BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 11-301, VOLUME 1

25 FEBRUARY 2009

Incorporating Change 1, 2 May 2014

AIR FORCE SPECIAL OPERATIONS COMMAND Supplement

7 JANUARY 2015

Flying Operations

AIRCREW FLIGHT EQUIPMENT (AFE) PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at **www.e-Publishing.af.mil** for downloading or ordering.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: AF/A3O-AT

Certified by: AF/A3O-A (Brig Gen Lyn D. Sherlock)

Supersedes: AFI11-301V1, 19 July 2002

Pages: 128

(AFSOC)

OPR: AFSOC/A3TL

Certified by: HQ AFSOC/A3T (Col Steven J. Breeze)

Supersedes: AFI11-301V1, AFSOCSUP, 15 June 2010

Pages:63

This instruction implements Air Force Policy Directive (AFPD) 11-3, *Life Support* (to be renamed *Aircrew Flight Equipment*), and establishes AFE objectives, responsibilities, administrative, deployment and contingency operations, training, clothing, and equipment requirements for the new Aircrew Flight Equipment career field (former Aircrew Life Support and Survival Equipment). Major Commands (MAJCOM) and the Air National Guard (ANG) must comply with the requirements for Aircrew Flight Equipment in this publication and applicable Air Force technical orders. This publication applies to all MAJCOMs and the ANG when published in the ANGIND 2. Aircrew Flight Equipment Officers or MAJCOM Functional Managers (FM) for each MAJCOM or Numbered Air Force (NAF), as well as Field Operating Agencies (FOA) must send one copy of MAJCOM supplements to this publication to HQ USAF/A3O-AT, 1480 Air Force Pentagon, Washington DC 20330-1480. Send comments and suggested improvements to this instruction on an AF IMT 847, *Recommendation for Change of*

Publication, through appropriate channels, IAW AFI 33-360, Volume 1, *The Air Force Content Management Program—Publications*, to HQ USAF/A3O-AT. Intervening levels will evaluate all recommendations and forward the AF IMT 847 to the next echelon. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this instruction does not imply endorsement by the Air Force. **Records Disposition**. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at **https://www.my.af.mil/gcss-af61a/afrims/afrims/**.

(AFSOC) Air Force Instruction (AFI) 11-301, Vol 1, *Aircrew Flight Equipment (AFE) Program*, 25 February 2009, incorporating change 1, 2 May 2014, is supplemented as follows: This supplement applies to Air Force Special Operation (AFSOC) gained Air Force Reserve Command (AFRC) and Air National Guard (ANG) units unless noted. Subordinate units may supplement this guidance, supplements must be routed through AFSOC/A3TL. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with (IAW) Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, Publications and Forms Management, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force (AF) Form 847, *Recommendation for Change of Publication;* route AF Form 847s from the field through the appropriate functional' s chain of command. (T-3)

SUMMARY OF CHANGES

This interim change revises AFI 11-301V1 by (1) changing the AFE Quality Assurance (QA) guidance, (2) deleting guidance which is no longer required, and (3) changes authorities to waive wing/unit level requirements as identified with tier ("T-0, T-1, T-2, T-3") number following the compliance statement. A margin bar (|) indicates newly revised material.

(AFSOC) This document has been revised and must be completely reviewed. This supplement updates AFSOC policies and guidance. It incorporates numerous messages and policy changes unique to the ACC AFE program. Among the changes too numerous to mention in this section, this revision outlines technician training requirements, aircraft AFE requirements, deployment/contingency operations, and quality control program guidance.

Chapter 1

OVERVIEW

1.1. Mission. Provide USAF aircrew safe and effective aircrew flight equipment and programs to increase aircrew performance. Protect and sustain human life during flight operations. Prepare aircrew and passengers to survive, affect their rescue, and return to duty if forced to abandon their aircraft during an emergency. Provide aircrew protection from effects of Chemical, Biological, Radiological, and Nuclear (CBRN) weapons.

1.1.1. **(Added-AFSOC)** This instruction establishes minimum program requirements and outlines fundamentals, administrative and managerial requirements for all AFSOC Aircrew Flight Equipment flying operations, Special Tactics Squadrons (STS), Special Tactics Training Squadrons (STTS) and Direct Support Operators (DSO) and other functions that require AFE equipment and support.

1.2. Program Objectives:

1.2.1. Increase combat capability of the total weapon system by enhancing and maximizing the performance and survivability of the aircrew.

1.2.2. Reduce injuries and increase survival rates by providing aircrew and passengers with the best equipment available through new technologies, system training, and quality system maintenance.

1.2.3. Identify requirements for modernization and new equipment by analyzing: customer-validated operational requirements, operational deficiencies, USAF suggestions and recommendations, Air Force Technical Order (TO) improvement reports, aircraft mishap investigation and safety report recommendations, and joint developmental programs from other Department of Defense (DoD) agencies.

1.2.4. Train aircrew and passengers to use their Aircrew Flight Equipment (AFE) in a manner that reinforces recall during emergency situations. Training should be accomplished using training equipment that mirrors operational equipment and realistic scenarios, in which aircrew and passengers are likely to encounter. Realistic training will ensure aircrew and passengers have confidence in their equipment and increase their ability to use it.

1.2.5. Train and qualify AFE personnel (Air Force Specialty Code [AFSC] 1P0X1) to maintain AFE in optimum condition and to conduct Aircrew Flight Equipment Continuation Training (AFECT). Provide units the suitable resources to perform optimal equipment maintenance.

1.2.6. Conduct aircraft mishap safety investigations and analysis where AFE is involved IAW AFI 91-204, *Safety Investigations and Reports*.

1.3. Supplements and Waivers:

1.3.1. MAJCOM and FOA functional managers must coordinate and forward a published copy of their supplement to this publication to HQ USAF/A3O-AT, 1480 Air Force Pentagon, Washington DC 20330-1480.

1.3.2. MAJCOMs, ANG, Direct Report Units (DRU), FOAs, and wings may request waivers as well as deviations to requirements of this instruction when unique or unusual circumstances affect the unit's ability to implement stated policy or procedure. MAJCOMs, ANG, DRUs (e.g., /A3T or higher), FOAs and wings will forward the request by letter, e-mail or message to appropriate tiered level waiver authority explaining why a waiver is needed and describing the specific requirement that is creating the problem. HQ USAF/A3O-A is the waiver authority for all T-1 and T-0 requirements in this instruction. All items in this instruction are waiver authority T-1 unless otherwise specified.

1.3.2.1. If approved, waivers remain in effect for the amount of time needed to correct the problem causing the waiver requirement, not to exceed one year or upon revision of this instruction. The approving agency may cancel the waiver in writing if issues change the basic intent or requirement for the waiver.

1.3.2.1.1. **(Added-AFSOC)** Route MAJCOM or higher waiver requests to AFI 11-301 (all volumes) and this supplement through the Operations Group Commander to HQ AFSOC/A3TL.

1.3.2.1.2. **(Added-AFSOC)** ANG units will submit requests to NGB/A3OS. AFRC units will send requests to HQ AFRC/A3TR.

1.3.3. MAJCOMs may supplement this instruction for their unique programs within 180 days of the publication date of this instruction IAW AFI 33-360, *Publications and Forms Management*.

1.3.3.1. **(Added-AFSOC)** Wings/Groups should supplement this instruction within 180 days of its publication date to address specific requirements. Include HQ AFSOC/A3TL as part of supplement coordination process prior to final publication. Forward a copy of the published supplement to HQ AFSOC/A3TL. This paragraph does not apply to ANG units. AFRC units should also supplement the basic instruction within 180 days of its publication date. Include respective NAF/A3 and HQ AFRC/A3TR as part of the supplement coordination process prior to final publication. Forward a copy of the published supplements to NAF/A3 and HQ AFRC/A3TR. Supplements should address missions common for AFSOC peacetime and wartime contingencies. (T-2)

1.3.4. **(Added-AFSOC) Recommended Supplement Changes.**

1.3.4.1. **(Added-AFSOC)** Units are encouraged to propose amendments and recommend improvements to this instruction.

1.3.4.2. **(Added-AFSOC)** Send AF Form 847 to HQ AFSOC/A3TL, 100 Bartley Street, Suite 153W, Hurlburt Field, FL 32544 or the HQ AFSOC/A3TL organization e-mail: **AFSOC.A3TL@us.af.mil.**

1.4. Communications:

1.4.1. All subordinate units will ensure AFE matters, including requests for waivers, are channeled through their group AFE staff.

1.4.1.1. **(Added-AFSOC)** Wing/Group AFE staffs forward AFE matters to HQ AFSOC/A3TL AFRC units forward to HQ ARC/A3TR.

1.4.2. At the wing level, direct communication with HQ USAF/A3O-AT, Air Logistics Centers (ALC), Systems Program Offices (SPO), or Depots offices is not authorized without prior approval and coordination with respective MAJCOM, NAF, or ANG FM. If immediate contact is required in an emergency situation, advise respective MAJCOM FMs as soon as possible.

1.4.2.1. **(Added-AFSOC)** Flight Equipment Officers (FEO) and AFE Superintendents are authorized to contact HQ AFSOC/A3TL.

1.4.3. Do not request waivers by telephone. Use letter, e-mail or message format to request waivers depending on urgency.

1.4.4. Keep messages to a minimum. Provide information copies to all command agencies involved when sending messages requiring an action by Higher Headquarters (HHQ). Units will ensure equivalent local coordination on messages prior to transmission when responding to coordinated messages.

1.4.5. Use written communications to explain actions or request assistance from a higher echelon. Forward the request to the next HHQs for action and do not bypass next echelon.

