had Veterinary Services that treated military working dogs and inspected food processing plants, purchases, and preparation facilities to prevent zoonotic and food borne illnesses. By 1983, the Air Force abolished the Veterinary Corp and reorganized its "preventive medicine" functions into Environmental Health Services (EHS) and Bioenvironmental Engineering. EHS took on communicable disease prevention and food safety programs, while Bioenvironmental Engineering focused on workplace hazard prevention (a.k.a. IH), environmental quality, and radiological health. In the 1980's, the AF realized the technical expertise of EHS and Bioenvironmental Engineering personnel could be used in Nuclear, Biological, and Chemical (NBC) agent detection and defense. The military practice of "preventive medicine" expanded from preventing non-combat casualties to preventing combat casualties as well. In 1989, EHS was renamed Military Public Health, then in 1992 it was renamed Public Health.

A5.2. BSC Occupational Badge. 43EXX officers wear the BSC badge. The BSC badge, a medical caduceus with an “S” superimposed, symbolizes the application of science to the medical profession. The

"S" on the badge symbolizes the BEs original Sanitary and Industrial Hygiene Engineering mission when they were attached to the U.S. Army Sanitary Corps. Eligibility criteria for award and wear of Air Force (AF) occupational badges can be found in AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*.

A5.2.1. Basic Badge. The basic badge is awarded upon successful completion of technical school or after attaining fully qualified AFSC when technical school is not available.

A5.2.2. Senior Badge. The senior badge adds a star to the top of the badge. Wear the senior badge after 7 years in the career field.

A5.2.3. Master Badge. The master badge indicates the final step in the occupational series. Wear the master badge after 15 years in the career field.

A5.2.4. Constructive Credit. Medical Service officers' time in specialty will include any constructive credit awarded at the time of appointment.

A5.2.5. Prior Enlisted Officers. When serving as an officer in the same career field as when enlisted, count both time in the enlisted and officer career fields to determine the earned badge level.

A5.3. BE Officer Accession Programs. Many officer accession programs exist for entrance into the 43EXX AFS. The list below is not all-inclusive. However, this listing could be considered for use by current BE officers for recruitment and mentoring purposes (e.g., enlisted-to-officer, civilian accessions, etc.).

A5.3.1. U.S. Air Force Academy (USAFA). USAFA is a military academy for officer candidates for the U.S. Air Force. Graduates of the Academy's four-year program receive a Bachelor of Science degree, and are commissioned as Second Lieutenants. The program at USAFA is based on the four pillars of military training, academics, athletics, and character development. In addition to a rigorous military training regimen, cadets also take a broad academic course load with an extensive core curriculum in engineering, humanities, social sciences, basic sciences, military studies, and physical education. An Academy education is valued at more than $416,000, yet is offered at no cost to cadets. More information can be found at http://www.usafa.af.mil/ or http://www.academyadmissions.com/.

A5.3.2. Air Force Reserve Officers' Training Corps (AFROTC). AFROTC is a college-based program for training commissioned officers of the U.S .Air Force. AFROTC students attend college like other students, but also receive basic military training and officer training through the AFROTC unit at or nearby the college. A variety of full and partial AFROTC scholarships provide for an attractive way to relieve the financial burden of college education. More information can be found at https://www.afrotc.com/.

A5.3.3. Commissioned Officer Training (COT). COT is a 4.5 week program that provides initial officership training for Air Force judge advocates, chaplains, health professions officers, and medical scholarship recipients. COT conducts training for Air Force active duty, Air National Guard and Air Force Reserve officers. This training is provided to qualified officers after commissioning.

A5.3.4. 4B0-to-43E. Enlisted members of the BE career field (4B071) may be eligible to become BE officers if they meet the requirements outlined in the AFOCD. Interested members should direct questions through their chain of command to either the BSC Associate Chief or the 4B071 Air Force Career Field Manager.

A5.4. Leadership.

A5.4.1. *Leadership* is an inherent responsibility of every military officer. Over the ages many great military leaders have displayed their unique talents both on and off the battlefields. All great leaders seem to understand and possess certain core values (or principles), which help them navigate through the tough times of leadership. These principles include honesty, integrity, commitment, enthusiastic energy, humility, faith and vision.

