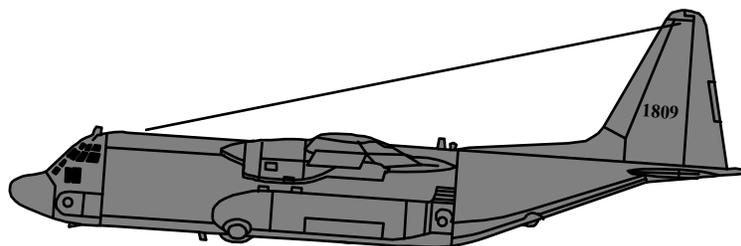
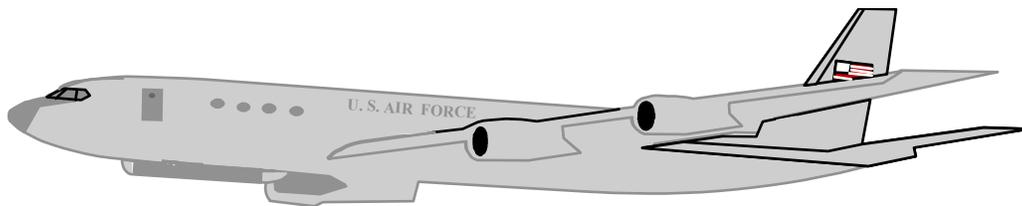
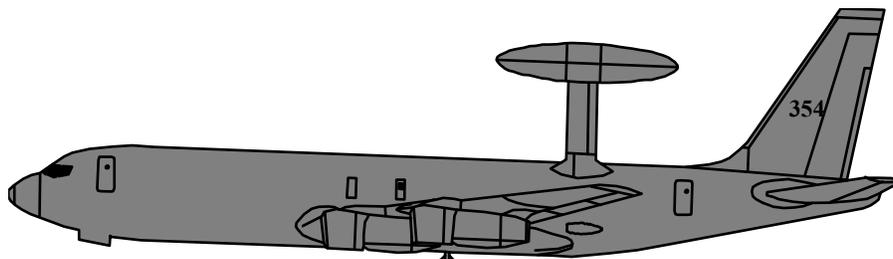


AFSC 1A4X1 Airborne Battle Management Systems Specialty



CAREER FIELD EDUCATION AND TRAINING PLAN

**CAREER FIELD EDUCATION AND TRAINING PLAN
AIRBORNE BATTLE MANAGEMENT SYSTEMS SPECIALTY
AFSC 1A4X1**

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**AIRBORNE BATTLE MANAGEMENT SYSTEMS SPECIALTY
AFSC 1A4X1
CAREER FIELD EDUCATION AND TRAINING PLAN**

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 instills rigor in all aspects of career field training.

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

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan; Section B identifies career 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: AFMAN 36-2108, *Airman Classification*, contains 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, wartime course, core tasks, and correspondence course requirements. Section B contains the course objective list and training standards supervisors will use to determine if airmen satisfied training requirements. Section C identifies available support materials. An example is a qualification training package (QTP) which may be developed to support proficiency training. QTPs identified in this section have been developed to support upgrade/qualification training. These packages are identified in AFIND 8, *Numerical Index of Specialized Educational Training Publications*. Section D identifies a training course index, which is used to determine resources available to support training. Included here are both mandatory and optional courses. Section E identifies MAJCOM unique training requirements.

3. This CFETP is designed to ensure individuals in AFSC 1A4X1 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). Individual appointed by Air Staff DCS's to manage education, training, and resources for a specific career field(s).

Basic Aircraft Qualification (BAQ). An aircrew member who has satisfactorily completed initial qualification training and is qualified to perform aircrew duties in the unit aircraft.

Basic Mission Capable (BMC). An aircrew member, who has satisfactorily completed mission qualification training, does not maintain MR/CMR status, but maintains familiarization in the command or unit operational mission.

Career Enlisted Aviator (CEA). An individual with a primary AFSC of 1Axxx (Aircrew Operations).

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive, multipurpose document encapsulating the entire spectrum of training for a specialty. It outlines a logical growth path, including training resources, and is designed to eliminate duplication and make training identifiable and budget defensible.

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

Continuation Training (CT). Training for aircrew members already qualified in their respective aircrew position to maintain their assigned level of proficiency. CT is designed to progressively improve basic aircraft qualification, combat mission ready, basic mission capable, and aircrew members' ability to perform the unit's mission.

Core Task. A task AFCFMs identify as essential qualification requirements for upgrade within an AFS. These tasks exemplify the essence of the career field--the foundation. Failure to complete core tasks precludes upgrade. The AFCFM has delegated to MAJCOM functional managers the right to waive core tasks which are not applicable to their MAJCOM

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

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

Enlisted Aircrew Undergraduate Course (EAUC). A course designed to screen candidates for the rigors of enlisted aircrew duties prior to spending expensive follow-on training resources.

Enlisted Specialty Training. A mix of formal training (technical school) and informal enlisted (OJT) training (life cycle) to qualify and upgrade airmen in each skill-level of a specialty.

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

Initial Qualification Training (IQT). A training course needed to qualify for basic aircrew duties in an assigned position for a specific aircraft without regard for the unit's operational mission.

Initial Skills Training. A formal school course that results in an 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.

Major Command (MAJCOM) Functional Manager. Individuals appointed by MAJCOMs to manage education, training, and resources for a specific career field(s) for that MAJCOM.

Major Weapons Systems (MWS). For the purpose of this CFETP, MWS consists of all applicable airborne platforms with a crew complement including at least one 1A4X1.

Mission Ready (MR). See **Combat Mission Ready (CMR)**

On-the-Job Training (OJT). Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

Phase I (IQT). Training necessary to initially qualify an aircrew member in a basic crew position and flying duties without regard to the unit's operational mission. This is the minimum requirement for BAQ.

Phase II (MQT). Training necessary to qualify an aircrew member in a specific aircrew position to perform the command's or unit's operational mission. MQT completion is a prerequisite for CMR

Phase III (CT). Training for aircrew members already qualified in their respective aircrew position to maintain their assigned level of proficiency. CT is designed to progressively improve basic aircraft qualification, combat mission ready, basic mission capable, and aircrew members' ability to perform the unit's mission.

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

Qualification Training. 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.

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

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

Specialized Training Package and COMSEC Qualification Training Package. A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by the National Security Agency (NSA), and administered by qualified COMSEC maintenance personnel.

Specialty Training Standard (STS). An Air Force publication that describes an AFS in general terms of tasks and knowledge that 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 is taught in formal schools and exportable courses.

Standard. An exact value, a physical entity, or 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.

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

Upgrade Training (UGT). Training that leads to the award of a higher skill level in an AFS.

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

War Task. Tasks that AFS functional managers identify as minimum qualification requirements trained in-resident wartime course.

Weapons 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 equipment. It 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 3-, 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 increase 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. In addition, it is used to help supervisors identify training at the appropriate point in an individual's career.

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

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

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

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

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial 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. Qualification training packages (QTP) are developed by AETC, MAJCOM functional managers, and/or unit training managers. Unit developed QTPs will be provided to the parent MAJCOM and included in the CFETP.

2.5. Personnel in AFSC 1AXXX are exempt from maintaining OJT Training Folders (AF Form 623). All core tasks identified in this document are satisfied in IQT, MQT, and CT. Trained instructors and evaluators certify that training via AF Form 8. Certification of the AF Form 8 eliminates the requirement to document STS items in this CFETP.

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

applicable inputs/changes to this CFETP through MAJCOM functional managers to HQ USAF/XOOTA, 1480 Air Force Pentagon, Washington D.C. 20330-1480.

