

# AFSC 1A0X1 IN-FLIGHT REFUELING



## CAREER FIELD EDUCATION AND TRAINING PLAN (CFETP)

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## CAREER FIELD EDUCATION AND TRAINING PLAN

### IN-FLIGHT REFUELING

#### AFSC 1A0X1

## PART I

### Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instill rigor in all aspects of career field training.

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

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan; Section B identifies career progression information, duties and responsibilities, training strategies, and career field path; Section C associates each level with specialty qualifications (knowledge, education, training, and other); Section D indicates resource constraints. Some examples are funds, manpower, equipment, and facilities. *Note: The Air Force Enlisted Classification Directory (AFECD) and AFI 36-2101 Classifying Military Personnel (Officer and Enlisted) contain the specialty descriptions.*

2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training, and correspondence course requirements. Section B contains the course objective list and training standards supervisors will use to determine if Airmen satisfy training requirements. Section C identifies available training support materials. Section D identifies a training course index that is used to determine resources available to support training. Included here are both mandatory and optional courses. Sections E and F identify MAJCOM unique training requirements.

2.3. Attachment 3 to the electronic version of the CFETP is a career path chart. This chart provides a visual depiction of the In-flight Refueling AFSC, Career Enlisted Flyers Incentive Pay gates and years of aviation service, and key information to education, training and qualification. It also contains promotion information specific to the In-flight Refueling AFSC, such as average time in grade, time in service, as well as Air Force averages. This chart provides a timeline for achieving additional qualifications such as instructor, evaluator, Flying Training Unit (FTU) assignment, and leadership opportunities within the squadron, Group, Wing and MAJCOM and HQ/USAF.

3. This CFETP is designed to ensure individuals in AFSC 1A0X1 receive comprehensive and effective training at the appropriate phases of their career. At unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

## ABBREVIATIONS/TERMS EXPLAINED

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

**Air Force Career Field Manager (AFCFM).** Representative appointed by the respective HQ USAF Deputy Chief of Staff or Under Secretariat, to ensure assigned AF specialties are trained and utilized to support AF mission requirements.

**Air Reserve Component (ARC).** Air National Guard and Air Force Reserve units.

**Aircrew Fundamentals Course (AFC).** A course designed to prepare enlisted personnel for their transition to a career in aviation. Knowledge presented in the course includes physiological, survival, aircrew mission, anti-hijacking and anti-terrorism, aircrew coordination, aircrew training, basic aerodynamics, aircraft publications, safety and flight medicine. This course screens for the ability to handle the rigor of aircrew duties prior to candidates entering expensive follow-on training resources.

**Aircrew Training System (ATS).** A system wherein a civilian contractor provides academic, simulator, and other designated aircrew training. ATS courses are listed in the applicable AFI 11-2MDS, Volume 1 or the ETCA website (<https://cs2.eis.af.mil/sites/app10-etca/SitePages/home.aspx#Home>).

**Basic Aircraft Qualification (BAQ).** An aircrew member who has satisfactorily completed training prescribed to maintain the skills necessary to perform aircrew duties in the unit aircraft.

**Basic Boom Operator Course (BBOC).** A non-flying course designed to cover the fundamentals and applications of basic boom operator duties and responsibilities. This course awards AFSC 1A031.

**Basic Mission Capable (BMC).** An aircrew member who has satisfactorily completed mission qualification training, is qualified in some aspect of the unit mission, but does not maintain MR/CMR status.

**Basic Qualification (BQ).** A status of an aircrew member who has satisfactorily completed the basic training prescribed to maintain the skills necessary to fly on the unit aircraft. The member must perform at the minimum frequency necessary to meet the most recent sortie and flight standards set for that weapons system.

**Boom Operator (BO).** Common name given to the in-flight refueling AFSC.

**Career Enlisted Aviator (CEA).** An aircrew member in any of the 1AXXX or 1UXXX career fields.

**Career Enlisted Aviator Center of Excellence (CoE).** The USAF CEA Undergraduate Training Center located at Lackland AFB, TX. Provides undergraduate, initial skills training through award of the 3-skill level.

**Continuation Training (CT).** The continuation training program provides crew members with the volume, frequency, and mix of training necessary to maintain proficiency in that assigned qualification level.

**Course Objective Lists (COL).** A publication derived from the initial and advanced skills course training standard (CTS), identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3- or 7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations.

**Course Training Standard (CTS).** A training standard identifying the training members will receive in a specific course.

**Crew Resource Management (CRM).** The effective use of all available resources, people, weapon systems, facilities and equipment, and environment - by individuals or crews to safely and efficiently accomplish an assigned mission or task. The term “CRM” is used to refer to the training program, objectives, and key skills directed to this end.

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

**Evaluator Boom Operator (EB).** An instructor qualified boom operator selected from the most highly qualified and experienced instructors and designated in writing by the OG/CC or SQ/CC designated to administer evaluations.

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

**Flying Training Unit (FTU).** Name given to an AETC or AMC school conducting flight training.

**Functional Area Manager.** Individual appointed by MAJCOM Functional Manager to manage education, training, and resources for an Air Force Specialty (MAJCOM Functional Area Manager or FAM).

**Initial Qualification Training (IQT).** Training needed to qualify aircrew for basic aircrew duties in an assigned crew position for a specific aircraft, without regard for the unit’s operational mission.

**Initial Qualification Evaluation (IQE).** The initial qualification evaluation is an air refueling flight that denotes the conclusion of FTU training (KC-10), or conclusion of technical school training (KC-135, KC-46). This is the capstone for awarding the 3-skill level.

**Initial Skills Training.** A formal school course that result in the award of a 3-skill level AFSC.

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

**Instructor Boom Operator (IB).** An individual authorized to instruct on those missions for which qualified.

**Lead Command.** A MAJCOM responsible for an assigned weapons system. Lead Commands establish advocacy for designated weapon systems during their life cycle and clarify responsibilities for all using and supporting organizations. They provide primary input into the process of developing and maintaining a force structure with a balance for complementary capabilities.

**MAJCOM Functional Manager (MFM).** Primary focal point and liaison between the MAJCOM and HQ USAF on all matters relating to the aircrew career fields and aviation resource management within the command. This includes, but is not limited to, responsibility for the aircrew training programs, coordination on aircrew resource allocations, and managing education, training, and resources for a specific career field(s) for that MAJCOM.

**Major Weapons Systems (MWS).** Several like Mission Design Series (MDS) comprise a Major Weapons System (MWS) category (e.g., the bomber MWS is comprised of the B-1, B-2, and B-52 MDSs).

**Mission Design Series (MDS).** A term used to identify a specific aircraft designation (e.g., KC-135, KC-10, KC-46).

**Mission Ready (MR).** An aircrew member who has satisfactorily completed mission qualification training and maintains qualification and proficiency in the command or unit operational mission.