A5.4.2. Leadership in the Air Force begins with understanding and living our core values every day. The Air Force core values of: *Integrity first; Service before self; and Excellence in all we do*, help us to continue being the absolute best at what we do. Former Secretary of the Air Force, Dr. Sheila Widnall, summed up core values like this:

> "Core values make the military what it is; without them, we cannot succeed. They are the values that instill confidence, earn lasting respect, and create willing followers. They are the values that anchor resolve in the most difficult situations. They are the values that buttress mental and physical courage when we enter combat. In essence, they are the three pillars of professionalism that provide the foundation for military leadership at every level."

A5.4.3. One great example of what it takes to be an effective leader can be found in these words, "BE A LEADER" (Source: AFSC 32EX CFETP):

A5.4.3.1. B – BE BETTER than those you have admired and respected. The best way to pay back those who have helped mentor your growth is to be better than even they hoped you would be.

A5.4.3.2. E – EXPECT THE UNEXPECTED – You've been promoted because of your proven potential to take on more responsibility. This brings with it a lot of unforeseen, unexpected terrain. Be ready to take on whatever comes your way head on. A true leader can afford to get surprised, but he/she can't afford to let surprise trip him/her up!

A5.4.3.3. A – ACCOUNTABILITY – You will fly lead more than ever now, take the heat for your mistakes and those of your team. Give your team all the credit you can and always provide top cover for your troops – even when it hurts.

A5.4.3.4. L – LEARN/LOVE/LOOK AHEAD – Learn every day – it's the key to not only continuously improving, but also to sustaining yourself as the best of the best (which is what those who follow you will expect/hope for). Love your troops and your family – always keep your priorities here in clear focus; never neglect either one. Look Ahead – you must constantly hone your vision for the future. Without doing it, you will be blind and worse yet, your troops will be too.

A5.4.3.5. E – EXPERT – Never assume you are one; always strive to be one. Be prepared for others to automatically expect you are one by virtue of your rank/position.

A5.4.3.6. A – ATTITUDE & ACCUMEN – There is no substitute for a sustained positive, proactive, and professional attitude – especially when you must lead something you don't particularly agree with. There is also no substitute for looking and acting like an all-pro at all times. Remember, a shiny penny catches the eye before a dull one every time!

A5.4.3.7. D – DOER – If you are not leading by doing, by example, then you're not leading. Never ask/task others to do anything you would not do yourself. Always consider this before you levy the task.

A5.4.3.8. E – EXCELLENCE is largely a function of mission success and what the people you serve with think about you and your leadership; it's never easy to do well in both arenas consistently, but that's what you must always strive for.

A5.4.3.9. R – RESPECT comes with the grade; what really counts is what you earn!

A5.4.4. Mentorship. Mentorship is a critical component of the AF's Force Development construct. Mentorship is normally a relationship in which a person with greater experience and wisdom guides another person to develop both personally and professionally and is designed to prepare Airmen for increased responsibilities. Reference AFMAN 36-2643, *Air Force Mentoring Program*, for additional guidance on mentoring in the Air Force.

A5.4.4.1. Mentoring Benefits: There are several benefits to a mentoring relationship, to include receiving further professional career development, enhancing capacity to translate core values and

strategies into productive actions, and increasing mastery of the institutional and occupational competencies. Officers are encouraged to engage in building and maintaining a productive relationship with a mentor. A logical choice for a mentor is a supervisor. While the immediate supervisor should be a logical choice for a professional mentor, they may not always be the best one. Should the immediate supervisor not be a good fit, Airmen might instead look for a professional mentor a couple of levels higher up the career ladder. This person may be a BE enlisted, commissioned officer or civilian, or work in a completely different AFSC.

A5.4.5. Feedback. The officer, enlisted, and civilian promotion systems require formal feedback sessions. Initial feedback to your subordinate establishes your expectations for their performance. Follow-on feedback sessions allow you to communicate to the subordinate just how well they are meeting your expectations. Just as importantly, the informal feedback you give your subordinates will enhance communication and help improve job performance.