1.4.6. E-mail Procedures. Units are encouraged to use e-mail to facilitate correspondence. E-mails shall be encrypted when they contain For Official Use Only (FOUO) information; Privacy Act Information; Personally Identifiable Information (PII); individually identifiable health information, DoD payroll, finance, logistics, personnel management, proprietary, and foreign government information; contract data; export controlled technical data or information; and operational information regarding status, readiness, location, or operational use of forces or equipment. Email encryption should be used to protect only the above types of information, and the number of e-mail recipients should be kept to a minimum.

1.4.6.1. An organizational and/or individual SIPR account is required for the AFE superintendent to respond to classified correspondence.

1.4.6.2. Digital signatures shall be used whenever it is necessary for the recipient to be assured of the sender's identity, have confidence the message has not been modified, or when non-repudiation is required. Examples include formal direction to a government employee or contractor, messages that stipulate an Air Force official position on any matter, and messages that commit to, authorize, or deny the use of funds in some manner.

1.4.7. Units will periodically check their respective MAJCOM web page to ensure receipt of all applicable information. Additional information can be found on the USAF AFE Community of Practice (CoP) at: **https://wwwd.my.af.mil/afknprod/ASPs/CoP/OpenCoP.asp?Filter=OO-OP-AF-61**.

1.4.8. **(Added-AFSOC)** HQ AFSOC/A3TL CoP has been discontinued. A new team site has been developed to replace this forum. The AFSOC Aircrew Flight Equipment Team Site is located at: **https://teams.afsoc.af.mil/sites/AFE/default.aspx**.

Chapter 2

RESPONSIBILITIES

2.1. Shared Responsibilities. MAJCOMs, DRUs, FOA Director of Operations (A3), NGB/A3OS, and comparable positions in the Numbered Air Forces (NAF), centers, and subordinate units, share responsibilities for execution of AFE policy.

2.2. HQ USAF/A3O (D irector of Operations) through HQ USAF/A3O-AT (Operational Training Division):

2.2.1. Is responsible for the Air Force AFE program.

2.2.1.1. The Chief, Operational Training Division (HQ USAF/A3O-AT) oversees the entire AFE program.

2.2.1.2. An active duty AFE functional manager (1P000) will be assigned to manage AFE matters and serve as the Air Force Career Field Manager (AFCFM) for AFSC 1P0X1.

2.2.1.3. Annually, or as required, convenes the Aircrew Flight Equipment Executive Committee (AFEEC) meeting. Membership includes the AFE AFCFM, AFE MAJCOM and ANG Functional Managers, and CMSgts (1P000). The intent of the working group is to communicate, provide course of action, and resolve operations and training issues (aircrew and technician) regarding the Air Force AFE program.

2.2.2. Coordinates on Air Staff, MAJCOM, ANG, DRU, and FOA operations and training issues (aircrew and technician).

2.2.3. Coordinates with other Air Staff offices that affect AFE programs; aircrew chemical defense equipment and procedures; Research and Development (R&D) of AFE; logistics; egress; and Counter-Chemical, Biological, Radiological, Nuclear (C-CBRN) defense doctrine, policy, training; and tactics, techniques, and procedures.

2.2.4. Hosts an annual Air Staff working group with representatives involved with AFE and aircrew performance responsibilities. Membership should include representatives from HQ USAF/A3O-AT (Operational Training Division), HQ USAF/A3O-AS, (Special Operations Division), HQ USAF/A4LM (Egress), AFMOA/SGOA (Aerospace Medicine), SAF/AQPC (Aircrew Flight Equipment PEM), HQ USAF/A7CX (CE Readiness), HQ USAF/A4LE (Logistics), HQ USAF/A4LM (Air Transportation), HQ AFSC/SEH (Safety), and aircrew representation. The intent of the working group is to build a network of contacts, keep lines of communication open, and resolve Aircrew Performance issues that are cross functional in nature. Similar working group meetings will be held annually at MAJCOM and ANG, and unit levels.

2.2.5. Advises on aircrew performance issues.

2.2.6. Briefs Air Staff directorates and other officials or organizations on AFE and training issues.

2.2.7. Serves on Air Force, joint inter-agency, and industry groups, boards, task forces, committees, and conferences dealing with aircrew performance operational issues.

2.2.8. Assists Air Education and Training Command (AETC) in formulating, implementing, and evaluating formal training programs for AFE personnel.

2.2.9. Biennially convenes a World-Wide Aircrew Flight Equipment Workshop.

2.2.10. Participates in MAJCOM and ANG AFE conferences, as needed.

2.2.11. Manages the USAF Outstanding AFE of the Year Awards Program, IAW AFI 36-2807, *Headquarters United States Air Force Deputy Chief of Staff Air and Space Operations Annual Awards Program*.

2.2.12. Monitors:

2.2.12.1. MAJCOM, ANG, and FOA aircrew performance programs.

2.2.12.2. Command-level technical concerns affecting aircrew performance systems and subsystems, manpower resources, and equipment and intervenes as required.

2.2.12.3. Commercial Off-The-Shelf (COTS) or Non-Developmental Items (NDI) that Air Force aircraft and aircrews might use as AFE.

2.2.12.4. Aircraft acquisition, conversion, and modification programs to ensure proper integration of AFE and weapon systems.

2.2.12.5. Development of Capabilities Decision Documents (CDD) IAW the Paperwork Reduction Act of 1974, Amended in 1996, and development of Initial Capabilities Documents (ICD).

2.2.12.6. Aircraft mishap investigation and safety reports in which aircrews have used AFE items or systems.

2.2.12.7. Fielding new AFE. Works with office of primary responsibility (OPR) and the AFMC AFE System Manager to ensure they publish and distribute technical publications and training equipment before new AFE is fielded. Ensures technical schools have assets to support new training requirements.

2.2.12.8. The Undergraduate Program Guidance Letter (UPGL) and shortfalls with formal AFE and survival training program quotas.

2.2.13. Annually, or as required, convenes the Aircrew Performance Executive Council (APEC) meeting.

2.2.14. Provides input to the Master Configuration List (MCL) for all aircraft-installed and aircrew issued aircrew performance related systems. The MCL will provide a list of all authorized subsystems and equipment in the Air Force aircrew performance inventory.

2.3. Aircrew Performance Executive Council (APEC):

2.3.1. The APEC is an O-6 level oversight and steering group body that provides direction and advocacy for all aircrew performance programs. The purpose of the APEC is to prioritize and provide Air Force direction to resource sponsors and the Single Managers for aircrew performance systems acquisition (77 AESG/CC); and sustainment (642 CBSG/CC).

2.3.2. The objective is to advocate Air Force sponsored aircrew performance systems research and development funding priorities, equipment procurement funding priorities, and

aircrew performance systems related Integrated Process Team (IPT) recommendations with user needs.

2.3.3. The APEC will operate under a charter approved by HQ USAF/A3O, and will meet annually to receive updates on aircrew performance systems programs and plans, discuss issues, and establish an Aircrew Performance Strategic Plan (APSP) for future development and acquisition. In addition, the APEC will prioritize sustainment activities related to currently fielded equipment. APEC membership will include representation from all MAJCOMs, the ANG, and the Air Staff.

2.3.4. HQ USAF/A3O-AT and 77 AESG/CC co-chair the APEC. The host (77 AESG/CC) will arrange for a suitable conference site, announce the meeting, and via message provide an agenda and specific details related to the meeting.

2.3.5. A sub-group of the APEC is the Aircrew Performance Working Group (APWG). The APWG will present updated roadmaps, acquisition status, and career field issues to the APEC.

2.3.5.1. The APWG will operate under a charter approved by HQ USAF/A3O-AT, and will meet at least 90 days prior to the APEC. Additional meetings whether in-person or via telecom will be scheduled at the discretion of the chairmen.

2.4. HQ USAF/SE (Chief of Safety). Through the Headquarters Air Force Safety Center, Human Factors Division (HQ AFSC/SEH); this office:

2.4.1. Provides statistical data, analysis, and recommendations on all aircraft mishap investigations or incidents involving AFE or training.

2.4.1.1. Provides this information to MAJCOMs to improve their continuation training lesson plans.

2.4.2. Monitors the Air Force Aircrew Performance program to ensure aircrews maintain safety standards.

2.4.3. Provides technical assistance on request to aircraft mishap investigation boards.

2.4.4. Serves on the APEC.

2.4.5. Attends the World-Wide AFE Workshop and MAJCOM meetings. Briefs attendees on aircrew use of AFE, their performance during aircraft mishap investigations, and general safety concerns.

2.4.6. Attends Air Force, joint agency, and industry meetings, boards, task forces, and conferences that deal with AFE, as required.

2.4.7. Provides a representative to the Air Staff APWG.

2.5. SAF/AQP (O ffice of the Assistant Secretary of the Air Force for Acquisition, Directorate Global Power Program):

2.5.1. Monitors the development and acquisition of new AFE.

2.5.2. Assigns an officer to serve on the APEC and ensures the AFE Program Management Directive contains the research, development, and acquisition strategies and priorities of the APEC.

2.5.3. Monitors aircrew performance System Development and Demonstration (SDD) programs aimed to satisfy validated user requirements.

2.5.4. Attends the World Wide AFE Workshop and briefs attendees on AFE research, development, and acquisition issues.

2.5.5. Provides a representative to the Air Staff and APWG.

2.6. HQ USAF/SG (Surgeon General). Through the Air Force Medical Support Agency (AFMSA/SG3PT), this office:

2.6.1. Manages all aerospace physiological training and support programs according to AFI 11-403, *Air Force Aerospace Physiological Training Program*.