Section B - Career Progression and Information

4. Specialty Description.

4.1. Airborne Battle Management Systems Apprentice (1A431).

4.1.1. Specialty Summary. Operates airborne battle management systems mission equipment. Gathers, records, displays, and distributes mission information. Maintains communications nets with ground, air, and maritime units. Performs airborne battle management functions under training and operational conditions.

4.1.2. Duties and Responsibilities.

4.1.2.1 Operates airborne battle management systems mission equipment. Performs air, ground, and maritime surveillance. Controls tactical air assets and air operations. Interprets computer-generated displays, data, and alarms, and takes appropriate switch actions. Compares track positions with flight data and/or database files to determine track identification. Performs mission planning, preflight, inflight, and postflight duties according to aircraft technical orders and applicable Air Force Instructions (AFIs).

4.1.2.2. Gathers, displays, records, and distributes operational mission information. Gathers mission data on ground, air, and maritime objects, and relays data to using agencies. Displays sensor, mission, identification, weather, and other data for battle managers. Updates mission data to tabular displays. Records and reports special interest tracks mission information, weather, emergency signals, and electronic attack (EA) observations.

4.1.2.3. Performs electronic-protection (EP) functions. Uses EP techniques to degrade effectiveness of electronic warfare activities or other external interference. Recommends procedures and techniques to improve EP effectiveness. Configures equipment to eliminate or reduce the effects of EA. Maintains coordination with exterior agencies.

4.1.2.4. Maintains status of air and ground activity. Coordinates with and supports other airborne and ground platforms in distributing and relaying operational target and identification data.

4.2. Airborne Battle Management Systems Journeyman (1A451).

4.2.1. Specialty Summary. Operates airborne battle management systems, electro-optical sensor systems, and electronic protection (EP) equipment. Interprets computer-generated displays and alarms. Gathers, records, displays, and distributes mission information. Maintains communications nets with ground, air, and maritime units. Performs airborne battle management functions under training and operational conditions.

4.2.2. Duties and Responsibilities.

4.2.2.1. Operates airborne battle management systems mission equipment. Identifies and maintains surveillance of air, ground, and maritime objects. Controls tactical air assets and air operations. Interprets computer-generated displays, data, and alarms, and takes appropriate switch actions. Compares track positions with flight data and database files to determine track identification. Determines data link requirements. Performs preflight, inflight, and postflight duties according to aircraft technical orders and applicable AFIs.

4.2.2.2. Gathers, displays, records, and distributes operational mission information. Gathers mission data on ground, air, and maritime objects, and relays data to using agencies. Displays sensor data and tactical mission, identification, weather, and other mission data for battle managers. Records special interest track and mission information. Transcribes tactical mission data to status boards. Reports unusual weather, emergency signals, and EA observations. Reviews and reports equipment status and performance. Maintains

status of mission aircraft, targets, and air tasking order information. Distributes alert status and records information.

4.2.2.3. Performs EP functions. Uses EP techniques to degrade effectiveness of electronic warfare activities or other external interference. Recommends procedures and techniques to improve EP effectiveness. Configures equipment to eliminate or reduce the effects of EA. Maintains coordination with exterior agencies.

4.2.2.4. Maintains status of air and ground activity. Coordinates with and supports other airborne and ground platforms in distributing and relaying operational target and identification data.

4.2.2.5. Instructs, evaluates, and supervises airborne battle management system activities. Conducts training for airborne battle management systems personnel. Develops and reviews instructional methods and procedures used in Initial Qualification Training (IQT), Upgrade Training (UGT), and Continuation Training (CT). Reviews training status and recommends remedial training. Evaluates aircrew inflight performances. Reviews trend analysis of flight evaluations to identify training deficiencies. Identifies and corrects faulty operational techniques. Supervises subordinates during the performance of their duties.

4.2.2.6. Performs weapons director duties. Controls aircraft conducting missions such as intercept, interdiction, close air support, search and rescue, combat air patrol, reconnaissance, offensive counter air, and air refueling. Coordinates and exchanges air movement and identification information. Maintains liaison with air defense artillery, surface, and naval fire units to ensure safe passage of friendly air traffic, and to effectively use air weapons resources. Coordinates with air traffic control agencies. Relays threat warnings and weather to aircrews and other agencies. Responsible for flight safety of missions being controlled.

4.2.2.7. Performs Gunship Sensor Operator Duties

4.2.2.8. Performs staff functions. Performs staff duties at squadron level and above where aircrew command and control, and gunship sensor operator expertise is required.

4.3. **Airborne Battle Management Systems Craftsman (1A471).**

4.3.1. Specialty Summary. Performs technical airborne battle management and gunship sensor systems operational mission duties; operates, trains and evaluates activities. Performs and assists in mission planning. Maintains publications and currency items. Maintains and supervises communications nets with external agencies. Supervises activities. Performs staff functions.

4.3.2. Duties and Responsibilities.

4.3.2.1 Performs technical airborne battle management and gunship sensor systems mission functions. Reacts to manual and computer-generated console situation and tabular displays to determine optimum airborne equipment settings. Performs EP to degrade the effectiveness of electronic warfare activities or other external influences. Determines data link requirements. Initiates and maintains surveillance of air, ground, and maritime objects. Performs and assists in mission planning and breaking air tasking orders. Formats initialization data. Coordinates mission profile requirements with internal and external agencies. Maintains logs, forms, and database files. Prepares reports, and performs preflight, inflight, and postflight duties according to aircraft technical orders and AFIs.

4.3.2.2. Operates gunship sensors and airborne battle management. Makes sensor operational checks and advises airborne systems technicians of status. Gathers, evaluates, and inserts into database files intelligence data, threat data, and operational capabilities. Monitors radio communications. Passes and receives data from the Immediate Air Request Net. Records, displays, and distributes operational information. Receives, transmits, and relays encoded and decoded messages from ground command and control agencies. Uses coordinate reference systems. Monitors status of mission aircraft, targets, and air tasking order information. Monitors and maintains air situation displays.

4.3.2.3. Supervises, evaluates, and monitors display of tactical air, ground, and maritime activity. Evaluates airborne individual aircrew inflight performances and systems capabilities, and recommends improvements. Coordinates with airborne, ground, and maritime agencies in distributing and relaying operational threat and

identification data. Monitors employment of assigned tactical air assets and operations. Compiles operational data for mission reports. Identifies and corrects faulty operational techniques. Reviews trend analyses.

4.3.2.4. Supervises and performs weapons director duties. Controls aircraft conducting missions such as intercept, interdiction, close air support, search and rescue, combat air patrol, reconnaissance, offensive counter air, and air refueling. Coordinates and exchanges air movement and identification information. Maintains liaison with air defense artillery, surface, and naval fire units to ensure safe passage of friendly air traffic, and to effectively use air weapons resources. Coordinates with air traffic control agencies. Relays threat warnings and weather to aircrews and other agencies. Responsible for flight safety of missions being controlled.

4.3.2.5. Supervises and performs gunship sensor operator duties.

4.3.2.6. Performs staff functions. Performs staff duties at squadron level and above where aircrew command and control, and gunship sensor operator expertise is required.

4.4. **Airborne Battle Management Systems Superintendent/CEM (1A491/1A400).**

4.4.1. Specialty Summary. Manages and provides expertise of airborne battle management systems and gunship sensor operations. Performs staff functions. Promotes and instills situational awareness in all aspects of airborne operations. Operates airborne battle management systems mission equipment and electro-optical sensor systems. Gathers, records, displays, and distributes mission information. Maintains communications nets with external agencies. Supervises and performs Weapons Director and Sensor Operator duties.