A5.5. Supervision. Initial training for all newly assigned supervisors helps bridge the gap between the skills required at the working level and those required at the supervisory level. Before first-level supervisors assume their new duties, or within six months after assignment to a supervisory position, they will be provided the initial training described below.

A5.5.1. U.S. Air Force Supervisor's Course (USAF SC). This course is designed to provide first-level supervisors, regardless of organizational component, with leadership and management skills required in supervisory positions. While most students are civil service, military supervisors who haven't obtained equivalency training through PME or through the waiver options should enroll. Experienced supervisors (3 or more years documented supervision) should consider enrolling in the Advanced USAF SC. To register, visit the PPDS Virtual Campus, located at the Air University Portal at https://auportal.maxwell.af.mil/auportal/welcome.AirUniversity. Contact your local FSS for more information on available training for supervisors.

A5.5.2. Supervising Officers.

A5.5.2.1. Officer Evaluation System (OES). AFI 36-2611, *Officer and Enlisted Evaluation Systems*, discusses the OES. This document includes information on the objective of the program, documenting job performance as well as dealing with Promotion Recommendation Forms (PRFs).

A5.5.2.2. Officer Promotion System (OPS). AFI 36-2501, *Officer Promotions and Selective Continuation*, describes the purpose and details of the OPS. Detailed information on such things as promotion opportunities, phase points, selection criteria, and selection boards are included. AFPAM 36-2506, *You and Your Promotions – The Air Force Officer Promotion Program*, contains additional information on officer promotion as well as selective continuation. Talk with your supervisor and commander on the details of the OPS. Promotion board schedules are also available on the myPers web page at https://gum-crm.csd.disa.mil/app/home.

A5.5.3. Supervising Enlisted.

A5.5.3.1. The Enlisted Force Structure. AFI 36-2618, *The Enlisted Force Structure*, defines the enlisted force structure and implements AFPD 36-26, *Total Force Development*. It establishes leadership and development levels, responsibilities, and official terms of address for enlisted Airmen. It describes special senior noncommissioned officer positions and standardizes duty titles.

A5.5.3.2. Enlisted Evaluation System (EES). AFI 36-2406, *Officer and Enlisted Evaluation Systems*, is the governing document for the EES. It includes information on such areas as performance feedback, enlisted performance reports, as well as other pertinent information. This AFI is accessible on AF e-publishing.

A5.5.3.3. Airman Promotion Program. AFI 36-2502, *Airman Promotion/Demotion Programs*, covers the airman promotion program. It contains information on promotions from Amn through CMSgt.

A5.5.3.4. Enlisted Training. AFI 36-2201, *Air Force Training Program,* covers the management and development of enlisted training.

A5.5.4. Supervising Civilians.

A5.5.4.1. Throughout your career you will be required to supervise civilians. This is a unique leadership opportunity that requires specific knowledge and training. These areas include union agreements, civilian appraisals, time keeping, etc. You can locate the most current information on the civilian personnel system by contacting the Civilian Personnel Office at your base.

A5.5.4.2. Civilian Performance Program. Refer to AFI 36-1001, *Managing the Civilian Performance Program*, for the latest information on how to manage the civilian performance program. This instruction includes information on such issues as: performance planning and appraisals, incentive awards, monetary incentive awards, time off incentive awards, honorary incentive awards, dealing with performance problems, as well as keeping records.

A5.5.4.3. Civilian Personnel Management Course (CPMC). CPMC is a federally-mandated course and is a requirement for all first-time supervisors of civilian employees. The course is hosted by the Air Force Personnel Professional Development School (PPDS). This course is designed to provide military and civilian first-level supervisors with background information and an understanding of applicable personnel laws and regulations needed to effectively carry out their civilian personnel management responsibilities. To register, visit the PPDS Virtual Campus, located at the Air University Portal at https://auportal.maxwell.af.mil/auportal/welcome.AirUniversity.