2.6.2. Oversees the medical aspects of the aircrew performance program.

2.6.3. Sets guidelines for infection control.

2.6.4. Provides representation to the APEC and APWG.

2.7. Air Force Materiel Command (AFMC).

2.7.1. Conducts an AFE science and technology program to ensure technologies will exist to satisfy future Air Force requirements.

2.7.2. Through the Aeronautical System Center, 77th Aeronautical Systems Wing, 77th Aeronautical Systems Group (77 AESG/CC) for acquisition management.

2.7.2.1. Is the acquisition and initial procurement authority for aircrew performance systems, managing specific AFE programs through developmental phases and initial procurement, and works with the 642 CBSG (WR-ALC) on program transition for sustainment support and final systems disposition.

2.7.2.2. Maintains Operational Safety, Suitability, and Effectiveness (OSS&E) compliance of developmental and future AFE items IAW AFI 63-1201, *Life Cycle Systems Engineering*.

2.7.2.3. Review and provide the 642 CBSG recommended updates to the MCL for all man-side AFE related systems and published in TO 14-1-1, *U.S. Air Force Aircrew Life Support Equipment and Ensemble Configurations*.

2.7.2.4. Maintains and updates Air Force TO 00-25-06-2-1, *Intermediate Maintenance, 412A Survival/Life Support System Equipment Work Unit Code Manual*, when new equipment is fielded. If new equipment items are command specific, then the Lead Command will sponsor the update.

2.7.2.5. Ensures AFE systems and subsystems are integrated with newly developed technologies, systems, and subsystems.

2.7.2.6. Conducts product engineering evaluations and analysis with the purpose of providing users safe-to-fly certifications and recommendations.

2.7.2.7. Monitors and participates in the acquisition of AFE systems and subsystems for COTS aircraft converted for Air Force missions.

2.7.2.8. Monitors and establishes procedures for the acquisition of AFE items through the COTS/NDI programs. Monitors and tracks the procurement, approval, and capability

of COTS/NDI systems used to meet Air Force requirements documented in formal requirement documents to include requirement letters.

2.7.2.9. Works with and monitors other services' AFE acquisition and developments to avoid duplication of effort in programs.

2.7.2.10. Develops a technology transfer plan to move exploratory and advanced development AFE technologies into full-scale development.

2.7.2.11. Develops procedures to control and coordinate the configuration of developmental AFE subsystems and equipment among MAJCOMs and the ANG.

2.7.2.12. Encourages operational input to AFE programs by ensuring MAJCOM, ANG, and 642 CBSG representatives attend key acquisition events.

2.7.2.13. Co-authors in conjunction with 642 CBSG the development, publishing, and maintenance of an Aircrew Performance Strategic Plan (APSP) outlining aircrew performance systems acquisition and sustainment strategies. The APSP will use APEC directed priorities as a basis for the strategic plan.

2.7.2.14. Serves as the approval authority for implementation of new aircrew and aircraft-installed AFE items through initial procurement and accomplishment of the Transfer Management Plan.

2.7.2.15. Establishes procedures for intra-command coordination and configuration control of developmental aircrew performance subsystems and equipment.

2.7.2.16. Assists MAJCOMs in determining training requirements for developmental systems.

2.7.2.17. Assists MAJCOMs and ANG in developing initial production funding plans for each aircrew performance endeavor.

2.7.2.18. Provides technical assistance and laboratory analysis to aircraft mishap safety investigation boards as requested and to the Joint POW/MIA Accounting Command (JPAC), assisting in determining the status of DoD warfighters missing in action.

2.7.2.19. When initiating acquisition contracts, the contracts will include the required DoD Automated Information Technology Barcode Marking Standard on the packaging (see **Attachment 2**).

2.7.2.20. Ensures all development and COTS/NDI AFE programs include and meet the TO acquisition requirements set forth in AFI 21-303, *Technical Orders*.

2.7.2.21. Works with 642 CBSG on the transition management of developmental/procurement programs.

2.7.2.22. Provides representation to the APEC and APWG, and provides the status of their aircrew performance programs.

2.7.3. Through the 642nd Combat Sustainment Group (642 CBSG/CC) for sustainment management.

2.7.3.1. Is the sustainment authority for aircrew performance systems, managing specific AFE items providing sustainment support and final systems disposition.

2.7.3.2. Maintains Operational Safety, Suitability, and Effectiveness (OSS&E) compliance of fielded AFE items IAW AFI 63-1201, *Life Cycle Systems Engineering*.

2.7.3.3. Manages and maintains a MCL for all man-side AFE related systems and published in TO 14-1-1, *U.S. Air Force Aircrew Life Support Equipment and Ensemble Configurations*. The MCL will provide a list of all authorized subsystems and equipment in the Air Force AFE inventory.

2.7.3.3.1. The requirement to publish a MCL in TO 14-1-1 is rescinded once the Automated Life-sustaining Equipment Record Tracking System (ALERTS) MCL reports are published. The Air Force ALERTS OPR will ensure that standard report functions are published no later than 24 months from this publication date.

2.7.3.4. Ensures fielded AFE systems and subsystems are integrated with newly developed technologies, systems, and subsystems. Conducts product engineering evaluations and analysis with the purpose of providing users safe-to-fly certifications and recommendations.

2.7.3.5. Monitors and participates in the acquisition of AFE systems and subsystems for COTS aircrew performance converted for Air Force missions.

2.7.3.6. Monitors and establishes procedures for the acquisition of AFE items through the COTS/NDI procedures.

2.7.3.7. Develops procedures to control and coordinate the configuration of fielded AFE subsystems and equipment among MAJCOMs and the ANG.

2.7.3.8. Encourages operational input to AFE programs by ensuring MAJCOM and ANG representatives attend key acquisition events.

2.7.3.9. Employs a Human Systems Support Manager (SSM) to provide centralized logistics support of the AFE systems.

2.7.3.10. Serves as the approval authority for aircrew and aircraft-installed AFE items upon approval of the Transfer Management Plan.

2.7.3.11. Establishes procedures for intra-command coordination and configuration control of fielded aircrew performance subsystems and equipment.

2.7.3.12. Assists MAJCOMs in determining training requirements for system changes.

2.7.3.13. Provide inspection intervals for shelf-life of aircrew performance equipment IAW AFMAN 23-110, *Supply Manual*, Volume 7, Part 3, *The AF Shelf-Life Program*.

2.7.3.14. Leads effort to develop and submit Sustainment Engineering Requirements Plans (SERP).

2.7.3.15. When initiating contracts, the contracts will include the required DoD Automated Information Technology Barcode Marking Standard on the packaging (see **Attachment 2**).

2.7.3.16. TO managers in coordination with the equipment specialists will analyze all legacy TOs and present the APWG/APEC with their recommendations for digitizing all legacy TOs IAW AFI 21-303.

2.7.3.17. Assists MAJCOMs and ANG in developing out-year funding plans for fielded aircrew performance systems.

2.7.3.18. Provides technical assistance and laboratory analysis to aircraft mishap safety investigation boards as requested.

2.7.3.19. Provides representation to the APEC and APWG, and provides the status of their aircrew performance programs.

2.8. Air Force Operational Test and Evaluation Center:

2.8.1. Plans and conducts realistic, objective, and impartial Operational Test and Evaluation (OT&E) to determine the operational effectiveness and suitability of Air Force systems and their ability to meet mission needs.

2.8.2. Advises MAJCOMs and ANG on operational test issues.

2.9. MAJCOM and ANG. Assign a full time AFE MAJCOM Functional Manager (AFSC 1P000) to manage the aircrew performance program (MAJCOM FM may delegate their responsibilities to NAF points of contact [POC] or appoint weapon system team chiefs to handle specific issues). ***NOTE:*** AFE Functional Managers may be assigned to Component NAF to provide direct COCOM support.

2.9.1. Provides representation to the APEC and APWG, and provides the status of their aircrew performance programs.

2.9.1.1. **(Added-AFSOC)** Aircrew Flight Equipment is a staff function of the Director of Operations at HQ AFSOC, and of comparable staff agencies in AFSOC groups and squadrons. HQ AFSOC/A3TL is responsible for the overall management of AFE operations in accordance with AFPD 11-3, *Life Support,* and all volumes of AFI 11-301. (T-3)

2.9.2. Establishes command-specific aircrew performance programs according to AFIs and applicable MAJCOM and ANG instructions.

2.9.2.1. Establishes and publishes TO Options List for their respective commands. Exceptions to gaining MAJCOM options will be published by Air Reserve Component (ARC) aircrew performance managers.

2.9.2.1.1. **(Added-AFSOC)** Publishes TO Options list for AFSOC and AFSOC-gained units and posts final version on the AFSOC team site. (T-2)

2.9.3. Reviews aircraft mishap investigation and incident reports (command specific) involving AFE and resulting recommendations.

2.9.3.1. **(Added-AFSOC)** AFE will augment HQ AFSOC/SE for mishap investigations. (T-2)

2.9.4. Through the Allowance Standard (AS) manager; annually reviews and validates AS 016, *Special Purpose Clothing and Personal Equipment*, AS 660, *Weapons Systems Communications Requirements*, and AS 450, *Aircrew Flight Equipment*, AS 538, *Security Police Equipment, Organizational Small Arms Equipment, Military Dogs, Associated Equipment, and Civil Disturbance Equipment,* for accuracy and adequacy, and attends the Allowance Source Review.

2.9.4.1. Annually, or as required, HQ ACC will coordinate Allowance Standard review and Night Vision Device workshop.

2.9.5. Identifies operational requirements and prepares Joint Capabilities Integration Development System (JCIDS) documents as required. Coordinates efforts with appropriate maintenance activities prior to submission.