4.4.2. Duties and Responsibilities.

4.4.2.1. Performs technical airborne battle management and gunship sensor systems mission functions. Reacts to manual and computer-generated console situation and tabular displays to determine optimum airborne equipment settings. Performs EP to degrade the effectiveness of electronic warfare activities or other external influences. Determines data link requirements. Initiates and maintains surveillance of air, ground, and maritime objects. Performs and assists in mission planning and breaking air tasking orders. Formats initialization data. Coordinates mission profile requirements with internal and external agencies. Maintains logs, forms, and database files. Prepares reports, and performs preflight, inflight, and postflight duties according to aircraft technical orders and AFIs. Makes sensor and battlestaff console operational checks. Monitors and processes manual and computer-generated console situation and tabular displays. Determines optimum settings for airborne battle management and gunship sensor systems. Processes encoded and decoded messages from ground, air, and maritime agencies.

4.4.2.2. Plans and organizes airborne command and control systems apprentice/journeyman/craftsman activities. Develops and improves methods of personnel utilization and aircrew operations economy. Establishes standardized procedures for the most efficient inflight personnel use and equipment operation. Advises commanders and staff officers of important changes and developments in the mission operations area. Identifies problems affecting the capability and efficiency of unit operations. Facilitates planning, organizing, and executing operational and training missions.

4.4.2.3. Directs airborne battle management and gunship sensor systems activities. Directs personnel to perform specific preflight, inflight, and postflight operational duties. Revises personnel distribution within assigned mission functions. Monitors methods used to detect, report, identify, and display air, ground, and maritime targets. Supervises personnel in their assigned duties, including sensor and Identification Friend or Foe (IFF) operations, EP, digital data link, controlling tactical air assets, voice tell, and intra system coordination. Determines mission requirements and recommends operational procedures to meet worldwide contingency and operational tasking.

4.4.2.4. Establishes and directs aircrew training for airborne battle management and gunship sensor systems personnel. Develops and directs instructional methods and procedures used in initial qualification training (IQT), upgrade training (UGT), and continuation training (CT). Ensures applicable aircrew training techniques

are being used to train crewmembers for multi-theater employment of airborne command and control systems. Reviews training status and arranges additional, remedial, and continuation training.

4.4.2.5. Inspects and evaluates airborne activities. Conducts periodic inspections of aircrew operations and unit activities. Analyzes inspection findings and initiates corrective actions. Evaluates individual flight performances and systems capabilities and recommends improvements. Reviews trend analysis of flight evaluations to identify training deficiencies. Identifies and corrects faulty operational techniques.

4.4.2.6. Manages airborne battle management systems and gunship sensor operations. Resolves technical and operational problems. Ensures mission objectives concerning personnel adequacy, equipment status, communications, and operating efficiency are consistently attained. Recommends methods, techniques, and procedures to improve systems operation.

4.4.2.7. Performs staff functions. Performs staff duties at squadron level and above where aircrew command and control, and gunship sensor operator 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 1A4X1 career field flow charts identify the training career path. They define the training required in an individual's career.

5.1. **Apprentice (3) Level** Completion of the Enlisted Aircrew Undergraduate Course (EAUC) (J3AQR1A411 001) at Lackland AFB, TX is mandatory for pipeline and non-aviation service cross training students. Course E3ABR1A431-001 (PDS Code127) at Keesler AFB, MS is mandatory for award of the 3-skill level AFSC. Initial skills training requirements are identified and revised (if necessary) annually during the 1A4X1 Utilization and Training Workshop (U&TW) held at Keesler AFB, MS. Task and knowledge requirements are identified in the STS, Part II, Sections A and B. Individuals must complete an initial skills course to be awarded AFSC 1A431.

5.2. **Journeyman (5) Level** Upgrade training to the 5-skill level in this specialty consists of task and knowledge training provided in Career Development Course (CDC) 1A451 and minimum 15 months UGT. Individuals in retraining status are subject to the same training requirements and a minimum 9 months in UGT.

5.3. **Craftsman (7) Level** Upgrade training to the 7-skill level in this specialty consists of holding at least the grade of SSgt and 12 months of experience. Individuals in retraining status are subject to the same training requirements and a minimum 6 months in UGT.

5.4. **Superintendent (9) Level** Upgrade training to the 9-skill level in this specialty consists of holding the grade of SMSgt, meeting mandatory requirements listed in AFMAN 36-2108 specialty description and having supervisor's recommendation.

6. Training Decisions The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Airborne Battle Management Systems specialty. 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** The initial skills training will be revised to provide training needed to prepare graduates for Airborne Battle Management Systems specialty related positions.

6.2. **Five Level Upgrade Training** The AFSC 1A451 CDC provides required training for upgrade in the Airborne Battle Management Systems specialty related positions.

6.3. **Seven Level Upgrade Training** The CSAF has approved a variance, eliminating the requirement for in-residence 7-level training for all 1AXXX (Aircrew Operations Career Field) personnel.

7. Community College of the Air Force Enrollment in CCAF occurs upon completion of basic military training. Off-duty education is a personal choice but is highly encouraged. CCAF provides the opportunity to obtain an Associate in Applied Sciences Degree. See the CCAF web site for program details regarding the Associate of Applied Science degree at <http://www.au.af.mil/au/ccaf> . In addition to its associate degree program, CCAF offers the following:

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

7.2. 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.

7.3. Degree Requirements: All airmen are automatically entered into the CCAF program. The 5-skill level must be held at the time of program completion. The following degree requirements come from the 1999-2001 CCAF Catalog for the Air and Space Operations Technology (4VAS) degree:

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

7.3.1. Technical Education (24 Semester Hours): Twenty-four semester hours are required to fulfill the technical education requirement. Twelve semester hours must be applied from technical core course with the remaining 12 applied from either technical core or technical elective course. Requests to substitute subjects/courses must be approved in advance by the Technical Branch at CCAF.

7.3.1.1. Technical Core (12-24 Semester Hours):

Subjects/Courses	Max Semester Hours
Aerospace Control and Warning Systems.....	20
CCAF Internship.....	16
Space Systems Operations	20

7.3.1.2. Technical Electives (0-12 Semester Hours):

Subjects/Courses	Max Semester Hours
Astronautics.....	3
Astronomy.....	3
Aviation/Flight Safety.....	3
Basic Electronics Theory/Application	6
Computer Science.....	6
Enlisted Professional Military Education	12
Management Information Systems	3
Programming Languages.....	6
Solid-State Theory/Application	3
Space Propulsion	3
Survival Training	3
Technical Writing	3

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

7.3.3. **Physical Education (4 Semester Hours):** This requirement is satisfied by completion of Basic Military Training. PHE 1000.

7.3.4. **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.

Subject/Courses	Semester Hours
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

7.3.5. **Program Elective (15 Semester Hours):** Satisfied with applicable technical education; leadership, management, and military studies; or general education subjects/courses, including natural science courses meeting GER application criteria and foreign language credit earned at the Defense Language Institute or through the Defense Language Proficiency Test. Six semester hours of CCAF degree-applicable technical credit otherwise not applicable to this program may be applied.