**Mission Qualification Training (MQT).** Training needed to qualify aircrew in an assigned crew position for a specific aircraft to perform the command or unit mission.

**On-the-Job Training (OJT).** A delivery method used to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training. It is hands-on, over-the-shoulder training conducted at the duty location.

**Operations Plan (OPLAN).** An OPLAN is a written description of the combatant commander’s concept of operations to counter a perceived threat. An OPLAN includes all required annexes, appendices, and a supporting Time Phase Force Deployment Data (TPFDD). It may be used as the basis of a campaign plan (if required) and then developed into an operations order (OPORD).

**Practicum.** A means of receiving college credits through Community College of the Air Force (CCAF) Teaching Technology Associates Degree Program for formal schoolhouse instructors. It covers a wide variety of subjects beyond initial instructor qualification.

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

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

**Retraining.** An Air Force objective to balance the career force of each AFSC as needed. The retraining program allows individual Airmen a choice of career fields from which to pursue an Air Force career and provides a method to return Airmen disqualified from their current AFSC to a productive status.

**Specialty Training Standard (STS).** An AF publication that describes an AFSC in terms of tasks and knowledge an Airman in that specialty may be expected to perform or to know on the job. 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.

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

**Subject Matter Expert (SME).** An individual qualified in a particular specialty and who is consulted with for his or her subject matter expertise or knowledge of the specialty.

**Syllabus.** Published outline of training required to achieve the proficiency specified in the course training standards for a specific course. It prescribes the course content, instructions to conduct the training, and the approximate time necessary to successfully complete all requirements. A formal syllabus may be published to include IQT, MQT, CT, and other aircrew training as determined by the training command, MAJCOM, or unit. (Formal and standardized syllabus are used primarily in AETC formal or developed courses.)

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

**Upgrade Training (UGT).** Mandatory training that leads to attainment of higher level of proficiency.

**Utilization and Training Workshop (U&TW).** A forum consisting of the AFCFM, MAJCOM functional managers (MFM), Subject Matter Experts (SME), and AETC training personnel, which determines career field training requirements.

**Weapon System Training Package (WSTP).** An instructional course which includes IQT, MQT, and CT designed for use at the unit to qualify or aid qualification in a duty position, program, or on a piece of equipment. The WSTP may be printed, computer based, flying, simulator, or other audiovisual material.

## Section A - General Information

### 1. Purpose.

This CFETP provides information necessary for the Air Force Career Field Manager (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training that individuals must receive in order to develop and progress throughout their career. For the purpose of this plan, training is divided into four areas: initial skills, upgrade training (UGT), qualification training (QT), and continuation training (CT). Initial skills training is the Air Force Specialty specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion required for award of the 5-, 7-, and 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge training required for the job. Continuation training is additional training either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to maintain their skills and knowledge beyond the minimum required. The CFETP has several purposes, some are:

- 1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program.
- 1.2. Identifies task and knowledge training requirements for each skill level in this specialty and recommends training and education throughout each phase of an individual's career.
- 1.3. Lists training courses available in the specialty, identifies sources of training, and the training medium.
- 1.4. Identifies major resource constraints that impact full implementation of the desired specialty training program.

### 2. Uses.

The CFETP will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available and/or instituted for each individual in the specialty.

- 2.1. Training personnel will develop and revise formal resident, non-resident, and exportable training based on requirements established by the user and documented in Part II of the CFETP. The lead command MFM will coordinate with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.
- 2.2. MFMs will ensure their training programs complement the CFETP mandatory initial and upgrade skills requirements. Identified requirements can be satisfied by OJT, resident training, contract training, or exportable courses. MAJCOM-developed training to support this AFSC must be identified for inclusion in this plan and must not duplicate available training resources.
- 2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.
- 2.4. Personnel in AFSCs 1AXXX or 1UXXX are exempt from maintaining OJT Training Folders (AF Form 623). All training is certified via AF Form 8, *Certificate of Aircrew Qualification*, by trained flight examiners. Certification on the AF Form 8 eliminates the requirement to document STS items in this CFETP.

### 3. Coordination and Approval.

The AFCFM is approval authority. MAJCOM functional managers and AETC training managers will identify and coordinate on the career field training requirements. The AFCFM will initiate an annual review of this document and coordinate with AETC and MFMs to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training. Send applicable inputs/changes to this CFETP through MAJCOM Functional Managers to HQ USAF/A3TF, 1480 Air Force Pentagon, Washington D.C. 20330-1480 or the following organizational email address: [usaf.pentagon.af-a3.mbx.actf-workflow@mail.mil](mailto:usaf.pentagon.af-a3.mbx.actf-workflow@mail.mil).



## Section B - Career Progression and Information

### 4. Specialty Description

4.1. **Specialty Summary.** Performs in-flight refueling aircrew functions and activities according to flight manuals, checklists, and United States Air Force publications. Related DoD Occupational Subgroup: 050.

#### 4.2. Duties and Responsibilities.

4.2.1. Performs in-flight refueling aircrew duties. Checks forms for equipment status. Performs visual and operational check of air refueling and associated systems and equipment. Performs pre-flight, thru-flight, and post-flight inspections. Accomplishes pre-flight and post-flight records and reports. Performs in-flight operational check of air refueling systems. Directs receiver aircraft into air refueling position. Operates in-flight refueling controls and switches to safely affect contact between tanker and receiver aircraft. Monitors control panel for proper operation of equipment during air refueling, and advises receiver pilot of actions required to safely maintain position within the air refueling envelope. Keeps tanker pilot informed as to progress of air refueling operations. Performs emergency operations and procedures as required for emergency off-load and on-load of fuel. Computes and completes aircraft weight and balance documentation.

4.2.2. Verify clearances, monitoring altitudes, airspeeds, traffic, aircraft configuration, fuel, electrical systems, monitoring take offs, approaches, and landings.

4.2.3. Receives cargo/passenger load briefing and reviews load plan and cargo documentation. Accomplishes load planning of cargo/passenger loads if required. Supervises cargo/passenger loading and off-loading operations. Directs the placement of material handling equipment to accomplish cargo on/off loading operations. Ensures cargo/passengers are placed according to load plans. Determines cargo restraint requirements according to criteria and directs and checks the application of cargo restraint equipment. Checks cargo/passenger loads against manifests.

4.2.4. Ensures availability of fleet service equipment and receives and stows in-flight meals. Accomplishes passenger briefings to include the use of emergency equipment, evacuation procedures, and border clearance requirements. Demonstrates the use of passenger emergency oxygen systems and life vests. Supervises passengers in-flight.