A5.5.5. Overseas. MAJCOMs and servicing civilian personnel flights (CPF) in overseas areas develop and present training courses for military and civilian supervisors of local national (LN) employees to meet local needs. No standard Air Force course will be developed due to the wide diversity in LN personnel programs.

A5.5.6. Awards and Decorations. One of the most important responsibilities of a supervisor is to properly recognize and reward subordinates for exceptional performance. AFI 36-2803, *The Air Force Military Awards and Decorations Program*, contains the latest information on the Air Force Awards and Decorations Program. Some other programs are listed below:

A5.5.6.1. The AFMS Awards Program. The AFMS Awards Program is an annual program designed to recognize and reward outstanding performance in a number of different categories.

A5.5.6.2. Squadron/Wing Recognition Programs. Local recognition programs vary by locations. Contact your first sergeant or squadron section commander for a full listing of recognition programs available.

A5.5.6.3. Civilian Awards. Civilian awards vary by location as well. Contact your civilian personnel office for local information.

A5.6. Promotion Guidance. Officer promotion is based on the whole person concept. Demonstrated expertise and performance within and outside the BE career field is considered at the time of promotion. An individual's assignment history should show increasing responsibility and clearly demonstrate examples of applied leadership. BE officer must take control of his/her career – do not leave it up to chance.

A5.6.1. PME. Generally "how" Developmental Education (DE) is completed (e.g., by correspondence, seminar, or in-residence) is not as important as getting it completed and doing it is early as possible. All things being equal, in-residence DE attendance may add some weight because of the competitive selection process for in-residence attendance. BE officers should enroll and complete DE as soon as eligible, which is as soon as you receive notification (line number) of promotion to the next rank (i.e. you can enroll in ACSC via correspondence as a Captain with a line number to Major). Distance learning PME programs can be found at the Air University website: http://www.au.af.mil/au/spaatz/schools.aspx. Additionally, consider that performing sister-service PME (e.g. Marine Corps Command

and Staff College by correspondence) will heighten your professional knowledge and may provide advantage at competitive selection boards.

A5.6.2. AF Form 707, Officer Performance Report (OPR). Performance reports are the bread and butter of a career and the key documents behind: medal considerations, promotions, AFIT selection, specialized training assignments and special duty selection. A well-written OPR should paint a quantitative and qualitative picture assessing the officer's performance. It is vital for an OPR to contain stratification statements. Stratification shows how a member ranks against peers within an organization. A stratification statement sends a message from leadership to the promotion board regarding the member's readiness for promotion. Absence or strength of impact in a stratification statement will significantly affect the OPR (and PRF when the time comes). One of the most often asked questions is, 'Should I write my own OPR?' The answer is no. However, given that it is the most important document to career progression, it is strongly recommended that you involve yourself in the writing process by submitting bullets and accomplishments to your supervisor early. Many times, this is accomplished via a draft OPR authored by the member. For more tips on OPRs, refer to Table A5.1 below.

A5.6.2.1. Awards, Decorations and Recognition. Quarterly and annual awards are important and should always be highlighted in an OPR. Awards are an important discriminator and impact stratification within an organization. Awards may seem insignificant early on, but they become extremely important in supporting OPR stratification statements that end up on the PRF. Other forms of recognition such as Distinguished Graduate, Honor Graduate, etc. during formal courses also become useful discriminators on OPRs that can be used for stratifications. Military decorations are also important for promotion. Promotion boards may consider the receipt of a decoration after each assignment as an important factor. Boards may also consider the order in which the decorations are received as an indicator of career progression (e.g., receiving a Commendation medal after already receiving Meritorious Service Medal may be detrimental to your career).