7.4. 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. Career Field Flow Charts

Figure 1. Enlisted Career Path

Figure 2. Accession Level Training Flow

Figure 3. Retrainee Training Flow

Figure 4. 1A4X1 Assignment Locations

Enlisted Career Path

Education and Training Requirements	GRADE REQUIREMENTS				
	Rank	Earliest Sew-on	Air Force Average Sew-on	1A4X1 Average Sew-on	High Year of Tenure (HYT)
Basic Military Training School					
Apprentice Technical School (3-Skill Level)	Amn A1C	6 months 16 months			
Upgrade To Journeyman (5-Skill Level) - Complete 3 months duty position and apprentice experience before beginning journeyman training. - Minimum 15 months on-the-job training. - Complete appropriate CDC.	SrA	28 months	3 years	3 years	12 years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).					
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt select - 12 months OJT - Formal advanced skill training. - Must be 7-skill level for TSgt sew-on.	SSgt	3 years	5.4 years	4.6 years	20 years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt	5 years	13.9 years	13.2 years	24 years
	MSgt	8 years	16.7 years	17.6 years	26 years
USAF Senior NCO Academy (SNCOA) - Must be a SMSgt or SMSgt selectee. - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	SMSgt	11 years	19.3 years	19.5 years	28 years
Upgrade To Superintendent (9-Skill Level) - Minimum rank of SMSgt. - Must be a resident graduate of SNCOA (Active Duty Only).	CMSgt	14 years	21.3 years	22.1 years	30 years
Data current as of Jan 2001					

Figure 1

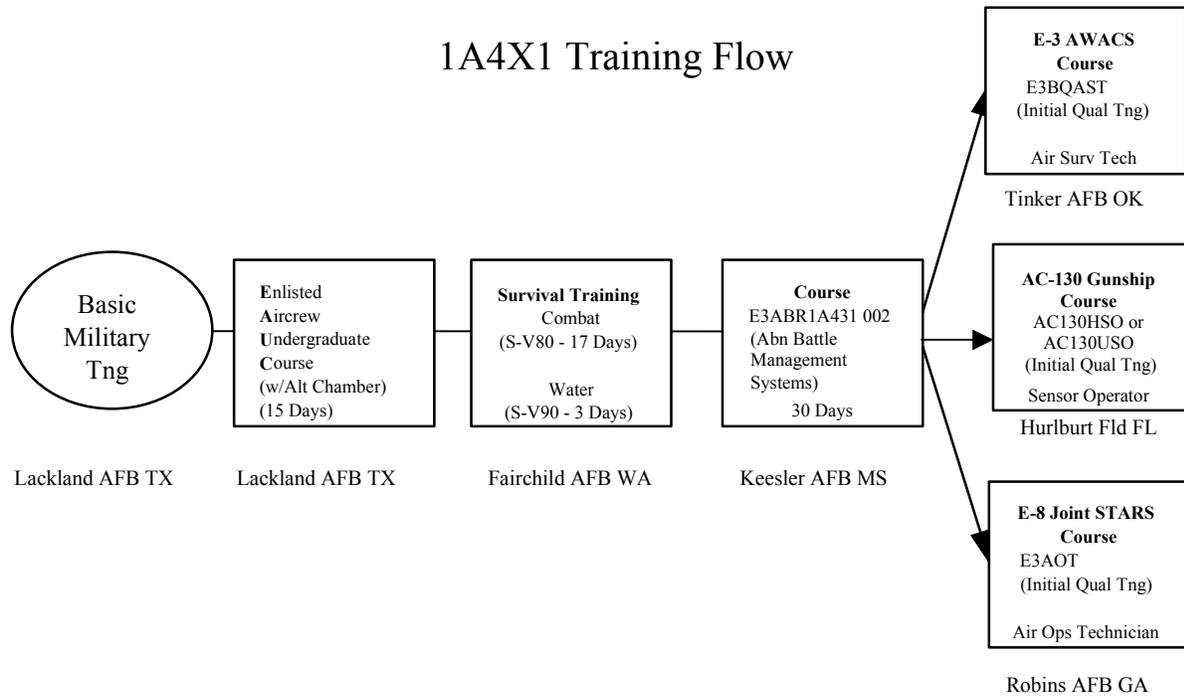


Figure 2

8.1. The flow outlined in figure 2 represents the formal training courses required for personnel entering and becoming fully qualified in the Airborne Battle Management Systems Specialty. The locations, course lengths, and titles are subject to change. The course owner will update changes in the Education and Training Course Announcements (ETCA) web site.

8.1.1. The course flow has been developed to minimize days students are awaiting training and to ensure survival training is received prior to AFSC award--minimizing the impact of not having the prerequisites come before entering weapons system training.

8.1.2. Personnel graduating from the Keesler AFB course are awarded AFSC 1A431. Wear of Basic Aircrew Member Badge will be IAW AFI 11-402 and MAJCOM supplements. The badge is not awarded permanently until the individual completes Initial Qualification Training at any of the weapons systems qualification courses. Failure to complete IQT is authority for supervisors to recommend revocation of wear of the aircrew member badge.

Careers Retraining Flow

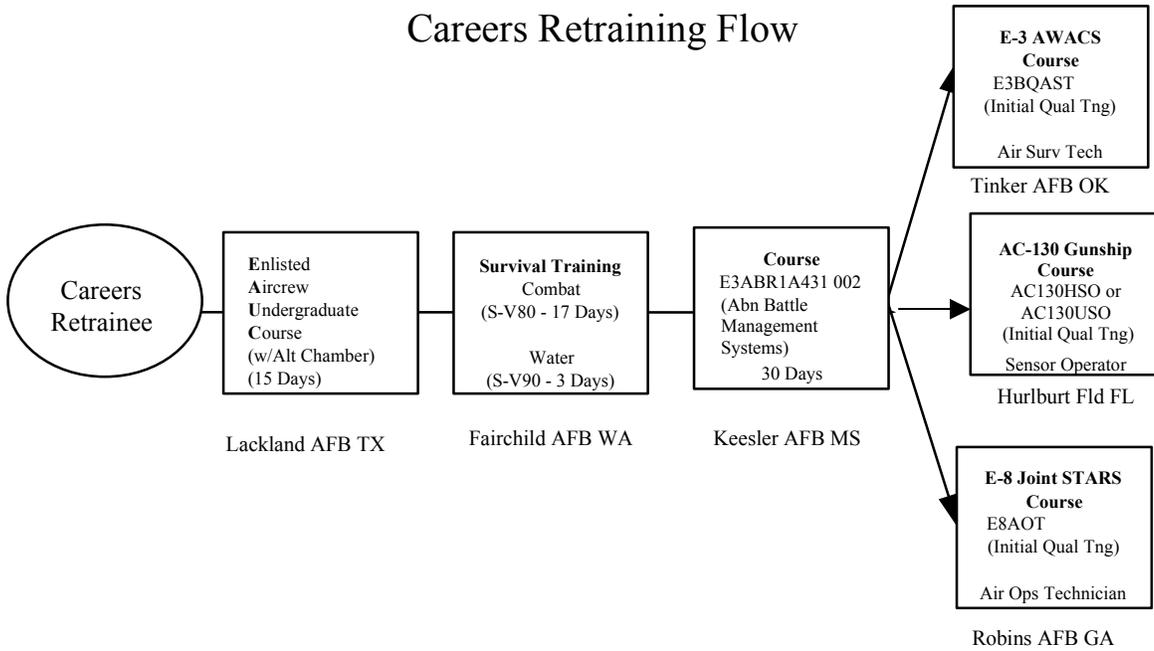


Figure 3

8.2. The flow outlined in figure 3 represents the formal training courses required for first-term personnel retraining into the Airborne Battle Management Systems Specialty (AFSC 1A4X1). This training flow depicts the mandatory formal training flow for individuals retraining to become Air Surveillance Technicians (AWACS), and Air Operations Technicians (Joint STARS).

8.2.1. Personnel retraining into 1A4X1 will be required to attend EAUC (Lackland), survival training (Fairchild), technical training, and weapons systems IQT.