4.2.5. Load and utilize COMSEC on aircraft for specific missions according to the applicable directives.

4.2.6. Performs and maintains certification in required OPLANs.

4.2.7. Performs staff functions. Performs staff duties at squadron level and above where Inflight Refueling expertise is required.

### 5. Skill/Career Progression.

Adequate training and timely progression from the apprentice to the superintendent skill level play an extremely important role in the Air Force's ability to accomplish its mission. Therefore, it is essential that everyone involved in training do their part to plan, develop, manage, conduct, and evaluate an effective and efficient training program. The guidance provided in this part of the CFETP will ensure individuals receive viable training at the appropriate points in their career. The following narrative and the AFSC 1A0X1 career field flow charts identify the training career path. They define the training required in an individual's career.

5.1. **Apprentice 3-Level.** Meeting requirements listed in AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, specialty description, completion of the Aircrew Fundamentals Course at Lackland AFB, TX. Initial skills training in this specialty consists of the tasks and knowledge training provided in the 3-skill level resident course (1A031). Tasks and knowledge training requirements are identified in the specialty training standard, at Part II, Section A. Individuals must complete the initial skills course to be awarded AFSC 1A031. For specific course names see Table 7 (Air Force In-Resident Courses).

5.2. **Journeyman (5) Level.** To be awarded AFSC 1A051, the trainee must complete requirements as listed in the applicable MAJCOM aircrew training directives, initial qualification training, and a successful AF Form 8.

5.3. **Craftsman (7) Level.** To be awarded AFSC 1A071, the trainee must be a SSgt, complete all 3- and 5-skill level training requirements and meet all requirements as listed in the applicable MAJCOM aircrew training directives. Additionally, complete any other requirements specified in the *Air Force Enlisted Classification Directory* (AFECD) and AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*.

5.4. **Superintendent (9) Level.** To be awarded AFSC 1A091, an individual must be a SMSgt and have his or her supervisor's recommendation. Additionally, complete any other requirements specified in the *Air Force Enlisted Classification Directory* (AFECD) and AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*.

5.5. **Chief Enlisted Manager (CEM).** CEM code is awarded when selected for promotion to Chief Master Sergeant.

## 6. Training Decisions.

The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Inflight Refueling Specialist career field. This CFETP was developed to include life-cycle (day one through retirement) training requirements for this specialty. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training.

6.1. **Initial Skills Training.** Initial physiological training will be conducted at the Aircrew Fundamentals Course. A Course Training Standard (CTS) was created to align common core training amongst all 1A/1U AFSCs into the Aircrew Fundamentals Course. The initial skills training will be revised to provide training needed to prepare graduates for Inflight Refueling Specialist related positions.

6.2. **Five Level Upgrade Training.** Completion of initial qualification training and an attainment of a successful AF Form 8 on member's first assigned weapons system.

6.3. **Seven Level Upgrade Training.** Must complete all 3- and 5-skill level training requirements. No formal 7- level upgrade training exists. The CSAF has approved a variance, eliminating the requirement for in-residence 7- level training for all 1AXXX/1U0XX (Aircrew Operations Career Field) personnel.

## 7. Community College of the Air Force (CCAF) Academic Programs.

CCAF provides the opportunity to obtain an Associate in Applied Sciences (AAS) Degree. Enrollment in CCAF occurs upon completion of basic military training. Off-duty education is a personal choice but is highly encouraged. See the CCAF web site for program details regarding the AAS degree at: <http://www.au.af.mil/au/ccaf> . Additionally, see the Air Force Virtual Education Center website regarding AAS degree progress at: <https://my.af.mil/afvecprod/>. In addition to its associate degree program, CCAF offers the following:

7.1. **Occupational Instructor Certification.** The CCAF offers the Occupational Instructor Certification to instructors teaching full time in a CCAF affiliated school. To qualify, instructors must complete an instructor course, a Teaching Practicum, have two years teaching experience, hold an associate or higher degree, and be recommended by their commander/commandant.

7.2. **Instructor of Technology & Military Science Degree.** This program is offered to enlisted members who are assigned to CCAF affiliated schools teaching CCAF degree-applicable courses. Applicants must complete three semester hours of CCAF-approved instructor methodology coursework and hold their career-field related CCAF degree or equivalent civilian college degree before registration.

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

7.4. **Degree Requirements.** All Airmen are automatically entered into the CCAF program. The current associate's degree program available from the CCAF for AFSC 1A0XX is the Aviation Operations (4VCB) degree. Prior to completing an associate degree, the 5-skill level must be awarded and the following requirements in Table 1 must be met.

**Table 1. Degree Requirements**

| Subject Area                                 | Semester Hrs |
|--|--------------|
| Technical Education                          | 24           |
| Leadership, Management, and Military Studies | 6            |
| Physical Education                           | 4            |
| General Education                            | 15           |
| Program Elective                             | 15           |
| Total  | 64           |

7.4.1. **Technical Education (24 Semester Hours):** A minimum of 12 semester hours of Technical Core subjects/courses must be applied and the remaining semester hours applied from Technical Core/Technical Elective subjects/courses. Requests to substitute subjects/courses must be approved in advance by the Technical Branch at CCAF. Refer to the CCAF Academic Programs page for a current listing of Technical Core and Elective Subjects/Courses.

**Table 2. Technical Core (12-24 Semester Hours)**

| Subject/Course                       | Max Semester Hrs |
|--------------------------------------|------------------|
| In-flight Refueling Operations       | 24               |
| Air Transportation Principles        | 6                |
| Aviation/Flight Safety               | 6                |
| CCAF Internship                      | 18               |
| Flight Rules and Regulations         | 3                |
| Introduction to Aviation/Aeronautics | 3                |
| Survival Training                    | 6                |

**Table 3. Technical Electives (0-12 Semester Hours)**

| Subject/Course                              | Max Semester Hrs |
|---|------------------|
| Advanced Flight Engineering                 | 12               |
| Aerodynamics                                | 3                |
| Aircraft Systems                            | 6                |
| Aircraft Weight and Balance                 | 3                |
| Aviation Law                                | 6                |
| Climatology/Meteorology                     | 6                |
| Computer Science                            | 6                |
| Electricity/Electronics                     | 6                |
| FAA Airframe and Powerplant Certification   | 6                |
| General Chemistry/Algebra-Based Physics     | 4                |
| Human Factors in Aviation/Flight Physiology | 3                |
| Human Relations                             | 3                |
| Private/Commercial Pilot's License          | 3                |

7.4.2. **Leadership, Management, and Military Studies (LMMS) (6 Semester Hours):** Professional Military Education and/or civilian management courses. See *CCAF General Catalog* for application of civilian management courses.

7.4.3. **Physical Education (4 Semester Hours):** This requirement is satisfied by completion of Basic Military Training.