2.9.5.1. Maintains integrity of the OSS&E baseline for all AFE IAW AFI 63-1201 by ensuring newly developed (COTS/NDI) AFE items and modifications to existing AFE items pursued by units for Air Force aircraft as well as for aircrew use are evaluated and approved by the appropriate organization.

2.9.6. Participates in periodic Research, Development, Test and Evaluation (RDT&E) program reviews as requested by AFMC.

2.9.7. Provides qualified aircrew member and appropriate maintenance personnel (if applicable) expertise early in the requirements definition phase and is involved throughout the RDT&E and acquisition process.

2.9.8. Lead MAJCOMs will publish weapon system specific policy for configuration requirements addressing aircrew and aircraft-installed AFE IAW AFPD 10-9, *Lead Operating Command Weapon Systems Management*. Manages and maintains a MCL for all aircraft AFE related systems, which will be published in AFI 11-2MDS series Addenda A and AFI 11-301, Volume 2 as applicable.

2.9.8.1. **(Added-AFSOC)** When guidance is not available, configuration requirements for NSAv and leased aircraft will be defined by the supporting AFE section with coordination from the Aircrew and SQ/CC for that unit. Configuration proposals will be sent to HQ AFSOC/A3TL for final approval and inclusion into AFI 11-301, Vol 2, *Maintenance and Configuration Requirements for Mobility Air Forces (MAF) Aircrew and Aircraft-Installed Aircrew Life Support Equipment (ALSE*) or AFI 11-2MDS series. (T-2)

2.9.9. Participates in and monitors OT&E of AFE. If the item is of an MDS specific nature, the lead command for that MDS (refer to AFPD 10-9) will oversee the process with AFMC.

2.9.9.1. **(Added-AFSOC)** Monitors the introduction of new MDS into the command inventory and monitors modification programs of existing aircraft to ensure timely integration of AFE equipment and training. Coordinate with the aircraft System Program Office to ensure AFE issues are addressed. (T-2)

2.9.10. Attends Air Force, joint agency, and industry meetings, groups, boards, task forces, committees, and conferences dealing with developing, modifying, or researching AFE. Conducts MAJCOM workshops during the biennial World-Wide Aircrew Flight Equipment Workshop.

2.9.11. Advises users when the lead MAJCOM will no longer fund specific AFE items for them. This will allow operational and maintenance funded MAJCOMs and ANG time to budget for the equipment.

2.9.12. Establishes AFE Continuation Training (AFECT), (formerly Aircrew Life Support Continuation Training) programs.

2.9.13. Establishes and evaluates AFE technician and supervisor training programs IAW AFI 36-2201, *Developing, Managing, and Conducting Training*. FEOs and enlisted AFE instructors must comply with AFI 36-2105, *Officer Classification, Air Force Enlisted Classification Directory,* and **Table 4.1** of this instruction.

2.9.14. Coordinates formal training requirements between the MAJCOM and ANG, Director of Personnel for submitting class quotas for FEOs and technicians to attend AETC courses.

2.9.15. Convenes an annual AFE Training Review Board (TRB) and Workshop. Biennially, the TRB will be held in conjunction with the worldwide Aircrew Flight Equipment Workshop.

2.9.16. Ensures FEOs (rated officers) fly periodic sorties in primary assigned aircraft to evaluate the adequacy of personal and aircraft-installed AFE.

2.9.17. Provides guidance to units for using, controlling, and safeguarding AFE.

2.9.18. Establishes requirement and evaluates unit AFE Quality Assurance (QA) programs.

2.9.19. Evaluates AFTO IMT 22, *Technical Order Improvement Report and Reply*, IAW TO 00-5-1, *AF Technical Order System*, and AF IMT 1000, *Idea Application*, which refer to AFE systems.

2.9.20. Monitors command manning levels and coordinates with MAJCOM/DP/A1 to ensure AFE manning is optimized. Ensures units notify MAJCOM FMs prior to changing manpower authorizations.

2.9.21. Monitors the forecasting of replacement requirements for calendar time-change items IAW TO 00-20-9, *Forecasting Replacement Requirements for Selected Calendar and Hourly Time-Change Items.*

2.9.22. Monitors Deficiency Reports (DR) applying to the aircrew performance system.

2.9.23. Monitors the overall operation of the aircrew performance program in subordinate units. Serves as a focal point concerning unit aircrew performance matters.

2.9.24. Annually or as required, hosts a working group meeting with MAJCOM representatives involved with Aircrew Performance responsibilities. Membership should include; Aircrew from various MDS, Egress, Aerospace Medicine, Safety, CE Readiness, Logistics, and Survival, Evasion, Resistance, and Escape (SERE). The intent of this working group is to foster a spirit of cooperation, keep lines of communication open, and resolve Aircrew Performance issues that are cross functional in nature. Forward appropriate issues to Air Staff counterparts for resolution.

2.9.25. Monitors and reviews the Unit Type Code (UTC) Logistics Detail (LOGDET) for changes in missions and requirements.

2.9.25.1. **(Added-AFSOC)** HQ AFSOC/A3TL will support/conduct SAV, Unit Effectiveness Inspection (UEI) and the Commander's Compliance Inspection Program (CCIP) when required or requested by subordinate units. (T-2)

2.9.25.2. **(Added-AFSOC)** Augments HQ AFSOC/IG as required on unit inspection and other visits as requested by the Inspector General. (T-2)

2.9.26. Conducts periodic site visits (e.g., Staff Assistance Visit [SAV], Aircrew Standardization and Evaluation Visit [ASEV], Readiness Assistance Visit [RAV]) to subordinate units for the purpose of providing HHQ level assistance and to remain connected to unit level requirements.

2.9.27. Identifies, submits and advocates command aircrew performance program requirements through the command's Program Objective Memorandum (POM), Requirements Review Board, Financial Management Board, and other resource management system processes.

2.9.28. Monitors AFE cost factors for the Air Force Cost Analysis Improvement Group/Cost Per Flying Hour (AFCAIG/CPFH) program.

2.9.28.1. Identifies and defines, (by decision-tree method), total aircrew performance program AFCAIG/CPFH requirements for each MDS aircraft configuration within the command.

2.9.28.2. Provides AFE annual call requirements to the MAJCOM/A3/A4 AFCAIG/CPFH manager for inclusion in the AFCAIG/CPFH program funds budget process.

2.9.28.3. Notifies unit Operations Group commander or equivalent of approved “funded” requirements and ensures program needs are met.

2.9.29. Serves as AFE Functional Area Manager (FAM) for Aerospace Expeditionary Force (AEF) issues.

2.9.30. Provides a synopsis of installation-level audit report results from units within command. This cross feed provides an awareness of potential issues that units may evaluate at their base and take corrective action as necessary.

2.9.30. **(AFSOC)** Reviews Interservice/Intraservice Support Agreements (ISSA) involving AFSOC AFE functions.

2.9.31. **(Added-AFSOC)** Conducts a command-wide AFE workshop concurrent with the Worldwide AFE Workshop and a RTRB in the off years. This workshop is an opportunity to discuss command issues and will cover as a minimum AFSOC specific manning, new equipment, deployments, waiver requests, submissions and status of AFTO 22’s and dissemination of AFE information.

2.9.32. **(Added-AFSOC)** Ensure cargo parachute rigging requirements are accomplished IAW AFJ 13210(I), *Joint Airdrop Inspection Records, Malfunction/Incident Investigation, and Activity Reporting* (T-3)

2.9.33. **(Added-AFSOC) HQ AFSOC/IG AFE.**

2.9.33.1. **(Added-AFSOC)** HQ AFSOC/A3TL will be included in the development and implementation of all checklists and inspection criteria developed by the HQ AFSOC/IG AFE representative augmentee. (T-2)

2.9.33.2. **(Added-AFSOC)** The HQ AFSOC/A3TL representative develops the HQ AFSOC/IG Unit Effectiveness Inspection (UEI) and the Commander’s Inspection Program (CCIP) checklist, in accordance with AFI 90-201, *Inspector General Activities*, and accompanying HQ AFSOC supplements. (T-2)

2.9.33.3. **(Added-AFSOC)** Conducts Unit Effectiveness Inspection (UEI) and the Commander's Inspection Program (CCIP) of AFSOC and AFSOC-gained ARC units. (T-2)

2.9.33.4. **(Added-AFSOC)** Assesses and evaluates subordinate units' management and process effectiveness and determines mission performance capability.

2.9.33.5. **(Added-AFSOC)** Informs HQ AFSOC/A3TL of any observations, shortfalls, or recommended actions identified during UEIs or CCIPs (not previously identified in official reports) which effect guidance and AFSOC's AFE program.

2.10. Operations Group Commander or ARC Equivalent:

2.10.1. The operations group commander or equivalent will appoint a rated officer to serve as the group FEO (AFE Flight Commander). An AFE Senior NCO (or civil service or contractor equivalent) will serve as the group AFE Superintendent to assist the FEO/Flight Commander in the management of the wing AFE Program. These individuals and manpower positions will be assigned and organizationally aligned to the Operations Support Squadron (OSS)/OSL, which is a single stand-alone Flight, as well as all other AFE (or equivalent) functions, personnel, and manpower positions to include all military, civil service, and contractor equivalent will be assigned and organizationally aligned to the OSS/OSL (AFE Flight), (Guardian Angel, Special Tactics, and ANG units will determine alignment of these positions in the applicable supplement to this instruction). The group FEO and the AFE superintendent are responsible to the operations group commander, through the OSS/CC, for the management of the wing/group AFE program to include manpower, training, rotations of AFE personnel, and budget. ***EXCEPTION:*** Appointment of an FEO in the ANG is optional.