1A4X1 Assignment Locations

Location	CMS	SMS	MSG	TSG	SSG	SRA	A1C	Student
Davis-Monthan AFB AZ			X					
Eglin AFB FL				X				
Elmendorf AFB AK	X		X	X	X	X	X	
Schreiver AFB CO			X					
Geilenkirchen AB GE			X	X	X			
Hickam AFB HI	X							
Hurlburt Field FL	X	X	X	X	X	X		
Kadena AB JA		X	X	X	X	X	X	
Keesler AFB MS			X	X	X	X		
Kirtland AFB NM				X				
Langley AFB VA	X	X	X	X				
Melbourne, FL				X				
Nellis AFB NV			X	X	X			
Osan AB Korea			X	X				
Randolph AFB TX			X					
Robins AFB GA	X		X	X	X	X	X	X
Seattle, WA				X				
SHAPE, Belgium		X						
Lackland AFB TX					X			
Tinker AFB OK	X	X	X	X	X	X	X	X
Tyndall AFB FL		X	X	X	X			

Figure 4

NOTE: The authorizations listed above are subject to change without notice. Crewmembers interested in assignments to locations listed should consult their MAJCOM functional manager or the AFPC resource manager for more detailed information about requirement for a specific location.

Section C - Skill Level Training Requirements

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

10. Specialty Qualifications:

10.1. Apprentice Level Training

10.1.1. Specialty Qualification.

10.1.1.1. Knowledge. Knowledge is mandatory of radar fundamentals and the operational characteristics of airborne battle management, surveillance, and mission systems; target detection and tracking functions; interpreting computer-generated console situation and tabular displays, electronically generated data, using identification procedures, performing electronic countermeasures functions; passing, receiving and interpreting data link information; using air-to-air and air-to-ground communications systems; emergency procedures and equipment; maintenance of standard and technical publications; performing emergency action procedures and conducting theater air activities.

10.1.1.2. Education. Completion of high school or having a general education development (GED) equivalency is mandatory for entry into this AFSC.

10.1.1.3. Training. Completion of the Enlisted Aircrew Undergraduate Course (J3AQR1A411 001) at Lackland AFB Texas is mandatory for pipeline and non-aviation service cross training students. Completion of the Airborne Battle Management Course (E3ABR1A431 002) (PDS Code IFZ) at Keesler AFB MS is mandatory for award of the 3-skill level AFSC.

10.1.1.4. Other. Physical qualification for aircrew duty according to AFI 48-143, *Class III Medical Standards*, is mandatory for entry, award, and retention of this AFSC. Qualification for aviation service according to AFIs 11-401 and 11-402 are mandatory for entry, award and retention of this AFSC. Completion of Basic Survival Training (Course S-V80-A) and Water Survival Training (Course S-V86-A or S-V90-A) is desired before entry into courses E3BQAST at Tinker AFB OK or E8AOT at Robins AFB GA, and mandatory prior to award of the 5-skill level. Eligibility for a secret clearance according to AFI 31-501, *Personnel Security Program Management* is mandatory for award and retention of the semi-skilled and skilled AFSCs.

10.1.2. Training Sources and Resources. Completion of the course E3ABR1A431-002 (PDS Code IFZ) at Keesler AFB MS satisfies the knowledge and training requirements specified in the specialty qualification section (above) for award of the 3-skill level.

10.1.3. Implementation. Entry into training is accomplished through initial accessions from BMTS or through retraining from any AFSC. After graduation from course E3ABR1A431 002, IQT starts when an individual is assigned to their first duty position. Thereafter, upgrade training is initiated anytime an individual is assigned duties they are not qualified to perform. QTPs will be used concurrently to obtain necessary duty positions qualification.

10.2. Journeyman Level Training:

10.2.1. Specialty Qualification. All qualifications for AFSC 1A431 apply to the 1A451 requirements.

10.2.1.1. Knowledge. In addition to knowledge required for the 3-level and other qualifications as listed above, an individual must possess the knowledge and skills necessary to operate and maintain Airborne Battle Management Systems. Knowledge is mandatory of air tasking orders; receiving, recording, and relaying operational threat data. Completion of qualification criteria in current assigned aircraft is mandatory. For AFSC 1A451D, knowledge is mandatory of air weapons control procedures and techniques, and aircraft performance characteristics and armament.

10.2.1.2. **Education.** To assume the rank of SSgt, individuals must be a graduate of the Airman Leadership School (ALS).

10.2.1.3. **Training.** Completion of the following is mandatory for award of the 5-skill level:

10.2.1.3.1. Completion of course E3ABR1A431-002 (PDS Code IFZ) at Keesler AFB MS and mission qualification training (Tinker, Davis-Monthan, or Robins AFB) is required. Personnel retraining into AFSC 1A4X1 must also attend the course.

10.2.1.3.2. All STS core tasks for assigned duty position.

10.2.1.3.3. All core tasks specified by an asterisk (*) in column 2 of the STS.

10.2.1.3.4. Completion of upgrade training (CDC and 15 months minimum performance period).

10.2.1.3.5. For award of AFSC 1A451D, completion of Airborne Warning and Control System Weapons Director Course at Tyndall AFB is mandatory.

10.2.1.4. **Experience.** Experience in performing or supervising activities such as aerospace surveillance systems, airborne command and control systems and/or mission equipment functions is desired. For upgrade to AFSC 1A451, experience is mandatory in functions such as: target detection, tracking, and reporting; receiving, displaying, recording and relaying threat data; or airborne warning and control systems operations. For retention of AFSC 1A451D, mission ready certification as a weapons director is mandatory.

10.2.1.5. **Other.** Physical qualification for aircrew duty according to AFI 48-143 Class III medical standards for entry, award, and retention of this AFSC is mandatory. Qualification for aviation service according to AFIs 11-401 and 11-402 for entry, award and retention of this AFSC are mandatory. Completion of Combat Survival Training (Course S-V80-A) and Water Survival Training (Course S-V86-A or S-V90-A) is desired before entry into course E3BQAST at Tinker AFB OK or E8AOT at Robins AFB GA, and mandatory prior to award of the 5-skill level. Eligibility for a secret clearance according to AFI 31-501 is mandatory for award and retention of the semi-skilled and skilled AFSCs.

10.2.2. **Training Sources and Resources.** Completion of CDC 1A451 satisfies the knowledge requirements specified in the specialty qualification section (above) for award of the 5-skill level. The STS identifies all core tasks required for qualification. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training are contained in AFIND 8. A list of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP. Requests for qualified trainers should be directed to your base training manager.

10.2.3. **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. CDC 1A451 and QTPs will be completed to be awarded the 5-skill level.

10.3. **Craftsman Level Training:**

10.3.1. **Specialty Qualification.** All 1A431 and 1A451 qualifications apply to the 1A471 requirements.

10.3.1.1. **Knowledge.** In addition to knowledge required for the 5-skill level and other qualifications as listed above, an individual must possess the aircrew management principles, knowledge, and supervisory skills necessary to supervise personnel, and operate and maintain Airborne Battle Management Systems.

10.3.1.2. **Education.** To assume the ranks of SSgt and MSgt, individuals must be graduates of the Airman Leadership School (ALS) and NCO Academy, respectively.

10.3.1.3. **Training.** Completion of the following requirements is mandatory for award of the 7-skill level:

10.3.1.3.1. Minimum rank of SSgt and 12 months OJT.

10.3.1.3.2. Completion of all QTPs.

10.3.1.4. **Experience.**

10.3.1.4.1. AFSC 1A471, qualification is mandatory as an Airborne Battle Management Systems Journeyman. Also, experience is mandatory in airborne warning and control systems, airborne battlefield command and control center, or joint surveillance target attack radar system. Experience is desirable in performing or supervising activities such as aerospace surveillance systems.