7.4.4. **General Education (15 Semester Hours):** Applicable courses must meet the criteria for application of courses to the General Education Requirement (GER) and be in agreement with the definitions of applicable General Education subject/courses as provided in the CCAF general catalog.

**Table 4. General Education Requirements**

| <b>Subject/Courses</b>  | <b>Semester Hours</b> |
|---|-----------------------|
| Oral Communication (speech)   | 3                     |
| Written Communication (English composition)   | 3                     |
| Mathematics (intermediate algebra or college-level mathematics)   | 3                     |
| Social Science (anthropology, archaeology, economics, geography, government, history, political science, psychology, sociology)         | 3                     |
| Humanities (courses in fine arts (criticism, appreciation, historical significance, foreign language, literature, philosophy, religion) | 3                     |

7.4.5. **Program Elective (15 Semester Hours):** Satisfied with applicable Technical Education, Leadership, Management, and Military Studies or General Education subjects/courses.

7.5. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should be actively pursuing an associate's degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

## 8. Assignments

8.1. RegAF (Equal Plus):

<https://afas.afpc.randolph.af.mil/AMSNET40/EnlistedAssignments/EnlistedAuthorized.aspx>

8.2. Air Force Reserve: <https://w45.afpc.randolph.af.mil/RMVSNet40/VacancyList.aspx>

8.3. Air National Guard: <https://www.goang.com/careers/find-your-career>

9. Career Field Flow Charts.

Figure 1. 1A0X1 Training Path 1 of 2

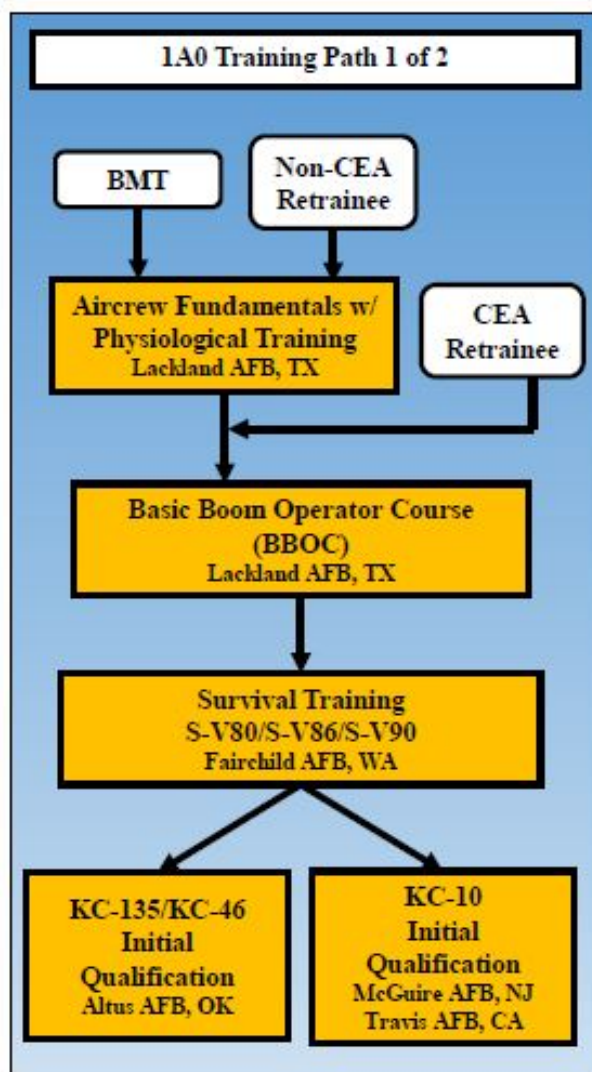


Figure 2. 1A0X1 Training Path 2 of 2



9.1. The courses outlined in Figure 1 and Figure 2 represents the formal training required for personnel entering and becoming fully qualified in the In-Flight Refueling Specialty. The locations, course lengths, and titles are subject to change. Changes will be updated in the Education Training Course Announcement (ETCA) by the course owner.

9.2. The course flow has been developed and agreed upon by the MAJCOM functional managers to minimize days students are awaiting training and to ensure survival training is typically completed prior to AFSC award minimizing the impact of not having the prerequisites completed before entering weapons system training.

9.3 Personnel graduating from the Basic Boom Operator Course are awarded AFSC 1A031 and are authorized to wear the Basic Aircrew Member Badge. Wear and permanent awarding requirements of the Basic Aircrew Member Badge will be IAW AFMAN 11-402 and MAJCOM supplements. Failure to complete initial qualification training (IQT) is justification for supervisors to recommend revocation of wear of the aircrew member badge.

**Table 5. 1A0X1 Enlisted Education and Training Path**

| <b>Enlisted Education and Training Path</b>  |                           |                       |                       |                   |                           |
|--|---------------------------|-----------------------|-----------------------|-------------------|---------------------------|
| <b>Education and Training Requirements</b>   | <b>GRADE REQUIREMENTS</b> |                       |                       |                   |                           |
|  | Rank                      | Earliest Sew-on TIS   | Air Force Average TIS | 1A0X1 Average TIS | High Year of Tenure (HYT) |
| <b>Basic Military Training School (BMTS)</b>   |                           |                       |                       |                   |                           |
| <b>Apprentice Technical School (3-Skill Level)</b>   | Amn<br>A1C                | 6 months<br>10 months |                       |                   |                           |
| <b>Upgrade To Journeyman (5-Skill Level)</b><br>- Completion of Initial/Mission Qualification Training   | Amn<br>A1C<br>SrA         |                       |                       |                   |                           |
| <b>Airman Leadership School (ALS)*</b><br>- Resident graduation is a prerequisite for SSgt sew-on (RegAF Only)   | SrA                       | 28 months             | 3 years               | 3 years           | 10 years                  |
| <b>Upgrade To Craftsman (7-Skill Level)</b><br>- Minimum rank of SSgt  | SSgt                      | 3 years               | 4.37 years            | 3.95 years        | 20 years                  |
| <b>NCO Academy (NCOA)*</b><br>- Must be a TSgt or TSgt-select to attend (SSgts may attend if all class seats have not been filled)<br>- Resident graduation is a prerequisite for MSgt sew-on (RegAF Only)             | TSgt                      | 5 years               | 9.33 years            | 9.75 years        | 22 years                  |
| <b>Senior NCO Academy (SNCOA)*</b><br>- Must be a SMSgt, SMSgt select, or Non-selects to SMSgt across AFSCs, from highest WAPS score descending until class seats are filled   | MSgt                      | 8 years               | 13.56 years           | 12.89 years       | 24 years                  |
| <b>Upgrade to Superintendent (9-Skill level)</b><br>- Minimum rank of SMSgt  | SMSgt                     | 11 years              | 17.91 years           | 17.05 years       | 26 years                  |
| <b>CMSgt Leadership Course</b><br>- Required for re-enlistment and developmental opportunities<br>- Must be a CMSgt or CMSgt-select to attend  |                           |                       |                       |                   |                           |
| <b>Chief Enlisted Manager (CEM)</b><br>- Minimum rank of CMSgt<br>- Completed SNCOA (RegAF Only)   | CMSgt                     | 14 years              | 20.91 years           | 18.17 years       | 30 years                  |
| *ARC personnel may satisfy EPME requirements via Distance Learning   |                           |                       |                       |                   |                           |
| Data current as of 19 June 2019<br>References: AFI 36-2301 AFGM2014-01 <i>Developmental Education</i> ; AFI 36-2201, <i>Air Force Training Program</i> ; and <a href="https://mypers.af.mil">https://mypers.af.mil</a> |                           |                       |                       |                   |                           |