2.10.1.1. Civilian organizations, to include Most Efficient Organizations (MEO), High Performance Organizations (HPO) and re-engineered organizations will continue to comply with the provisions of their existing compliance documentation (e.g. Performance Work Statement [PWS], Statement Of Work [SOW] or Statement Of Objectives [SOO]) that is currently being enforced. When the compliance documents expire or when requirements change, the civilian organization will adhere to the new enforcement documentation (PWS, SOW, SOO) as directed by OG/CC and described in **paragraph 2.10.1**. The enforcement documentation shall be modified to acknowledge the transfer of all 1P0X1, AFE (formerly 2A7X4, Survival Equipment and civilian equivalent) work force authority and functions to the OG/CC. In the interim, these organizations/activities will provide survival equipment maintenance training for military and civil service personnel in all aspects of the career field IAW the Career Field Education and Training Plan (CFETP), as applicable.

2.10.1.2. Contracted organizations will continue to comply with the provisions of their existing contracts. Contracted documentation will be modified to acknowledge the transfer of functional liaison to the OG/CC and described in **paragraph 2.10.1**. Contracted organizations will be utilized to provide survival equipment maintenance training, and/or resources for military and civil service personnel in all aspects of the career field IAW the CFETP, as applicable. ***NOTE:*** All civilian and contracted organizations performing AFE functions are subject to HHQ level assistance from Director of Operations (A3) per **paragraph 2.9.25**, regardless of existing organizational alignment.

2.10.1.3. **(Added-AFSOC)** AFE personnel will be functionally, operationally and administratively aligned directly AFEO/AFES. "With duties at" does not meet the intent of this guidance.

2.10.1.4. **(Added-AFSOC)** Personnel supporting geographically separated and special mission units such as STS and the 6 SOS may reside within the squadrons they are supporting. These unique situations are not covered under the provisions of the PGL or AFI11-301, Vol 1.

2.10.2. Ensure at least one 1P071 or civilian/contractor equivalent is appointed to fill the AFE QA Inspector position with authority and visibility over all AFE activities. The AFE QA program will reside and be organizationally aligned to the OSS AFE Flight (OSL). Note: AFE programs with between 8 and 29 1P0X1s assigned are authorized one 1P071 QA Inspector manpower position. AFE programs with 30 or more 1P0X1s assigned are authorized two 1P071 QA Inspector manpower positions. MAJCOMs and National Guard Bureau may determine applicability of QA programs for smaller units, e.g. units with less than seven (7) personnel assigned. (T-2)

2.10.2.1. Ensure a rotation plan of AFE QA Inspectors is developed at the discretion of the AFE Superintendent. When possible, appointment as QA inspector will be a minimum of one year. AFE QA inspectors at ARC, civil service, and Contractor Officers Representative (COR) do not have any time requirements. (T-3)

2.10.2.1.1. **(Added-AFSOC)** ANG AFE QA inspectors do not have any time requirements. (T-2)

2.10.2.2. Designated AFE (1P071 or civilian/contractor equivalent) Quality Inspector (QI) may augment the AFE (1P071 or equivalent) QA inspector, as necessary, in the various AFE activities/sections. (T-3)

2.10.3. At a minimum, ensure the AFE superintendent, AFE QA or COR is appointed to the Wing Inspection Team (WIT) to evaluate and ensure compliance with AFE areas of responsibility. Note: Not applicable to AFGSC contracted units. (T-3)

2.10.4. Ensure the AFECT program is actively managed and instructors are qualified and certified IAW **Chapter 5** of this publication. AFRC units will forward waiver requests through the NAF channels to HQ AFRC. ANG waivers will be sent to NGB/A3OS.

2.10.5. Ensure adequate distraction-free training facilities, sites and equipment are available to conduct all AFECT events.

2.10.6. Ensure AFE facilities meet standards in AFI 32-1024, *Standard Facility Requirements*, and AFH 32-1084, *Facility Requirements*. Ensure all AFE items are stored/maintained within approved AFE facilities and IAW applicable technical data.

2.10.7. Ensure funds are allocated for the continued management of all AFE programs and contingency plans. This includes establishing a government purchase card for the Cost Per Flying Hour (CPFH), Operations & Maintenance (O&M), and aircrew chemical defense assets.

2.10.8. AFE skill sets are critical to combat operations. During wartime contingencies, Inspector General Exercises (IGX), Operational Readiness Exercises (ORE), Mobility Exercises (MOBEX), Readiness Assistance Visits (RAV), and generation exercises, AFE

personnel must be available to perform mission-essential duties to sustain AFE operations (i.e., AFE issue, fitting and inspection, aircraft-installed AFE configurations, pre-deployment AFE briefings, aircrew contamination control area (ACCA) operations, AFE decontamination, etc.). Ensure AFE personnel are not assigned duties that will detract from wartime proficiencies and requirements.

2.10.8.1. **(Added-AFSOC)** Ensure AFE personnel are knowledgeable of unit Operational Plans (OPLANS), Designed Operational Capabilities (DOCs), Special Instructions (SPINS), and Unit Type Codes (UTCs) as they relate to the operation and maintenance of AFE at deployed locations. (T-2)

2.10.9. Ensure standardized guidance is provided for aircraft and AFE configurations, mobility and chemical defense operations at bare-base and unit exercise locations. Standardized guidance will be provided to the maximum extent possible.

2.10.10. Ensure AFE functions are advised of changes to applicable contingency plans in time to ensure required equipment is available for deployment.

2.10.11. Ensure compliance with minimum AFE requirements as established by the provisions of AFI 11-202, Volume 3, *General Flight Rules*, this instruction, applicable technical orders, and aircraft flight manuals.

2.10.12. Ensure all aircrew and passengers wear or have readily available aboard the aircraft for use all required AFE. In no case will equipment worn or carried on aircraft be less than that prescribed by AFI 11-202, Volume 3, AFI 11-2MDS, Volume 3, and AFI 11-301, Volume 2, *Maintenance and Configuration Requirements for Mobility Air forces (MAF) Aircrew and Aircraft-Installed Aircrew Life Support Equipment (ALSE).* ***NOTE:*** Once aircraft AFE item configurations are added to all individual MDS-specific flying instructions, they will be removed from AFI 11-301 Vol 2. Manside AFE item configuration, clothing information and inspection requirements will be added to AFI 11-301 Vol 2 upon revision.

2.10.13. Ensure only flying clothing and AFE items approved "safe-to-fly" and authorized by the Air Force Equipment Management System (AFEMS), TOs, aircraft-specific manuals, and this instruction are utilized for flight operations. All other items require approval from appropriate MAJCOM AFE focal point prior to use.

2.10.13.1. Flight Boots. The primary aircrew boots, as authorized in AS 016, are the FWU-3/P, FWU-8/P, and the lightweight model 700, 770, 790 and sage green 690 Belleville® Aircrew Boot. Lace-up zipper inserts may be used. Boots, flying, extreme cold, Sorrel Premium, Mukluks, as well as vapor barrier thermal are authorized for wear during winter flight operations at the discretion of unit commander.

2.10.13.2. **(Added-AFSOC)** See T.O. 14-1-1, ASC 016 and AFSOC AFE team site safe-to-fly list for authorized equipment and clothing. (T-2)

2.10.14. Evaluate and forward waiver requests to respective MAJCOMs, NAFs or ANG as outlined in **paragraph 1.3**.

2.10.14.1. Operations Group commanders may request waivers to requirements of this publication when unique or unusual circumstances affect the unit's ability or requirements to implement stated policy or procedure. Forward requests by letter or message through

appropriate MAJCOM or ANG to HQ USAF/A3O-AT describing the specific requirement that is creating the problem and explaining why a waiver is needed.

2.10.14.1.1. **(Added-AFSOC)** Operations Group commanders will submit waivers to HQ AFSOC/A3T when they are unable to comply with the requirements established in the AFI 11-301 series. Waivers will be routed from HQ AFSOC/A3T to HQ USAF/A3O-AT for consideration. HQ AFSOC/A3T is the waiver authority for this supplement. ANG units will follow waiver procedures as outlined in **Paragraph 2.10.14.3**. (T-2)

2.10.14.2. If approved, waivers remain in effect for 1 year unless HQ USAF/A3O-AT specifies a shorter period of time, cancels it in writing, or issues a change that alters the basis for the waiver.

2.10.14.3. ANG units will forward waiver requests through the POC to NGB/A3OS.

2.10.14.4. AFRC units will forward waiver requests through applicable NAF to HQ AFRC/A3T.

2.10.15. Monitor TO/AFI directed local manufacture duties assigned to the AFE Flight (i.e., aircraft refurbishments, non-TO and non-AFI directed fabrications/repairs, etc.). The OG/CC is the approval authority for all work order requests of this nature as related to the AFE Flight.

2.10.16. **(Added-AFSOC)** Ensure an area is designated for use by aircrew members to evaluate the operational integrity of Night Vision Devices (NVDs), make proper adjustments and focus before departure for flight. (T-3)

2.10.17. **(Added-AFSOC)** Ensure AFE facilities are adequate to afford maximum protection of AFE and sufficient in size to support equipment inspection, storage (to include mobility bins), training, aircrew ready room, and office space for program management. Facilities must satisfy requirements identified in 15X/14D-series T.O.s, AFH 32-1084, and 91-series AFIs. (T-2)

2.11. Operations Group or Equivalent FEO (Flight Commander) or Equivalent/AFE Superintendent. The FEO (Flight Commander) and AFE Superintendent will:

2.11.1. FEOs (rated officer) will maintain currency in unit-equipped aircraft. If equipment modifications are made that change ground egress, ejection procedures, or affect crew comfort, etc the FEOs will fly with the new equipment to identify required changes to operational and training procedures. This duty may be delegated to squadron level rated officer for those units with more than one Mission Design Series (MDS), as described in **paragraph 2.14.1.1**.