Table A5.1. Tips on OPRs

Throughout the performance period you should be collecting key accomplishments and outcomes and crafting bullets. This will do two things: 1) it helps you become a better mentor/supervisor in the future when you have to write OPRs and advise others and; 2) it provides key input to your supervisor in case they may not know the full impact of your contributions and accomplishments. If you are not disciplined in periodically capturing OPR input, a good habit is to keep most of your e-mail traffic over a rating period and review the subject/content. You will find most of what you need to construct meaningful input. You may be asking, 'Should I put the bullets on the OPR form?', and, 'What if my supervisor does not ask me for input?' Each is certainly at the discretion of the supervisor, but you should always be tracking your OPR due date and 60 to 45 days out have your input constructed in order to provide to your supervisor. It will be their choice if they use it. The next thing you will want to do is get an up to date OPR guide and local instructions for completing OPRs. Don't get too hung up on the formatting (e.g., do I use a dot, dot, dot or dash – dash). As soon as you learn the style at one location you will move and the next unit will have a different style. What does not change is what should go into constructing bullets that jump off the page at the reader. Each bullet should be fact-based, hard hitting, and paint a picture of accomplishment. The three parts to an effective bullet are: 1) Action (*what was done*); 2) Info (*how it was accomplished*); and 3) Impact (*what was the result/significance*). Avoid the use of flowery words and acronyms that may either affect the readability of a bullet or serve as a distraction to a review board. Another area you should watch closely is what goes into the top and bottom lines in the rater and rater's rater sections; especially the push statements. Make sure from year to year there is consistency especially in those bottom lines that show continuous growth or at least a consistent strong recommendation. For example let's say they push really hard for school and command one year and then just school the next year. Even if not intended, it might send the wrong message to a board

reviewing your record. Bottom line… make sure you review the previous OPRs every time your OPR is due. Make sure the push lines on the most recent ones at least agree with previous ones if they don't already make them stronger.

Finally, be aware of the importance of stratifications on you OPR. Stratifications are a quantitative comparison of an officer's standing amongst other officers within a definable group and within a specific rater's scope of authority. Stratifications are arguably the most important discriminator that can be used on an OPR. Stratifications can be especially useful when authoring a Promotion Recommendation Form (PRF). Generally, there are three tiers of stratifications. The first tier is stratification within your rank/peer group (e.g., 1/7 Captains, 2/12 CGOs). The next tier is amongst your vocation (e.g., 2/10 instructors). Finally, the third tier is an organizational stratification (e.g., 4/50 Wing CGOs). A superstar performer could have 3-4 stratifications on his/her OPR. Consult with your organizational leadership, including your BSC Executive Officer, about the importance of stratifications in performance reports.

A5.6.3. AF Form 709, Promotion Recommendation Form (PRF). The PRF is the single most important document at the O-4, O-5, and O-6 promotion boards. The PRF briefly summarizes an officer's career and highlights to the promotion board why he/she should or should not be promoted. All the information included in the PRF is obtained from OPRs, decoration citations, and training reports. Additionally, officers who are prior enlisted or prior service in other branches of the military can use information from EPRs, or the equivalent. See AFI 36-2406, *Officer and Enlisted Evaluation Systems*, for specific guidance on PRFs.

A5.6.3.1. Starting at the IPZ for O4, PRFs will be accomplished for every promotion board. Along with your career brief, the PRF is the primary document the selection board reviews. Promotion boards do not have a great deal of time to thoroughly review each record, and may rely heavily on the PRF. BE officers must make sure the PRF is very strong. If PCSing near an upcoming O-4 or O-5 promotion board, watch the timing closely. It is typically better to have the PRF written from the previous organization because a gaining commander may not stratify a new BSC officer above those currently working for him/her. This could mean the difference between a Definite Promote and a Promote recommendation. (This statement holds true for OPRs as well. Always think about stratification on OPRs.)

A5.6.3.2. The Senior Rater signs the PRF. The Senior Rater will make a promotion recommendation: Definite Promote (DP), Promote (P), or Do Not Promote. Strive for DP as this increases promotion percentages well above 90%. The Senior Rater (or Wing) will only have a small number of DPs to give; the percentages change but it is about 1 per every 5 or 6 BSCs in the promotion zone. If the Senior Rater does not have enough officers meeting the board to qualify for a DP quota, a MAJCOM Management Level Review (MLR) is held to distribute the DPs. MLRs are held 90 days prior to the promotion board and members score records just like a promotion board.