## Section C - Skill Level Training Requirements

### 10. Purpose.

Skill level training requirements in this career field are defined in terms of task and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS and the Course Objective List at Part II, Section A and B of this CFETP.

### 10.1. Specialty Qualifications:

#### 10.1.1. Apprentice Level Training:

##### 10.1.1.1. Specialty Qualification.

10.1.1.2. **Knowledge.** Knowledge is mandatory of: electrical and mechanical principles applying to aircraft and related systems; flight theory; aircraft electrical, hydraulic, and pneumatic systems applying to in-flight refueling system; navigation fundamentals, including chart reading; normal and emergency operation of aircraft refueling systems; weight and balance factors; cargo tie-down techniques; crew resource management principles; minor in-flight maintenance; using survival equipment and oxygen; communication procedures; aircraft emergency procedures; border agency clearance; dispensing and preserving food aboard aircraft; interpreting and using diagrams, loading charts, publications, and flight manuals.

10.1.1.3. **Education.** For entry into this specialty, completion of high school with courses in physics and mathematics are desirable. A minimum score of 55 is required on the General portion of the Airman Qualifying Examination (AQE).

10.1.1.4. **Training.** For award of AFSC 1A031, individuals must meet mandatory requirements listed in specialty description in Air Force Enlisted Classification Directory (formally known as AFMAN 36-2108). Completion of the Aircrew Fundamentals Course is mandatory for pipeline and non-aviation service cross training students. Completion of the Inflight Refueling Course is mandatory for award of the 3-skill level AFSC.

10.1.1.5. **Other.** The following are mandatory as indicated:

10.1.1.5.1. For entry, award, and retention of this AFSC:

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

10.1.1.5.3. Physical qualification for aircrew duty according to AFI 48-123, *Medical Examinations and Standards*.

10.1.1.5.4. Qualification for aviation service according to AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*.

10.1.1.5.5. Eligibility for a Top Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

10.1.1.5.6. Completion of SERE Training Course (S-V80) and Water survival Training Course (S-V85 or S-V90) is mandatory for all 1A0X1 personnel.

10.1.1.5.7. Must maintain eligibility to deploy and mobilize worldwide.

10.1.1.6. **Training Sources.** Completion of the Inflight Refueling Course satisfies the knowledge and training requirements specified in the specialty qualification section (above) for award of the 3-skill level.

10.1.1.7. **Implementation.** Entry into training is accomplished by initial accessions from Basic Military Training School (BMTS) or approved retraining from any AFSC. After graduation from 3-level awarding course, initial qualification training (IQT) begins when the individual enters formal flight training. Thereafter, upgrade training is initiated anytime an individual is assigned duties they are not qualified to perform.

### 10.1.2. Journeyman 5-Level Training:

10.1.2.1. **Specialty Qualification.** All qualifications for AFSC 1A031 apply to the 1A051 requirements.

10.1.2.2. **Knowledge.** Knowledge is mandatory of: electrical and mechanical principles applying to aircraft and related systems; flight theory; aircraft electrical, hydraulic, and pneumatic systems applying to in-flight refueling systems; navigation procedures to include chart reading; normal and emergency operation of aircraft refueling systems; weight and balance factors; cargo tie-down techniques; cargo compartment configurations; minor in-flight

maintenance; using survival equipment and oxygen; communication procedures; aircraft emergency procedures; border agency clearance; interpreting and using diagrams, loading charts, publications, and flight manuals.

10.1.2.3. **Education.** No additional requirements for entry into this skill level.

10.1.2.4. **Training.** The following training is mandatory for the award of the 5-skill level:

10.1.2.4.1. Complete the resident and informal training for the assigned weapon system.

10.1.2.5. **Experience.** Qualification in and possession of AFSC 1A031. In addition, the individual must complete requirements as listed in the applicable MAJCOM aircrew training directives, initial qualification training, and a successful AF Form 8.

10.1.2.6. **Other.** See paragraph 10.1.1.5.

10.1.2.7. **Training Sources.** Refer to Part II, Section D, Training Course Index.

10.1.2.8. **Implementation.** Entry into upgrade training is initiated when an individual possesses the 3-skill level. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform.

### **10.1.3. Craftsman 7-Level Training:**

10.1.3.1. **Specialty Qualification.**

10.1.3.2. **Knowledge.** In addition to knowledge required for the 5-skill level and other qualifications as listed above an individual must possess the knowledge and skills necessary to supervise personnel.

10.1.3.3. **Education.** To assume the grades of SSgt and MSgt, individuals must be graduates of the Airman Leadership School (ALS) and Noncommissioned Officer Academy (NCOA), respectively. Reference AFI 36-2301, Developmental Education.

10.1.3.4. **Training.** The CSAF has approved a variance eliminating the requirement for in-residence 7-skill level training for all CEA career fields. However, minimum rank of SSgt and recommendation by the supervisor still apply.

10.1.3.5. **Experience.** Qualification in and possession of AFSC 1A051. Also, experience performing functions such as: inspecting, operating, and troubleshooting in-flight refueling systems; validating load plans; loading and unloading aircraft; and instructing passengers in the use of emergency equipment and procedures.

10.1.3.6. **Other.** See paragraph 10.1.1.4.

10.1.3.7. **Training Sources.** Refer to Part II, Section D, Training Course Index.

### **10.1.4. Superintendent 9- Level Training:**

10.1.4.1. **Specialty Qualification.**

10.1.4.2. **Knowledge.** In addition to knowledge required for the 7-skill level qualification, an individual must possess advanced skills and knowledge of concepts and principles in the effective leadership of in-flight refueling personnel and management of assigned resources.

10.1.4.3. **Education.** Completion of SNCOA (RegAF – In-Residence, ARC – In-Residence or DL) commensurate with rank requirements. Additionally, award of the Community College of the Air Force (CCAF) Associate of Applied Science degree or an associate degree or higher from a nationally or regionally accredited academic institution, if not already earned, is required.