10.3.1.4.2. AFSC 1A471D, qualification is mandatory as an Airborne Battle Management Systems Journeyman, Weapons Director. Also, for award and retention of AFSC 1A471D, the experience required for annual qualification and certification as a combat mission ready weapons controller is mandatory.

10.3.1.5. **Other.** Physical qualification for aircrew duty according to AFI 48-143 Class III medical standards is mandatory for entry, award, and retention of this AFSC. Qualification for aviation service according to AFIs 11-401 and 11-402 are mandatory for entry, award and retention of this AFSC. Eligibility for a secret clearance according to AFI 31-501 is mandatory for entry, award and retention of this AFSC.

10.3.2. **Training Sources and Resources.** The STS identifies all tasks required for qualification. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training are contained in AFIND 8. A list of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP.

10.3.3. **Implementation.** Entry into 7-level upgrade is effective 1 Sep each year if an individual is selected for promotion to E-5. The only exception is STEP.

10.4. **Superintendent Level Training:**

10.4.1. **Specialty Qualifications.**

10.4.1.1. **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 management of Airborne Battle Management Systems and personnel. Knowledge is mandatory of airborne battle management systems operations, administrative techniques, aircrew personnel management, staff functions, budgeting, scheduling, training development, inspections, and standardization and evaluation, aircrew management principles and supervisory techniques.

10.4.1.2. **Education.** To assume the grade of CMSgt, individuals must be a graduate of the USAF Senior NCO Academy or Army/Navy Senior Academy in-residence.

10.4.1.3. **Training.** Completion of all training tasks is mandatory.

10.4.1.4. **Experience.** For AFSC 1A491, qualification is mandatory as an Airborne Battle Management Systems Craftsman. Experience is desirable in performing or supervising activities such as aerospace surveillance systems, training development, exercise plans and schedules, and standardization and evaluation.

10.4.1.5. **Other.** Physical qualification for aircrew duty according to AFI 48-143 Class III medical standards is mandatory for entry, award, and retention of this AFSC. Qualification for aviation service according to AFIs 11-401 and 11-402 are mandatory for entry, award and retention of this AFSC. Eligibility for a secret clearance according to AFI 31-501 is mandatory for entry, award, and retention of this AFSC.

10.4.2. **Training Sources and Resources.** The STS identifies all tasks required for qualification in the individual's duty position. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training are contained in AFIND 8. A list

of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP. Requests for qualified trainers should be directed to your base training manager.

10.4.3. **Implementation.** Entry into upgrade training is initiated when an individual possesses the 7-skill level and is in the grade of SMSgt. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. All QTPs will be completed to be awarded the 9-skill level.

Section D - Resource Constraints

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

12. Apprentice Level Training: None Identified.

13. Journeyman Level Training: None identified.

14. Craftsman Level Training: None identified.

Part II

Section A - Specialty Training Standard

1. Implementation. This STS will be used for technical training provided by AETC for classes beginning **1 October 2004**.

2. Purpose. As prescribed in AFI 36-2201, this STS:

2.1. Lists in column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties at the 3-, 5-, and 7-skill level AFSC in the Airborne Battle Management Systems Specialty ladder of the Aircrew Operation Career Field. These are based on an analysis of the duties in AFMAN 36-2108. *Items in column 1 with an asterisk (*) are the tasks/knowledge items that are trained in the resident wartime course.* Column 2 (Core Tasks) identifies, by asterisk (*), specialty-wide training requirements. NOTE: Core task is minimum qualification training required for upgrade to the 5-skill level, but only pertain to or are a function of the work center assigned.

2.2. Shows formal training and correspondence course requirements. Column 3 shows the proficiency to be demonstrated on the job by the graduate as a result of training in Course E3ABR1A431-002 (PDS Code IFZ) described in Education and Training Course Announcements (ETCA) web site (formally AFCAT 36-2223, USAF Formal Schools Catalog) and the career knowledge provided by the correspondence course. There is no advanced course. See AFIADL/AFSC/CDC listing maintained by the unit OJT manager for current CDC listings.

2.3. Provides certification for OJT. Column 4 is used to record completion of task and knowledge training requirements. Certification is accomplished as outlined in AFI 36-2201.

2.4. **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.

2.5. Becomes a job qualification standard for on-the-job training and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. Go means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct use of procedures.

2.6. Is 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.

3. Recommendations. Report unsatisfactory performance of individual course graduates to 332 TRS/TRR, 613 Hangar Road, Room 152, Keesler AFB MS 39534-2235. Reference specific STS paragraphs.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

**RONALD E. KEYS, Lt Gen, USAF
DCS, Air and Space Operations**

2 Attachments:

- 1. Qualitative Requirements**
- 2. Specialty Training Standard**

STS 1A4X1

<i>THIS BLOCK FOR IDENTIFICATION PURPOSES ONLY</i>		
NAME OF TRAINEE		
PRINTED NAME <i>(Last, First Middle Initial)</i>	INITIALS <i>(Written)</i>	SSAN
PRINTED NAME OF CERTIFYING OFFICIAL AND WRITTEN INITIALS		
N/I	N/I	

QUALITATIVE REQUIREMENTS

PROFICIENCY CODE KEY		
	SCALE VALUE	DEFINITION: The Individual
TASK PERFORMANCE LEVELS	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
	2	Can do most parts of the task. Needs help only on hardest parts. (PARTIALLY PROFICIENT)
	3	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
*TASK KNOWLEDGE LEVELS	a	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
	b	Can determine step by step procedures for doing the task. (PROCEDURES)
	c	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)
	d	Can predict, isolate, and resolve problems about the task. (ADVANCED THEORY)
**SUBJECT KNOWLEDGE LEVELS	A	Can identify basic facts and terms about the subject. (FACTS)
	B	Can identify relationship of basic facts and state general principles about the subject. (PRINCIPLES)
	C	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	D	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)

EXPLANATIONS

- * A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Examples: b and 1b)
- ** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task or for a subject common to several tasks.
- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.
- x This mark is used alone in course columns to show that training is required but not given due to limitations in resources.

Users are responsible for annotating training references (TR) to identify current references pending STS revision.