A5.6.3.3. Mentoring. Officers should seek the advice of others when drafting a PRF. Drafts should be created at least 3-4 months prior to the due date. A member should draft their PRF, send it to a mentor (e.g., senior BSC officer), then edit and send to another mentor. This process should be accomplished at least three times in order to formulate a good PRF. Also consider seeking the advice of a knowledgeable line officer who may be able to provide a different perspective.

A5.6.4. Education. Reference Part I, Section B – *Career Field Progression Information*, Paragraph 1.3.6. – *Education* of this CFETP for more details and guidance on educational opportunities as an officer in the BE Career field.

A5.6.5. Duty.

A5.6.5.1. Flight Command. The position of Flight Commander is a highly sought-after position in the BE career field. The BE career field places much emphasis on this position since it is a prominent leadership position at an operational-level assignment. Obtaining and succeeding in a Flight Commander role is a key discriminator for selection to Lt Col (O-5). BE officers should strive to become a Flight Commander at the first available opportunity to ensure that they complete this milestone in time. Also, experience as a Flight Commander is almost certainly a prerequisite to be competitive for a Squadron Command position.

A5.6.5.1. Timing and Promotion. If the timing of the first Flt/CC position is close to the member's Lt Col board, the member should make every effort to arrive early enough to generate an OPR, or push for an out-of-cycle OPR so that a flight command OPR is on the top of the member's record for the review board to see.

A5.6.6. My Career Brief / Single Uniform Retrieval Function (SURF). A member's 'My Career Brief' (i.e., SURF) is available through the AMS. Each member should verify accuracy of information in the SURF at least annually. If information is incorrect, make corrections through self-service functions in Virtual Military Personnel Flight (vMPF). Other corrections may require contacting the local Military Personnel Flight or Commander Support Staff.

A5.6.6.1. Duty Titles. Ensure that duty titles conform with guidance in Attachment 4 of the AFMS Flight Path located at https://kx2.afms.mil/kj/kx5/FlightPath/Pages/home.aspx. Duty titles that do not conform with this standard may be confusing to a promotion or reviewing board and, as a result, may not accurately reflect the level of responsibility associated with a certain position.

A5.7. Retirements / Separations. Hopefully your goal is to have a long and successful career that leads to a retirement at the time of your choosing and planning. However, that will not always be the case so make sure you give special attention to retirement and separation. Separation requires special attention and it goes without saying it should not be made without detailed thought and consideration. Don't make the decision based on short-term conditions such as not liking your current job or not getting selected for AFIT. Certainly there is nothing wrong with separating when you have considered all the factors both personal and professional, and understand the impacts if at a future date you decide that you may want to return. Make sure you consult mentors and supervisors to help you identify some of the key factors; once the decision is made to separate, contact your BSC Executive Advisor for an exit interview.

A5.7.1. Transition Assistance Program (TAP). The key to a successful transition to civilian life is career readiness planning, which requires a carefully thought-out Individual Transition Plan (ITP) incorporated into the entire span of a service member's career. The re-designed Transition Assistance Program (TAP) initiated by the Veterans Opportunity to Work (VOW) Act of 2011, and the Veterans Employment Initiative (VEI) requires that 4 mandates be completed by all Military Personnel prior to separation or retirement: 1) Pre-separation Counseling; 2) The TAP Goals, Plans, and Success (GPS) Workshop; 3) The Veterans Affairs (VA) Benefits Briefing; and 4) the Capstone activity. Elements of a successful career ready ITP are depicted in Figure A5.1 below. Contact the local Airman & Family Readiness Center to schedule pre-separation counseling and to receive detailed information on other available transition services. More information can also be found at http://www.afpc.af.mil/lifeandcareer/transition.asp.