2.11.2. Ensure AFE personnel are trained and certified IAW **Chapter 4** of this instruction. Additionally, ensure personnel with special/unique training are assigned to duty positions maximizing those qualifications (i.e., premeditated personnel parachute inspection/packing, pararescue equipment maintenance etc.). Movement of these personnel should be kept to a minimum necessary to ensure continuity and return of time and funds spent on training and qualification of these individuals.

NOTE: All civil service and contractor equivalent personnel internal and external new hires for this career field must be a graduate of the prior Aircrew Life Support (AFSC 1T1X1) and/or

Survival Equipment (AFSC 2A7X4) technical training courses (or equivalent), sister-service equivalent courses, or FAA certified equivalent background. Ensure this is written into the position(s) requirement, contract, and/or Statement of Work as applicable.

2.11.3. Monitor TO distribution accounts, authorized as their own TO Distribution Office (TODO), at each AFE section assigned within the operations group using the web-based Enhanced Technical Information Management System (E-TIMS). Electronic TOs will be filed and maintained IAW TO 00-5-1. Ensure that AFE sections maintain a current file of publications, TOs and manuals pertaining to issue, inspection, maintenance and use of assigned AFE, and ensure compliance with instructions contained therein. Ensure a familiarization program exists to ensure AFE personnel are knowledgeable of TOs and publications.

2.11.3.1. **(Added-AFSOC)** AFE Superintendents will establish accounts through the Electronic Technical Order Library (E-TIMS). Publication familiarization will also include effective training on accessing electronic publications and forms from DOD and governmental websites. (T-2)

2.11.3.2. **(Added-AFSOC)** Wing/group AFE Superintendents are functional OPRs on all related proposed TO changes and will establish procedures within the wing to assign improvement report numbers. As the functional experts, Superintendents are responsible for reviewing, evaluating, and processing wing-initiated AFTO Form 22 dealing with AFE related issues to ensure reports are correct, prior to submitting reports to higher headquarters. (T-2)

2.11.4. Electronic TOs do not need to be printed if available on-screen during equipment inspection or used for reference only. Ensure electronic copies (discs, etc.) are kept current and available for times when internet or LAN access is not available. Refer to T.O. 00-5-1, T.O. 00-5-3, *Air Force Technical Order Life Cycle Management*, and AFI 21-303, *Technical Orders*, for guidance on maintaining electronic TOs.

2.11.5. Conduct annual assessments of each section or satellite shop. Maintain records of such visits for at least 2 years IAW AFI 33-364, *Records Disposition – Procedures and Responsibilities*. The respective functional manager will determine assessment frequencies for the AFRC and AFSPC.

2.11.6. Prepare and evaluate AFE related portions of local support agreements. The AFE superintendent is responsible for conducting an annual review. Units providing host support to tenant units will maintain authorized AFE according to support agreements and directives.

2.11.6.1. **(Added-AFSOC)** Forward a copy of support agreements to HQ AFSOC/A3TL (Does not apply to ANG). AFRC units will follow guidance IAW AFRC Supplement. (T-2)

2.11.7. Ensure other units' reports (e.g., Operational Readiness Inspections [ORI], Unit Compliance Inspections [UCI], Air Force audits, etc.) are reviewed for benchmarking and comparison.

2.11.8. Monitor status of deficiencies identified during AFE QA inspections, AFE no-notice inspections, SAVs, UEIs, unit self-assessments and outside agencies until corrective actions have been completed and validates entries into Management Internal Control Toolset

(MICT). Corrective actions will be documented as prescribed by governing instructions or as required to reflect current status and actions taken. (T-3)

2.11.8.1. **(Added-AFSOC)** The QA process will also include other functions which require assessment on a routine basis. QA will conduct and document monthly checks on at least one of the major areas listed below on a rotational basis: (T-2)

2.11.8.1.1. **(Added-AFSOC)** Explosive locker/munitions program.

2.11.8.1.2. **(Added-AFSOC)** PMEL.

2.11.8.1.3. **(Added-AFSOC)** CTKs.

2.11.8.1.4. **(Added-AFSOC)** Administrative files to include technical orders, etc.

2.11.8.1.5. **(Added-AFSOC)** OJT program, to include task evaluations, etc.

2.11.8.1.6. **(Added-AFSOC)** Supply, to include control and accountability, documentation, supply product reviews, etc.

2.11.8.1.7. **(Added-AFSOC)** Inspection record files.

2.11.8.1.8. **(Added-AFSOC)** Storage of equipment.

2.11.8.1.9. **(Added-AFSOC)** Housekeeping.

2.11.8.1.10. **(Added-AFSOC)** QCI Program.

2.11.8.1.11. **(Added-AFSOC)** AFE Aircrew Training and Equipment.

2.11.8.1.12. **(Added-AFSOC)** Safety Program.

2.11.8.2. **(Added-AFSOC)** Open AFE QA no-notice inspections, SAVs, CCIPs, UEIs, and unit self-assessment discrepancies will be reviewed monthly until closed by the appropriate authority. (T-3)

2.11.9. Conduct initial task certifications for the AFE section NCOICs.

2.11.10. Gather squadron-level acquisition and sustainment recommendations from unit AFE and aircrew personnel to identify AFE systems requirements. MAJCOMs and ANG will task each wing/unit for inputs in preparation for annual APEC meetings.

2.11.11. Ensure newly developed (COTS/NDI) AFE pursued by units for Air Force aircraft as well as for aircrew use is evaluated and approved using 77 AESG requirements identified on the Air Force Portal at: **https://wwwd.my.af.mil/afknprod/ASPs/docman/DOCMain.asp?Tab=0&FolderID=OO-OT-MC-87-9&Filter=OO-OT-MC-87**.

2.11.11.1. **(Added-AFSOC)** Ensure all equipment modifications are approved by the MAJCOM, 77th Aeronautical Equipment Systems Group (AESG), and the 579th Combat Sustainment Squadron (642 CSG) prior to flight. (T-2)

2.11.12. Ensure FEOs and SNCOs attend the Life Sciences Equipment Investigation Course, and mishap investigation response kit(s) are developed and available to allow active participation as an interim or primary mishap investigation board member. Provide functional expertise representation to the base Disaster Control Group for response to major peacetime accidents.

2.11.12.1. **(Added-AFSOC)** Refer to AFPAM 91-211, *USAF Guide to Aviation Safety Investigation,* Attachment 2, for mishap response kit contents.

2.11.13. FEOs and AFE superintendents will contact their applicable MAJCOM and ANG when contractors/vendors contact them regarding product use.

2.11.14. AFE Superintendent (with assistance) will review and approve local In-Process Inspection (IPI) tasks annually for applicability. Document the annual review on the front of IPI sheet. Ensure IPI qualified personnel are annotated on the automated Special Certification Roster (SCR) or designated by unit commander via appointment letter for units that do not have access to an automated SCR or as determined by applicable MAJCOM and ANG. (T-3)

2.11.15. Ensure positive control of all pilferable parts and items assigned to AFE sections.

2.11.16. Ensure -21 and groundcrew CBRN equipment is not stored within the AFE section.

2.11.17. **(Added-AFSOC)** Implement group AFE policy, procedures and ensure AFE personnel qualifications, equipment, and manning meet mission requirements. The Superintendent is the focal point for AFE information distribution from HQ AFSOC/A3TL. (Does not apply to AFRC/ANG) (T-3)

2.11.17.1. **(Added-AFSOC)** FEO or equivalent will appoint in writing those authorized to conduct quality control inspections by name. Quality Inspector (QI) personnel will only perform Quality Control Inspections (QCIs) on equipment they are qualified/certified on IAW CFETP requirements. (T3)

2.11.18. **(Added-AFSOC)** Ensure each FEO/AFES possess a SIPRNET account for classified communications. Ensure all classified communications are accomplished on secure phones or SIPRNET. Troop movements, contingency operations, equipment shortfalls, contingency operating locations, contingency dates, and times, capabilities, Special Instructions (SPINS), and CONOPS are a few examples of information requiring added protection. (T-2)

2.11.19. **(Added-AFSOC)** Plan, direct, organize, evaluate, and inspect AFE programs.