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		EAUC	CRS	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
1. CAREER LADDER PROGRESSION TR: AFMAN 36-2108										
1.1. Progression in AFSC 1A4X1		-	A		B					
1.2. Duties of AFSC 1A431/51/71/91/1A400/D	*	-	A		B					
2. COMMANDS TR: AF Mission Directives										
2.1 Unified/Combatant/Combined Command		A	A		B					
2.2 Northern Command		A	A		B					
2.3. Air Combat Command (ACC)	*	A	A		B					
2.4. Pacific Air Forces (PACAF)	*	A	A		B					
2.5. North American Aerospace Defense (NORAD)		A	A		B					
2.6. North Atlantic Treaty Organization (NATO)		A	A		B					
2.7. Air Force Special Operations Command		A	A		B					
2.8. US Special Operations Command		A	A		B					
2.9. Air Force Reserve Command		A	A		B					
2.10. Air National Guard		A	A		B					
3. AIRBORNE WEAPONS SYSTEMS TR: AFIs 11-2E3 V3, 11-2E8 V3, 11-2AC130 V3; AFFTP 3-3; T.O.s 1E-3A-43-1-1, 1E-8C- 43-1-1	*									
3.1. AWACS										
3.1.1. Mission		-	A		B					
3.1.2. Capabilities		-	A		B					
3.1.3. Functions		-	A		B					
3.1.4. Self-Protection		-	A		B					
3.1.5. Sensors		-	A		B					
3.2. Joint STARS										
3.2.1. Mission		-	A		B					
3.2.2. Capabilities		-	A		B					
3.2.3. Functions		-	A		B					
3.2.4. Self-Protection		-	A		B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		EAUC	CRS	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
3.2.5. Sensors		-	A		B					
3.3. AC-130 Gunship										
3.3.1. Mission		-	A		B					
3.3.2. Capabilities		-	A		B					
3.3.3. Functions		-	A		B					
3.3.4. Self-Protection		-	A		B					
3.3.5. Sensors		-	A		B					
4. COMMAND CONTROL COMMUNICATION, and COMPUTER (C4) SYSTEMS SECURITY	*									
* 4.1. Safeguarding Sensitive and Classified Information and Equipment TR: DOD 5200.1R; AFIs 31-401, 14-302; AFH 31-405	*									
4.1.1. Security of facilities TR: AFJI 31-102		-	A		-					
4.1.2. Handling		-	A		-					
4.1.3. Storage		-	A		-					
4.1.4. Documentation		-	A		-					
4.1.5. Protection		-	A		-					
4.1.6. Security classification codes		-	A		-					
* 4.2. Communication Security (COMSEC) TR: DoD 5200.1R; AFI 31-401; AFSSI 4100	*									
4.2.1. Definition of COMSEC		-	A		B					
4.2.2. Security procedures		-	A		B					
4.2.3. Security violations		-	A		B					
4.2.4. Critical information (CIs)		-	A		B					
* 4.3. Operational Security (OPSEC) TR: AFI 10-1101; AFPAM 10-1107	*									
4.3.1. Definition of OPSEC		-	A		-					
4.3.2. History of OPSEC		-	A		-					
4.3.3. Relationship of OPSEC to COMSEC information security and physical security		-	A		B					
4.3.4. OPSEC vulnerabilities		-	A		B					
4.3.5. OPSEC significance of unclassified data CIs		-	A		B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		EAUC	CRS	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
4.4. Physical Security TR: AFJI 31-102										
4.4.1. Work area		-	A		B					
4.4.2. Flightline		-	A		B					
4.5. Computer Security (COMPUSEC) TR: AFSSI 9100		-	A		B					
* 5. AIR FORCE OCCUPATIONAL SAFETY AND HEALTH PROGRAM (AFOSH) TR: AFIs 91-301, -302; AFI 123-1										
5.1. Occupational Hazards	*									
5.1.1. Laser Hazards		-	A		B					
5.1.2. Munitions		-	A		B					
5.2. AFOSH Standards										
5.2.1. Safety precautions in the work area	*	-	A		-					
5.2.2. Safety procedures around electronic equipment	*	-	A		B					
5.2.3. Safety procedures during airborne operations	*	A	A		B					
5.2.4. Safety procedures during flightline operations	*	A	A		B					
5.3. Foreign Object Damage (FOD) Program	*	-	A		B					
5.4. Bird Avoidance Strike Hazard (BASH) TR: AFI 91-202, AFPAM 91-212		A	-		B					
* 6. COMMUNICATION TR: AFIs 33-113, 33-xxx Series; ACPs 121,125,165; AFI 11-214; AFKAG; AFTTP 3-1 Vol 1, Atch 1-1										
6.1. Radio Telephone Procedures	*	A	A		B					
6.1.1. Associated Communication terms to their definition		B	-		-					
6.1.2. Types of calls		-	A		B					
6.1.2.1. Perform Long call		-	B		B					
6.1.2.2. Perform Abbreviated call		-	B		B					
6.2. Authentication Procedures										
6.2.1. Use Transmission authentication		-	2b		B					
6.2.2 Use Challenge/Reply		-	2b		B					
6.2.3. Electronic encryption systems	*	-	A		B					
6.2.4. Use manual encryption systems	*	-	2b		B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		EAUC	CRS	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
6. COMMUNICATIONS (Continued)										
6.3. Minimize Procedures	*	-	-		B					
6.4. Communications Systems TR: JCS Pub 3-56.23; T.O.s 1E-3A-43-1-1, , 1E-8C-43-1-1, 1C-130(A)H-1, 1C-130(H)U-1										
6.4.1. Internal	*	-	-		B					
6.4.1.1 Use Mission nets		-	-		-					
6.4.1.2. Use Selective intercom//Internal telephone		-	-		-					
6.4.1.3. Use Maintenance net		-	-		-					
6.4.2. External	*	-	-		B					
6.4.2.1. Voice communication		-	A		-					
6.4.2.1.1. UHF		-	A		B					
6.4.2.1.2. VHF		-	A		B					
6.4.2.1.3. HF		-	A		B					
6.4.2.1.4. SATCOM		-	A		B					
6.4.2.2. Digital Data Links										
6.4.2.2.1. TADIL-A/LINK 11		-	A		B					
6.4.2.2.2. TADIL J/LINK 16		-	A		B					
6.4.2.2.3. TADIL B/LINK1		-	A		B					
6.4.2.2.4. SCDL		-	-		B					
6.4.2.2.5 Broadcast Intelligence (BI) Systems		-	A		B					
6.4.2.2.6 SADL		-	A		B					
* 7. ELECTRONIC WARFARE TR: AF PD 10-7	*									
7.1. Electronic Attack (EA)										
7.1.1. Mechanical		-	A		B					
7.1.2. Electronic		-	A		B					
7.1.3. Communication		-	A		B					
7.2 Electronic Protection (EP)										
7.2.1 EP Techniques		-	A		B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		EAUC	CRS	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
7.3. EA Threat		-	A		B					
7.4. Operator EP Techniques		-	A		B					
7.5. Jamming										
7.5.1 Intentional		-	A		B					
7.5.2. Unintentional		-	A		B					
7.6. Air Force Spectrum Interference Resolution (AFSIR) TR: AFI 10-707		-	A		B					
8. WEATHER TR: AFMAN 15-113										
8.1. Weather conditions	*	-	-		B					
8.2. Reports	*	-	-		B					
8.3. Effects on the Weapons System		-	A		B					
8.4. Mission Impact		-	A		B					
* 9. BASIC CONCEPTS TR:; MSC 3-1;										
9.1 Electromagnetic Spectrum		-	A		B					
9.2. Sensors										
9.2.1. Radar										
9.2.1.1. Theory	*	-	A		B					
9.2.1.2. Components		-	A		B					
9.2.2. IFF / SIF										
9.2.2.1. Theory	*	-	A		B					
9.2.2.2. Components		-	A		B					
9.2.2.3. Modes		-	A		B					
9.2.3. Passive detection system		-	A		B					
9.2.4. Electro-Optical Sensors										
9.2.4.1. Theory		-	A		B					
9.2.4.2. Systems		-	A		B					
9.3. Computers	*									
9.3.1. Fundamentals		-	A		B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		EAUC	CRS	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
9.3.2. Components		-	A		B					
10. OPERATIONAL FUNCTIONS TR: AFDD-2;										
10.1. General Functions										
10.1.1. Mission planning		-	A		-					
10.1.2. Mission execution		-	A		-					
10.1.3. Mission debriefing		-	A		-					
* 10.2. Surveillance										
10.2.1. Detect		-	A		B					
10.2.2. Acquisition		-	A		B					
10.2.3. Track		-	A		B					
10.2.4 Reporting		-	A		B					
* 10.3. Identification TR: ACCIs 13-MCS Vol III; 13-AOC Vol III AFI 11-214; NI 10-15										
10.3.1. Purpose	*	-	A		B					
10.3.2. Identification Authority		-	A		B					
10.3.3. Identification methods										
10.3.3.1. Manual methods		-	A		B					
10.3.3.2. Automatic methods		-	A		B					
10.3.4. Track classification		-	A		B					
10.4 Battlespace management										
10.4.1. Types of doctrinal missions		-	A		B					
10.4.2.Types of control		-	A		B					
10.4.3. Weapons systems										
10.4.3.1. Friendly Systems		-	-		B					
10.4.3.2. Enemy Systems		-	-		B					
10.5 Command Reporting/TACON/OPCON										
10.5.1. Scrambles		-	A		B					
10.5.2. Diverts		-	A		B					
10.5.3. Alert status warning		-	A		B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		EAUC	CRS	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
* 10.5.4. Target data		-	A		B					
* 10.5.5. Intelligence		-	A		B					
* 11. USE REFERENCE SYSTEMS TR: AFI 11-214	*									
11.1. Geographical Reference System		-	2b		B					
11.2. Military Grid Reference System		-	2b		B					
11.3 Universal Transverse Mercator (UTM)		-	2b		B					
11.4. Latitude / Longitude (Lat / Long)		-	2b		B					
11.5. Bearing and Range		-	2b		B					
12. OPERATIONAL INTERFACE TR: ACCIs 13-MCS Vol III; 13-AOC Vol III; JCS Pub 3-56.23	*									
12.1. Theater Air Control System		-	A		B					
12.2. Army C2 System		-	A		B					
12.3. Naval C2 System		-	A		B					
12.4. Marine C2 System		-	A		B					
12.5. NORAD		-	A		B					
12.6. Other Agencies		-	A		B					
13. AIRCREW PUBLICATIONS TR: AFIs 11-215, 37-160; AFPD 21-3										
13.1 Define aircraft forms and their uses		B	-		-					
13.2. Air Force Aircrew Technical Order System										
13.2.1. Purpose	*	A	-		B					
13.2.2. Type		-	-		B					
13.2.3. Organization		-	-		B					
13.2.4. Maintenance		A	-		B					
13.3. Standard Publications Air Force										
13.3.1. Purpose	*	A	-		B					
13.3.2. Type		-	-		B					
13.3.3. Organization		-	-		B					
13.3.4. Maintenance		A	-		B					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		EAUC	CRS	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
14. AIRCREW MANAGEMENT TR: AFIs 11-202, 11-401, -402, -412, 38-201										
14.1. Responsibilities		A	A		B					
14.2 Aircrew Duties		A	-		B					
14.3. Aviation Service	*	A	A		B					
14.4. Aircrew Training Program TR: AFI 11-202 Vol 1										
14.4.1. Training phases		A	A		B					
14.4.2. Life support training (LST) TR: AFI 11-301	*	A	A		B					
14.4.3. Flight Crew Information File (FCIF)		A	A		B					
14.4.4. Initiate Flight Operations Improvement Reports		A	A		B					
* 14.5 Crew resource management TR: AFI 11-290	*	A	-		B					
14.5.1 Identify facts related to aircrew members duties		A	-		-					
14.5.2 Identify facts related to aircrew member responsibilities		A	-		-					
14.5.3. Crew positions		-	-		-					
15. INCENTIVE PAYS TR: DoD 7000.14-R Part A		A	A		B					
* 16. AIRCREW TRAINING TR:										
16.1 Identify facts related to qualification training		A	-		-					
16.2 Identify facts related to continuation training		A	-		-					
16.3 Identify facts related to standardization/evaluation		A	-		-					
16.4 Identify the use and purpose of flight records		A	-		-					
* 17. FLIGHT MEDICINE TR:		A	-		-					
17.1 Define basic functions concerning flight surgeon services		B	-		-					
17.2 Define basic aircrew member responsibilities concerning flight medicine		B	-		-					
* 18. ANTI-HIJACKING and ANTI-TERRORISM TR:										
18.1 Identify facts related to anti-hijacking		A	-		-					
18.2 Identify facts related to anti-terrorism		A	-		-					