10.1.4.4. **Training.** Must hold the rank of Senior Master Sergeant (SMSgt) and have supervisor's recommendation for award of the 9-skill level (RegAF only).

10.1.4.5. **Experience.** Qualification in and possession of AFSC 1A071. Also, experience managing advanced operations and maintenance of aircraft mission systems.

10.1.4.6. **Other.** See paragraph 10.1.1.4.



**Section D - Resource Constraints****11. Purpose.**

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

**11.1. Apprentice Level Training.**

None identified.

**11.2. Journeyman Level Training.**

None identified.

**11.3. Craftsman Level.**

None identified.

**BY ORDER OF THE SECRETARY OF THE AIR FORCE**

**OFFICIAL**

**JAMES A. JACOBSON, Major General, USAF  
Director, AF Training and Readiness**

## **PART II**

### **Section A - Specialty Training Standard (STS)**

#### **1. Implementation.**

This STS will be used for technical training provided by AETC for classes beginning 15 November 2019.

#### **2. Purpose.**

As prescribed in AFI 36-2651, *Air Force Training Program*, this STS:

2.1. Lists in column 1 of attachment 2, the tasks, knowledge, and technical references (TR) necessary for airmen to perform in the 3-level AFSC in the In-Flight Refueling Specialist ladder of the Aircrew Operations Career Field. These are based on an analysis of the duties listed in Air Force Enlisted Classification Directory.

2.2. Column 2 (3-Skill Level) shows formal training and correspondence course requirements as described in the Education and Training Course Announcements (ETCA) web site at: <https://cs2.eis.af.mil/sites/app10-etca/SitePages/home.aspx#Home> and the career knowledge provided by the correspondence course. There are no CDCs listed for this AFSC.

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

2.4. Utilized as a guide for development of promotion tests used in the Weighted Airmen Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members to be most appropriate for promotion to higher grades. Questions are based on study references listed in the WAPS study catalog. Individual responsibilities are in AFI 36-2605 *Air Force Military Personnel Testing System*.

#### **3. Recommendations.**

Report unsatisfactory performance of individual course graduates to 37 TRG/DOS, 1220 Truemper Street, Suite 1, Lackland AFB TX 78236-5568. Please reference specific STS paragraphs.

3 Attachments:

1. Qualitative Requirements
2. STS: In-Flight Refueling (1A0X1)
3. CFETP Career Path Chart (1A0X1)

## Section B - Course Objective List

**4. Measurement.** Each objective is indicated as follows: W indicates task or subject knowledge which is measured using a written test, PC indicates required task performance which is measured with a performance progress check, and PC/W indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check.

**5. Standard.** The standard is 85 percent on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained.

**6. Proficiency Level.** Most task performance is taught to the “1a” proficiency level which means the students can do simple parts of the task, but needs to be told or shown how to do most of the task (extremely limited) or to a “2b” proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step-by-step procedures for doing the task.

### 7. Advanced Skills Course.

*NOTE:* There is currently no advanced course. This area is reserved.

## Section C - Support Material

### 8. Support Materials.

*NOTE:* There are currently no support material requirements. This area is reserved.

## Section D - Training Course Index

### 9. Purpose.

This section of the CFETP identifies training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field training programs.

**Table 7. Air Force In-Residence Courses**

| COURSE #        | COURSE TITLE  | LOCATION               |
|-----------------|---|------------------------|
| L3AQR1A011AC    | Aircrew Fundamentals Course – In-flight Refueling Operator    | Lackland AFB, TX       |
| L3ABR1A031 048C | Basic Boom Operator Course – Undergraduate Flying Course      | Lackland AFB, TX       |
| S-V80-A         | SERE Training   | Fairchild AFB, WA      |
| S-V85-A         | Water Survival School (parachuting)                           | Fairchild AFB, WA      |
| S-V90-A         | Water Survival School (non-parachuting)                       | Fairchild AFB, WA      |
| KC-135BIQ       | KC-135 Inflight Refueling Initial Qualification Course        | Altus AFB, OK          |
| KC-135BTX2      | KC-135 Inflight Refueling Requalification Course              | Altus AFB, OK          |
| KC-135IB        | KC-135 Instructor Inflight Refueling Qualification Course     | Altus AFB, OK          |
| KC-10BBQ        | KC-10 Inflight Refueling (Basic) Initial Qualification Course | Travis, CA/ JB MDL, NJ |
| KC-10BIC        | KC-10 Inflight Refueling Instructor Course                    | Travis, CA/JB MDL, NJ  |
| KC-10BRQ        | KC-10 Inflight Refueling Requalification Course               | Travis, CA/JB MDL, NJ  |
| KC-46BTX        | KC-46 Inflight Refueling Transition Course                    | Altus AFB, OK          |
| KC-46BIQ        | KC-46 Inflight Refueling Initial Qualification Course         | Altus AFB, OK          |
| KC-46BRC        | KC-46 Inflight Refueling Requalification Course               | Altus AFB, OK          |
| KC-46IB         | KC-46 Instructor Boom Operator Course                         | Altus AFB, OK          |
| KC-46BFTC       | KC-46 Inflight Refueling Faculty Training Course (FTU only)   | Altus AFB, OK          |
| AMC AAMOC       | Advanced Air Mobility Operations Course                       | JB MDL, NJ             |
| KC-135AIC       | KC-135 Advanced Instructor Course                             | Fairchild AFB, WA      |

**Table 8. Air Mobility Command Advanced Distributed Learning Service (ADLS) Courses**

| <b>COURSE NUMBER</b> | <b>COURSE TITLE</b>                               | <b>WEBSITE</b>  |
|----------------------|---|---|
| WBT AMOC             | Introduction to Air Mobility Operations Course    | <a href="https://amc.csd.disa.mil/">https://amc.csd.disa.mil/</a> |
| FEMO                 | Fundamentals of Expeditionary Mobility Operations | <a href="https://amc.csd.disa.mil/">https://amc.csd.disa.mil</a>  |
| STAGE                | Stage Management Course                           | <a href="https://amc.csd.disa.mil/">https://amc.csd.disa.mil</a>  |

## **Section E - MAJCOM Unique Requirements**

### **10. Air National Guard (ANG).**

**10.1. Purpose.** This section applies to all 1A0X1 personnel assigned to Air National Guard (ANG) units.

#### **10.2. Proficiency Training.**

**10.2.1.** Upon completion of the Initial Qualification course, ANG 1A0's require a minimum of 250 days to become Mission Ready (MR), and obtain operational proficiency as outlined in the most recent Ready Aircrew Program (RAP) Tasking Message/MDS Vol 1.