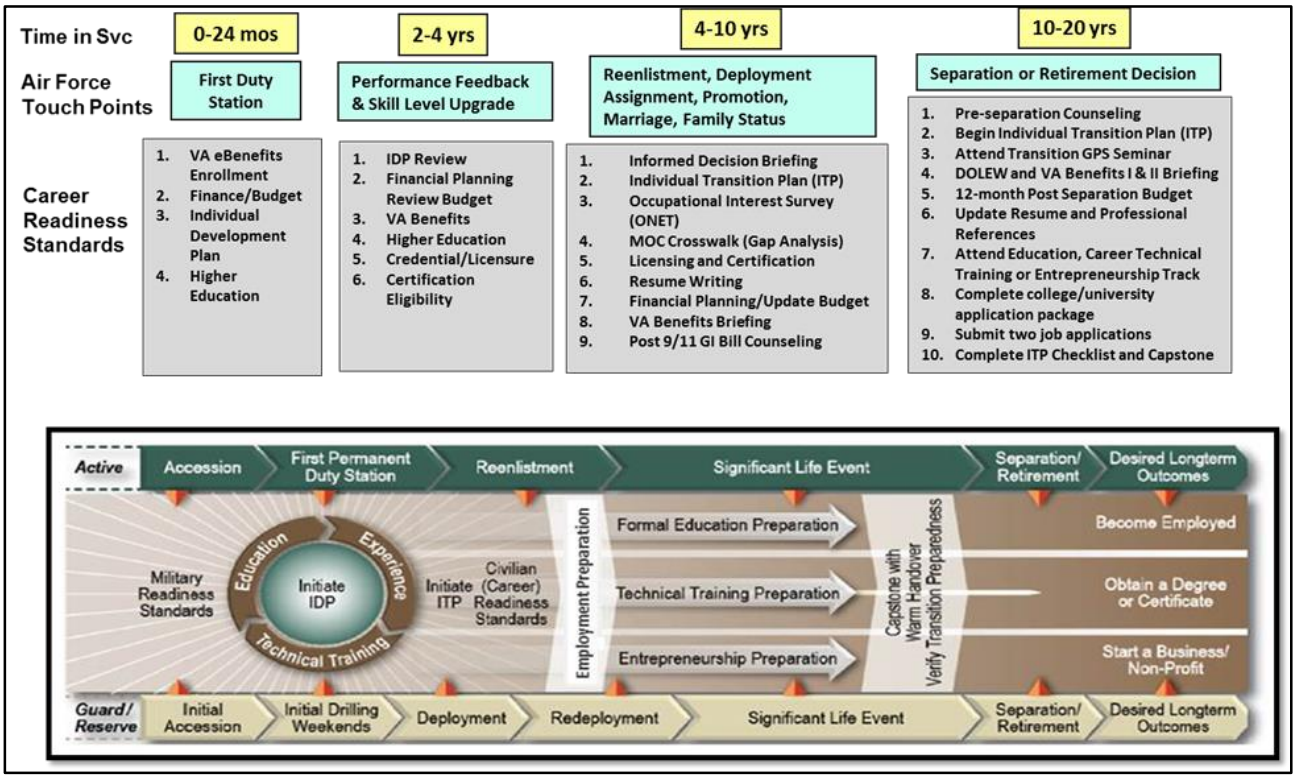

Figure A5.1. Individual Transition Plan (ITP) Elements

A5.7.2. AF Reserve and Air National Guard (ANG). Both the AF Reserve and ANG provide opportunities for officers wishing to continue their military service beyond active duty.

A5.7.2.1. Air Force Reserve. Operating in various locations around the world, the Air Force Reserve has evolved from a "stand by" force for emergencies into a Major Command (MAJCOM) of the active duty Air Force. The Air Force Reserve currently performs about 20 percent of the work of the Air Force, including traditional flying missions and other more specialized missions, such as Weather Reconnaissance (Hurricane Hunters), Aerial Fire Fighting and Personnel Recovery (Pararescuemen). Opportunities exist for prior service officers wanting to transition to the AF Reserve. For more information, visit https://afreserve.com/.

A5.7.2.2. Air National Guard. Serving part-time in the Air Guard, you'll continue to receive the benefits of military service with the freedom to pursue a civilian career or continue your education. With more than 140 Air Guard units in the United States and its territories, you can serve where you live. Plus, you can choose from over 200 career options, so you can continue in your military specialty or re-train into a completely new field. Prior service officers can take advantage of various transition programs for entrance into the ANG. For more information, visit https://www.goang.com/.