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		EAUC	CRS	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
* 19. BASIC AERODYNAMICS TR:										
19.1 Define basic principals of aircraft flight controls		B	-		-					
19.2 Define aircraft instruments and their uses		B	-		-					
19.3 Perform calculations associated with aircraft missions		2b	-		-					

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. **P** indicates performance test only.

5. Standard. The standard is 70% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructor assistance is provided as needed 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 “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. Course Objective. These objectives are listed in the sequence taught by Block of Instruction.

7.1. Initial Skills Course:

7.1.1. Block 1. Aircrew Fundamentals

- 7.1.1.1 Orientation
- 7.1.1.2 Career Ladder Program
- 7.1.1.3 C4 Security Systems
- 7.1.1.4 AFOSH
- 7.1.1.5 Basic Operational Function Concepts
- 7.1.1.6 Basic Aircrew Management Fundamentals

7.1.2. Block 2. Basic Sensors

- 7.1.2.1 Electromagnetic Spectrum
- 7.1.2.2 Radar Fundamentals
- 7.1.2.3 Electro-optical Sensors
- 7.1.2.4 Identification Friend Foe System
- 7.1.2.5 Electronic Warfare Concepts

7.1.3. Block 3. Computers and Communications

- 7.1.3.1 Basic Computer Systems
- 7.1.3.2 Basic Aircrew Communications

7.1.4. Block 4. Reference Systems

- 7.1.4.1 Bearing and Range
- 7.1.4.2 Latitude/Longitude

- 7.1.4.3 Geographical Reference System
- 7.1.4.4 Military Grid Reference System
- 7.1.5. **Block 5. AC-130 Gunships**
- 71.5.1 Airframe Capabilities
- 71.5.2 AC-130 History and Functional Roles
- 71.5.3 Defensive Systems and Tactics
- 71.5.4 Operating Systems and Devices
- 7.1.6. **Block 6. Joint Stars**
- 7.1.6.1 History and Mission
- 7.1.6.2 Airframe
- 7.1.6.3 Radar Subsystem
- 7.1.6.4 Communication Subsystem
- 7.1.7. **Block 7. AWACS**
- 7.1.7.1 Mission
- 7.1.7.2 Airframe
- 7.1.7.3 Mission Subsystems
- 7.1.7.4 Surveillance and Identification Functions
- 7.1.8. **Block 8 Operational Interface and Battlespace Management**
- 7.1.8.1 Commands
- 7.1.8.2 Battlespace Management
- 7.1.8.3 Operational Interface

7.2. Advanced Skills Course:

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

Section C - Support Material

8. The following list of support materials is not all-inclusive; however, it covers the most frequently referenced areas.

NOTE: 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.

10. Air Force In-Residence Courses.

COURSE NUMBER	COURSE TITLE	LOCATION
J3AQR1A31110 001	Enlisted Aircrew Undergraduate Course	Lackland AFB
E3ABR1A431- 002	Airborne Battle Management Systems Apprentice Course	Keesler AFB
S-V80-A	Combat Survival Training	Fairchild AFB
S-V86-A	Water Survival Training	Pensacola NAS
S-V83-A	Special Survival	Fairchild AFB

11. Extension Course Institute (ECI) Courses.

COURSE NUMBER	COURSE TITLE	
CDC 1A451	Airborne Battle Management Systems Journeyman	

Section E - MAJCOM Unique Requirements**12. Air Combat Command Courses.**

COURSE NUMBER	COURSE TITLE	LOCATION
ACCAIC100	ACC Academic Instructor Course	All ACC Formal Schools
E3BQAST	AWACS Airborne Surveillance Technician	Tinker AFB, OK
E3UPSST	AWACS Senior Surveillance Technician	Tinker AFB, OK
E8AOT	Joint Stars Air Operations Technician	Robins AFB, GA

13. Air Force Special Operations Command Courses.

COURSE NUMBER	COURSE TITLE	LOCATION
AC130USO	AC-130U Sensor Operator	Hurlburt Field FL
AC130HSO	AC-130H Sensor Operator	Hurlburt Field FL