**10.2.2.** CMR, as defined in the RAP tasking message/MDS Vol 1, and proficiency training will include TDY travel to accomplish training not available at home station.

**10.2.2.1.** The number of days required for a member to attain CMR may be adjusted accordingly by the ANG CEA CFM as required to meet all necessary requirements identified in the MDS Vol 1 and applicable AFI's/supplements.

#### **10.3. Special Qualification Training.**

**10.3.1.** Reserved

## **Section F - MAJCOM Unique Resource Requirements**

*NOTE:* There are currently no MAJCOM unique resource requirements. This area is reserved.

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

**QUALITATIVE REQUIREMENTS**

| <b>Proficiency Code Key</b>   |                    |  |
|---|--------------------|--|
|   | <b>Scale Value</b> | <b>Definition: The individual</b>  |
| <b>Task Performance Levels</b>  | 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) |
| <b>*Task Knowledge Levels</b>   | 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)                                     |
| <b>**Subject Knowledge Levels</b>   | 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)                                |
| <i>Explanations</i>   |                    |  |
| <p>* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)</p> <p>** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.</p> <p>- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.</p> <p>X This mark is used alone in the course columns to show that training is required but not given due to limitations in resources.</p> |                    |  |

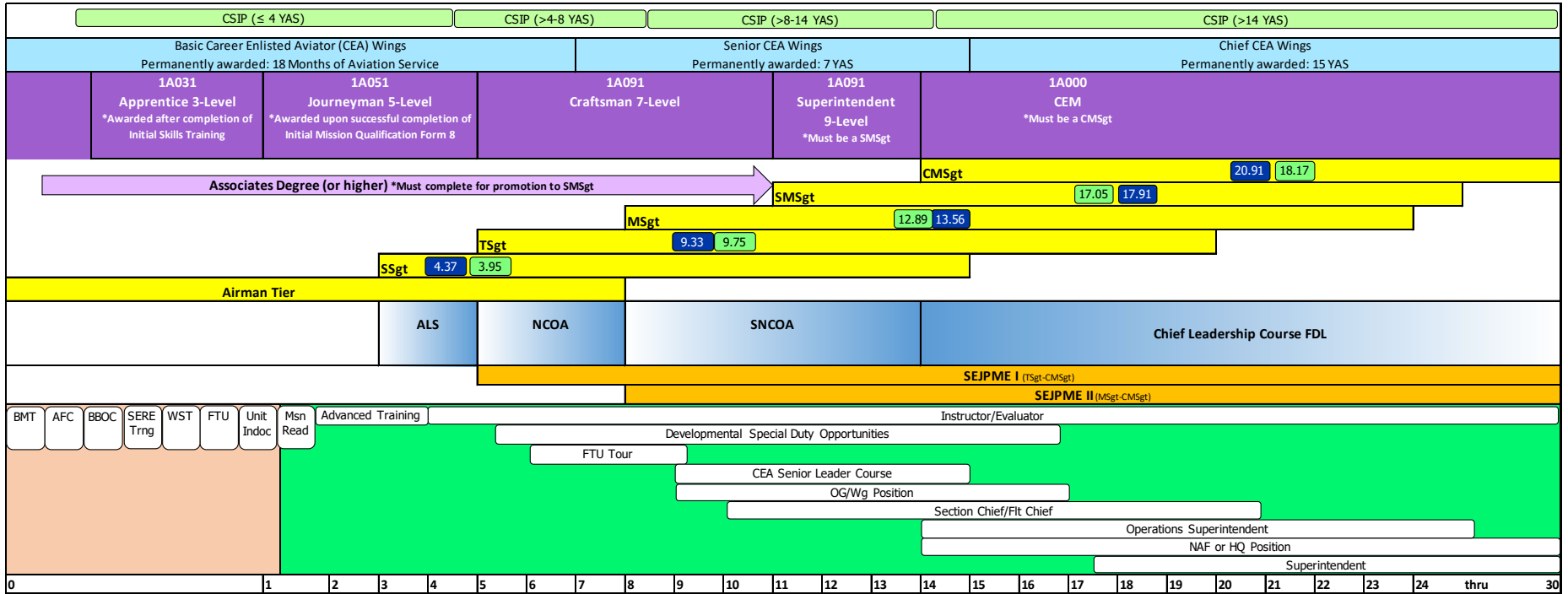
| <b>TASKS, KNOWLEDGE<br/>AND TECHNICAL REFERENCES</b>               |                               |               | <b>3-SKILL LEVEL<br/>COURSE</b> |
|--|-------------------------------|---------------|---------------------------------|
| <b>1. CAREER FIELD INFORMATION</b>                                 |                               |               |                                 |
| AFIs   |                               | Miscellaneous |                                 |
| 11-202 V1  | 11-401                        | AFECD         |                                 |
| 11-2KC-135 V1  | 11-2KC-10 V1                  |               |                                 |
| 11-2KC-46 V1   |                               |               |                                 |
| 1.1. Duties and Progression within 1A0XX AFSC                      |                               |               |                                 |
| <b>2. AIRCRAFT SYSTEMS/EQUIPMENT</b>                               |                               |               |                                 |
| Technical Orders   |                               |               |                                 |
| 00-25-172  | 1C-XXX-9                      | 00-5-1        |                                 |
| 1C-XXX-1   | Flight Crew Operations Manual | 00-5-3        |                                 |
| 2.1. Electrical  |                               |               | A                               |
| 2.2. Hydraulic   |                               |               | A                               |
| 2.3. Environmental   |                               |               | A                               |
| 2.4. Communication   |                               |               | A                               |
| 2.5. Landing Gear/Brake  |                               |               | A                               |
| 2.6. Fuel  |                               |               | A                               |
| 2.7. Engines/APU   |                               |               | A                               |
| 2.8. Flight Instruments  |                               |               | A                               |
| 2.9. Fire Detection/Extinguishing                                  |                               |               | A                               |
| <b>3. WEIGHT AND BALANCE</b>                                       |                               |               |                                 |
| Technical Orders   |                               |               |                                 |
| 1C-XXX-1   | Flight Crew Operations Manual | 1-1B-50       |                                 |
| 1C-XXX-9   | Weight and Balance Manual     |               |                                 |
| 3.1. Concepts  |                               |               | B                               |
| 3.2. Apply Formulas  |                               |               | 2b                              |
| 3.3. Weight and Balance Records                                    |                               |               | A                               |
| 3.4. Complete Weight and Balance DD Form 365-4                     |                               |               | 2b                              |
| 3.5. Effects of Weight and Balance                                 |                               |               | B                               |
| 3.6. Pounds per Square Inch (PSI) & Shoring Requirements           |                               |               | A                               |
| 3.7. Compute Pounds per Square Inch (PSI) and Shoring Requirements |                               |               | 1a                              |
|  |                               |               |                                 |