2.11.19.1. **(Added-AFSOC)** Recommend assigning 2-3 SNCOs directly under the AFE Superintendent to assist in performing Superintendent level duties. This allows the FEO/AFE Superintendent to focus on steering the flight toward established goals and improves the flight's ability to maintain continuity when Superintendent is deployed. As required at ANG units. (T-2)

2.11.19.2. **(Added-AFSOC)** Superintendents will ensure that the parachute section is well supervised and that multiple experienced 7-levels are assigned to this section at all times. (T-3)

2.11.19.3. **(Added-AFSOC)** AFE is only responsible for performing local manufacture jobs that are required by TO, however it is recommended that local manufacture jobs be contracted through a local commercial source whenever possible. If the local manufacture request is valid and the AFE function does not have the internal capability to perform the request, it is the AFE function's responsibility to facilitate alternate solutions through local commercial sources. (T-3)

2.11.20. **(Added-AFSOC)** Geographically separated ST units will rely on the closest AFSOC wing/group AFES for policy oversight for example; QA program, supply, training. The ST AFES will provide overall guidance, equipment decisions, and other ST specific requirements that are identified and met. This guidance applies to but is not limited to; 352 SOG will provide oversight to 321 STS, 353 SOG will provide oversight to 320 STS, 919 SOW will provide oversight to 6 SOS and 720 STG will provide oversight to STTS in addition to all subordinate units. (T-3)

2.11.21. **(Added-AFSOC)** Annually (18 months for ANG) review and ensure AFE personnel are knowledgeable of unit Operational Plans (OPLANS), Designed Operational Capabilities (DOCs), Special Instructions (SPINS), ART, and Unit Type Codes (UTCs) as they relate to the operation and maintenance of AFE at deployed locations. (T-3)

2.11.22. **(Added-AFSOC)** Ensure aircrew and AFE are briefed and understand local turn in procedures for NVGs; NVGs are required to be returned to AFE after each mission. (T-3)

2.12. AFE Quality Assurance (QA).

2.12.1. At a minimum, one 1P071 or civilian/contractor equivalent will be appointed to provide QA oversight for the AFE program. The QA will be trained and certified using the Quality Assurance/Quality Control Certification Checklist and PowerPoint located on the AF AFE CoP or SharePoint. The AFE QA inspector will perform COR duties and responsibilities at related contractor operated locations, as applicable. MAJCOMs and ANG units may supplement this instruction to further outline roles, responsibilities, training and other program requirements as appropriate. Furthermore, as contractors cannot perform COR duties, the owning MAJCOM will determine who will perform these duties at location where no active duty, ANG or AFRC AFE are assigned. (T-2)

2.12.1.1. Ensure AFE QA program is effectively managed in accordance with this instruction and all applicable technical data and instructions. Aircrew Flight Equipment Quality Assurance Program (AFEQAP) is an automated QA database which is required for use in all AFE QA programs. The AFEQAP program and users guide will be located on the AF AFE CoP or SharePoint. (T-2)

2.12.1.2. AFE QA/Superintendent will establish Acceptable Quality Levels (AQL) for Personnel Evaluations (PE). Additional AQLs may be established for additional inspections. (T-3)

2.12.2. The AFE QA inspector will perform non-mission impact no-notice QA inspections within each AFE duty section. Results of no-notice inspections will be documented in AFEQAP and maintained for two years. AFE Superintendent will be immediately notified of any major discrepancies. (T-3)

2.12.3. AFE QA will publish and define the trend program in the unit supplement to this instruction. When trends are noted, recommend corrective action and assign an OPR/Office of Collateral Responsibility (OCR) until closed. Provide monthly trend analysis to the OSS/CC (or equivalent), Group FEO (Flight Commander), and AFE Superintendent upon request. The OSS/CC will up channel trend status to the OG/CC as required. Maintain trend data for at least one year. (T-3)

2.12.3.1. **(Added-AFSOC)** QCI may be documented on IPI sheet, IPI sheet may be discarded upon next inspection providing data has been entered into FERMS IAW this **Paragraph 3.7.6.1**. (T-3)

2.12.4. Coordinate on all requests for locally designed tools or equipment. (T-3)

2.12.5. Maintain records of all approved locally designed tools and equipment, including pictures or drawings and a description of the use for each item. Note: If pictures, drawings, or authorizations are not available, they will be re-accomplished. (T-3)

2.12.6. Manage Time Compliance Technical Order (TCTO) programs to ensure satisfactory integration of AFE with aircrew recovery systems, in cooperation with the AFE Superintendent. Advise AFE Superintendent of program delays or supply problems as they occur, and upon completion of the TCTO. Maintain copies of all applicable TCTOs for two years after rescission date. (T-3)

2.12.7. Manage TO distribution accounts for each AFE section assigned within the operations group, in cooperation with the AFE superintendent. Ensure that AFE sections maintain a current file of publications, TOs and manuals pertaining to issue, inspection, maintenance and use of assigned AFE, and ensure compliance with instructions contained therein. Ensure a familiarization program exists to ensure AFE personnel are knowledgeable of TOs and publications.

2.12.8. Provide guidance, evaluate, process, submit and track all AFTO Form 22, *Deficiency Reports* and suggestions affecting AFE in cooperation with the AFE Superintendent.

2.12.9. Develop and maintain applicable AFE In-Process Inspection (IPI) listings and accomplish an annual review with AFE Superintendent. IPIs will be updated as TO changes dictate. The IPI list must include nomenclature, specific TO, paragraph, and step number within the TO task where the IPI will be called for. When developing the IPI list, consult with AFE QI and NCOIC's on trends or problem areas that continually warrant extra supervisory attention. The list must be forwarded to AFE Superintendent for approval. (T-3)

2.12.9.1. **(Added-AFSOC)** An IPI is a separate inspection conducted by a qualified person on a task, part, procedure, action, or T.O. step to ensure 100% compliance. IPIs should be developed with the mindset that the step requiring an IPI is critical to the function and operation that if left unchecked may result in loss of life or equipment destruction/malfunction. (T-2)

2.12.9.2. **(Added-AFSOC)** IPI's will be accomplished on the following equipment: All Premeditated and Emergency Parachutes, ML-4 Survival kits, and NVGs. (T-2)

2.12.9.3. **(Added-AFSOC)** IPI listings in **Attachment 4** **Figures A4.1-A4.6** are the minimum required. AFES and units may add to the requirements. Submit additions to the AFES for approval IAW **Paragraph 2.12.8, 2.15.16**, and **2.15.16.1**. (T-3)

2.12.10. Provide direct oversight of deficiencies identified during AFE QA inspections, AFE no-notice inspections, SAVs, UEIs, and unit self-assessments (as applicable) until corrective actions have been completed, in coordination with the AFE Superintendent at least every 60 days. Corrective actions will be documented as prescribed by governing instructions or as required to reflect current status and actions taken. (T-3)

2.12.11. The QA process will also include other functions which require assessment on a routine basis. QA will conduct and document monthly checks on at least one of the major areas listed below on a rotational basis: Explosive locker/munitions, PMEL/TMDE, CTKs, administrative files (to include technical orders, etc.), OJT (to include personnel evaluations, etc.), supply (to include control and accountability, documentation, supply product reviews, etc.), inspection record files, storage of equipment, housekeeping, Quality Control Inspection (QCI), AFE aircrew training, safety, vehicle, and HAZCOM programs. (T-3)

2.12.12. The QA process will also monitor Detected Safety Violations (DSV), Technical Data Violations (TDV), and Unsatisfactory Condition Reports (UCR). This category represents observed events or conditions with safety implications or technical violations not related to an inspection or evaluation and are considered unsafe, not IAW established procedures, or in the case of equipment, unfit to operate. The AFEQAP database will be used to document any of these conditions. (T-3)

2.12.13. **(Added-AFSOC)** AFE Quality Assurance should become members of the wing inspection team (WIT) to observe AFE combat capability in accordance with the criteria listed in AFI 90-201, *The Inspection System*, as a minimum will cover equipment combat configuration, deployment procedures, weapons issues (if applicable), deployed site operations (facilities, equipment inspection and maintenance), aircrew chemical equipment donning, doffing, and redonning, aircrew ACCA processing, and equipment decontamination should be evaluated. Additionally, support agencies' (e.g., hospital, supply, etc.) ability to sustain the group's AFE program should be considered part of the observation process (Does not apply to AFRC/ANG units). (T-3)

2.12.13.1. **(Added-AFSOC)** QA AFE functional oversight resides in the Operational Support Squadron as follows: (T-2)

2.12.13.2. **(Added-AFSOC)** 17, 21, 22, 23, 26, 123 and 125 STS AFE functional oversight is the 720 OSS.

2.12.13.2.1. **(Added-AFSOC)** STTS AFE functional oversight is the 720 OSS.

2.12.13.2.2. **(Added-AFSOC)** 24 STS AFE functional oversight is the 724 OSS.

2.12.13.2.3. **(Added-AFSOC)** 321 STS AFE functional oversight is the 352 OSS.

2.12.13.2.4. **(Added-AFSOC)** 320 STS AFE functional oversight is the 353 OSS.

2.12.13.3. **(Added-AFSOC)** 6 SOS AFE functional oversight is the 919 OSS.

2.13. Operations Support Squadron Commanders:

2.13.1. Responsible for the wing/group AFE program to include manpower, training, rotations of AFE personnel, and budget, etc. Also, monitors related contractor operated locations IAW AFI 63-124.

2.13.2. Provide non-cost per flying hour program items, i.e., Gortex©, steel toed boots, hearing protection, to all assigned AFE personnel.

2.13.3. Route visit assessment reports through the operations group commander (or equivalent) to provide them with an accurate picture of units' health.

2.13.4. Monitor TCTO programs to ensure satisfactory integration of AFE with aircrew recovery systems.

2.13.5. Ensure instructions, publications, manuals, procedures, and TCTOs pertaining to the inspection, maintenance, and use of assigned AFE, systems, and subsystems are maintained according to HHQs directives.

2.13.6. Ensure AFE Continuation Training is accomplished IAW **Chapter 5** of this instruction, the appropriate AFI 11-2MDS-series, Volume 1 publications, and command supplements to this instruction.

2.13.7. Ensure the AFE program is operating in compliance with all applicable safety directives.

2.13.8. Ensure adequate funding is provided to sustain non-cost per flying hour program items.

2.13.9. Implement policies and procedures as HHQs directs.

2.13.10. **(Added-AFSOC)** Ensure, to the highest extent possible, AFE personnel (AFSC 1P0X1) are not assigned additional duties, details, or assignments (e.g., first sergeant, mobility NCO, shelter monitor, etc.) that interfere with their primary AFE duties. (T-3)

2.13.11. **(Added-AFSOC)** Notify HQ AFSOC/A3TL when AFE personnel cannot attend scheduled AFE courses (Program Manager Course, Basic Combat Survival training, etc.). The annual allocation of school quotas is based on the number used, and repeated cancellations reduce the number available for future use. Commanders must carefully review these cancellations and provide HQ AFSOC/A3TL with cancellation justification. (T-2)

2.14. Flying Squadron Commanders:

2.14.1. Appoint a rated officer to provide emergency Egress training as described in **paragraph 5.2.2.1**.

2.14.1.1. Rated officer will maintain currency in unit-equipped aircraft. If equipment modifications are made that change ground egress, ejection procedures, or affect crew comfort, etc the rated officer will fly with the new equipment to identify required changes to operational and training procedures for a particular MDS, as applicable.