| <b>TASKS, KNOWLEDGE<br/>AND TECHNICAL REFERENCES</b>               |                                       |                                      | <b>3-SKILL LEVEL<br/>COURSE</b> |
|--|---------------------------------------|--------------------------------------|---------------------------------|
| <b>4. CARGO HANDLING</b>   |                                       |                                      |                                 |
| <b>AFI</b>   | <b>Technical Orders</b>               |                                      |                                 |
| <b>24-6501 V11</b>   | <b>1C-XXX-1</b>                       | <b>Flight Crew Operations Manual</b> |                                 |
| <b>11-218</b>  | <b>1C-XXX-9</b>                       | <b>Weight and Balance Manual</b>     |                                 |
| 4.1. Cargo Loading/Offloading Procedures                           |                                       |                                      | A                               |
| 4.2. Cargo Loading Aids  |                                       |                                      | A                               |
| 4.3. Concepts of Restraint   |                                       |                                      | A                               |
| 4.4. Compute Restraint Criteria                                    |                                       |                                      | 2b                              |
| 4.5. Secure Cargo  |                                       |                                      | 2b                              |
| 4.6. Cargo Inspection Procedures                                   |                                       |                                      | A                               |
| 4.7. Inspect Cargo   |                                       |                                      | 2b                              |
| 4.8. Cargo Documentation   |                                       |                                      | A                               |
| 4.9. Special Handling Procedures                                   |                                       |                                      | A                               |
| 4.10. Marshall Material Handling Equipment (MHE)                   |                                       |                                      | 1a                              |
| <b>5. AIR TRANSPORTATION OF HAZARDOUS MATERIAL</b>                 |                                       |                                      |                                 |
| <b>Technical Orders</b>  | <b>Miscellaneous</b>                  |                                      |                                 |
| <b>1C-XXX-1</b>  | <b>AFMAN 91-201</b>                   | <b>AFJI 11-204</b>                   |                                 |
|  |                                       | <b>AFMAN 24-204</b>                  |                                 |
| 5.1. Determine Suitability and Segregation/Compatibility of HAZMAT |                                       |                                      | 2b                              |
| 5.2. Safety Procedures   |                                       |                                      | A                               |
| <b>6. PASSENGER/TROOP REQUIREMENTS</b>                             |                                       |                                      |                                 |
| <b>Technical Orders</b>  | <b>Miscellaneous</b>                  |                                      |                                 |
| <b>1C-XXX-1</b>  | <b>AMCI 24-101 V14</b>                |                                      |                                 |
| <b>1C-XXX-9</b>  | <b>DoD Foreign Clearance Guide</b>    |                                      |                                 |
| <b>Flight Crew Operations Manual</b>                               | <b>Aircrew Border Clearance Guide</b> |                                      |                                 |
| 6.1. Passenger Handling  |                                       |                                      | B                               |
| 6.2. Border Clearance Procedures                                   |                                       |                                      | A                               |
| 6.3. Equipment Inventory Forms                                     |                                       |                                      | A                               |
| <b>7. SUPPORT AGENCIES</b>   |                                       |                                      |                                 |
| <b>AFIs</b>  | <b>Miscellaneous</b>                  |                                      |                                 |
| <b>11-221</b>  | <b>AFDD 3-17</b>                      |                                      |                                 |
|  | <b>AMCI 10-202 V4</b>                 |                                      |                                 |
| 7.1. Command and Control   |                                       |                                      | A                               |

| <b>TASKS, KNOWLEDGE<br/>AND TECHNICAL REFERENCES</b>    |                                      |  |  | <b>3-SKILL LEVEL<br/>COURSE</b> |
|---|--------------------------------------|--|--|---------------------------------|
| <b>8. NAVIGATION</b>                                    |                                      |  |  |                                 |
| <b>AFIs</b>   | <b>Technical Orders</b>              | <b>Miscellaneous</b>                   |  |                                 |
| <b>11-208 IP</b>  | <b>1C-XXX-1</b>                      | <b>AFP-1B</b>                          | <b>AFPAM 11-216</b>                    |                                 |
| <b>11-218</b>   | <b>Flight Crew Operations Manual</b> | <b>ATP-3.3.4.2</b>                     | <b>AFMAN 11-217 V1/V3</b>              |                                 |
|   |                                      |  | <b>U.S. Standards Related Document</b> |                                 |
| 8.1. NAVAID Identification and Principles               |                                      |  |  | A                               |
| 8.2. Position Orientation                               |                                      |  |  | A                               |
| 8.3. Terminal and En-route Procedures                   |                                      |  |  | A                               |
| 8.4. Rendezvous Procedures                              |                                      |  |  | A                               |
| 8.5. Flight Controls/Aerodynamics                       |                                      |  |  | A                               |
| <b>9. AIRCRAFT AERIAL REFUELING OPERATIONS</b>          |                                      |  |  |                                 |
| <b>AFIs</b>   | <b>Technical Orders</b>              | <b>Miscellaneous</b>                   |  |                                 |
|   | <b>1C-XXX-1</b>                      | <b>ATP 3.3.4.2</b>                     |  |                                 |
|   | <b>Flight Crew Operations Manual</b> | <b>U.S. Standards Related Document</b> |  |                                 |
| 9.1. Types of Refueling/Tanker Aircraft                 |                                      |  |  | A                               |
| 9.2. Boom & Drogue                                      |                                      |  |  | B                               |
| 9.3. EMCOM Procedures                                   |                                      |  |  | A                               |
| 9.4. Boom Aerodynamic Effects                           |                                      |  |  | A                               |
| 9.5. Communications                                     |                                      |  |  | A                               |
| 9.6. Conduct simulation/air-to-air refueling procedures |                                      |  |  | 2b                              |
| 9.7. Boom Components                                    |                                      |  |  | A                               |



### Attachment 3 Boom Operator Career Path Chart 1A0X1



**References:**  
 AFI 11-401 Aviation Management  
 AFMAN 11-402 Aviation and Parachutist Service, Aeronautical Ratings, and Aviation Badges  
 AFI 36-2201 Air Force Training Program  
 AFI 36-2301 Developmental Education  
 AFI 36-2502 Enlisted Airman Promotion/Demotion  
<https://mypers.af.mil/>

OPR: HQ USAF/A3TF  
 POC: CMSgt Philip P. Leonard  
 14 June 2020

**Legend:**

- Compensation
- CEA Milestones
- AFSC Skill Level
- Promotions
- AF Avg
- AFSC Avg
- PME
- Training Progression
- Career Progression
- Years Of Service (not necessarily the same as YAS)

NOTE: Career progression is typical, but not mandatory. Each member's career may take shape in many different forms.