2.14.2. Conduct OT&E programs on AFE as HHQs directs.

2.14.3. Restrict from flying any aircrew who have not completed required training events (grounding events only).

2.14.4. Ensure all aircrew process through the AFE section upon assignment or PCS, as well as before and after flying duties.

2.14.5. **(Added-AFSOC)** Commanders will ensure crew members return all previously signed out equipment to the AFE facility at the end of each flying day, upon returning from alert, Temporary Duty (TDY), or deployment. (T-3)

2.14.6. **(Added-AFSOC)** Squadron operations will notify the unit AFE section in advance of any changes in mission equipment/configuration requirements. AFE will ensure equipment changes are annotated on the AFTO Form 46. (T-3)

2.15. AFE Section/Satellite NCOICs:

2.15.1. AFE Section/Satellite NCOIC responsibilities may be consolidated, in whole and/or in part, at the AFE Flight level.

2.15.2. Maintain a current file of directives, procedures, TOs, and manuals pertaining to issue, inspection, maintenance, and use of AFE or systems possessed, and ensure compliance with instructions contained therein. Electronic TOs will be filed and maintained IAW TO 00-5-1, TO 00-5-3, and AFI 21-303.

2.15.2.1. **(Added-AFSOC)** Maintain a complete shop copy of (non-deployable) technical orders (TO). Maintain a complete set of TOs for each lead/independent unit type code. All TOs will be accomplished through electronic media. (T-3)

2.15.3. Monitor aircraft conversion and TCTO modification programs to ensure satisfactory integration of AFE with aircrew recovery systems. Advise wing/group FEO, AFE superintendent and AFE QA inspector of program delays or supply problems as they occur.

2.15.4. Ensure compliance with all AFE administrative, training, clothing, equipment, and mobility requirements as designated in the applicable chapters of this instruction.

2.15.5. Forward unit level acquisition and sustainment requirements to the operations group FEO and AFE superintendent. These inputs are the root of AFE systems requirements that feed the APEC process.

2.15.6. Maintain accurate copies of AFTO Form 392, *Parachute Repack Inspection and Component Record*, (or computer generated equivalent), on ACES II Drogue parachutes, and reference copies on ACES II Personnel Recovery Parachutes. ***NOTE:*** Computer software (ALERTS/ALSMS) may be used in lieu of AFTO Form 392.

2.15.7. Ensure access is restricted in the parachute shop/section to personnel directly involved in the parachute packing operations. This is to prevent tampering, damage, and or contaminants getting on parachute assemblies.

2.15.8. Ensure compliance with AFI 11-410, *Personnel Parachute Operations*, as applicable.

2.15.9. Ensure the capability exists to inspect, clean, repair and package aircraft thermal curtains and thermal radiation barriers if required. A qualified aircraft maintenance crew chief will remove thermal protective devices, inspects and reseals devices that are serviceable. Unserviceable devices are delivered to the AFE main section for inspection and repair. Devices and shields remaining sealed are not re-inspected.

2.15.10. Ensure only qualified repairs and modifications are performed on flight clothing and equipment IAW applicable technical orders and instructions. Owning individuals are responsible for sewing on rank and Velcro as required by AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*.

2.15.11. Provide (OG/CC approved) local manufacture capability to meet flying squadron mission requirements and monitor all local manufacture work order requests.

2.15.11.1. AFE personnel are not responsible for MWR or CE tent repair, machine covers, upholstery, installation of aircraft fabric patches, (AFE personnel can pre-cut

aircraft fabric patches), or other local manufacture projects not directly related to aircrew flight equipment.

2.15.12. AFE personnel are not responsible for the maintenance of groundcrew Night Vision Goggles (NVG) and devices, (i.e. Security Forces, Airfield Operations, etc.). ***EXCEPTION:*** Only for Special Tactics Team, Combat Control Team, and Guardian Angel already supported by AFE personnel for that specific operator mission.

2.15.12.1. **(Added-AFSOC)** The 6 SOS may maintain ground crew Night Vision Goggles.

2.15.13. Evaluate the extent of damage and wear to material and equipment IAW technical data, and determine whether to repair or replace.

2.15.14. Ensure only authorized equipment is issued or installed in survival kits/vests. NCOIC will contact their group FEO and AFE superintendent when contractors contact them directly regarding product use.

2.15.15. Develop and coordinate a workcenter specific local explosive safety program through the AFE FEO/Superintendent and wing safety office.

2.15.16. In consultation with AFE QA, recommend tasks that require IPI's to the AFE Superintendent for approval. (T-3)

2.15.16. **(AFSOC)** 1 (Added) Review and update IPI listing annually and forward changes to Operations Group or equivalent FEO or AFE Superintendent for review and approval. (T-3)

2.15.17. Conduct monthly scheduling meeting with Egress and Wing PS&D, as applicable.

2.15.18. Monitor and manage daily operations pertaining to the section they are assigned, (i.e., daily workloads, flying schedule coverage, leave, and appointments).

2.15.19. **(Added-AFSOC)** Utilize the HAF, AFSOC supplemented checklist and evaluate all aspects of management, equipment, and training. Forward a copy of the SA results to the AFES. The SA program is established for the purpose of reviewing key processes and provides an overall objective assessment of the AFE program. NCOICs conduct SA to evaluate all aspects of the AFE program semi-annually. The written report will outline quality trends (positive and negative), strengths, problem areas and solutions, AFE quality, customer satisfaction, internal and external agency support, personnel qualifications, publications and T.O. familiarization, command policy implementation, etc. (Does not apply to AFRC/ANG). (T-3)

2.15.20. **(Added-AFSOC)** Ensure preflight and post flight are accomplished on aircraft installed AFE. Ensure equipment is accounted for and serviceable.

2.15.21. **(Added-AFSOC)** If hand held lasers are issued from the AFE section, consult AFI 11301, Vol 4, *Aircrew Laser Eye Protection (ALEP),* found on the AFSOC AFE team site. NCOICs will ensure the applicable Laser (Danger) signs are posted. Ensure assigned personnel are trained on hazards of these devices, IAW AFI 48-139, *Laser and Optical Radiation Protection Program* and AFSOCSUP to AFI 48-139. (T-2)

2.16. Aircraft Commanders (AC). ACs will ensure required AFE is available prior to each flight and all personnel are briefed or trained on the use, care, and safeguarding of this equipment.

2.16.1. ACs of multi-place aircraft will ensure all prepositioned AFE items are serviceable, inventoried, and certified on the AFTO Form 46, *Prepositioned Life Support Equipment* (or computer generated equivalent). Before departing home station and following crew changes, review, sign, and date the AFTO Form 46 document to ensure all required protective clothing and AFE items have been certified as installed by AFE and configuration documents match mission requirements. Ensure appropriate number and type of life preservers are aboard for over-water missions carrying children and infants. Notify the AFE section of any onboard equipment shortages or unserviceable conditions. Note discrepancies on AFTO Form/IMT 781A, *Maintenance Discrepancy and Work Document*.

2.16.2. Crewmembers whose main function is performing duties in the rear of a multi-place aircraft, e.g., combat camera and aeromedical nurses and technicians will coordinate emergency actions and clothing requirements with a qualified crew member (i.e., aircraft commander, boom operator, loadmaster) prior to flight. ACs will determine the clothing requirements for the route of travel when performing passenger or patient transport missions aboard MAJCOM support aircraft. The AC is responsible for ensuring each crewmember is wearing the required clothing and equipment, or has it aboard the aircraft and readily available for flight or alert duty. Military passengers, except for litter bound patients, are responsible for ensuring clothing needs meet environmental requirements IAW AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*.

2.16.3. The AC or designated aircrew representative will document and ensure missing AFE items and enroute configurations are annotated on AFTO Form/IMT 781A and AFTO Form 46 (or computer generated equivalent). Entries will include as much information as possible to assist AFE in locating and recovering missing AFE items (i.e., station where discovered missing, names, agencies and persons contacted, etc.) Reports of survey will be initiated IAW AFMAN 23-220, *Reports of Survey for Air Force Property*.

2.16.4. ACs of multi-place aircraft will ensure all AFE items, (e.g. survival kits, life preservers, anti-exposure suits, emergency passenger oxygen systems [EPOS], parachutes, etc.), are returned to their proper storage location.

2.17. Aircrew Members:

2.17.1. Obtain personal flying equipment (i.e., flight suits, boots, gloves, etc.) from assigned/attached squadron supply, maintain accountability and serviceability, and ensure availability for maintenance.

2.17.1.1. Wear only authorized undergarments. The use of nylon/polyester undergarments in situations of increased risk of fire exposure (forward operations, flying, fuel handling, etc.) is not authorized.

2.17.2. Ensure flying helmets, oxygen masks, and headsets are carried in the helmet bag to and from the AFE facility. The helmet and mask are the only items authorized in the main compartment of the helmet bag. The headset will be carried in the helmet bag outer pocket.

2.17.3. Possess all required Aircrew Chemical Defense Equipment (ACDE) items prior to deploying to a chemical threat area or serving on conventional warfare alert as required by reporting instructions. Ensure ACDE has been fit and issued prior to deployment.

2.17.4. Receipt for ACDE on an AF IMT 1297, *Temporary Issue Receipt*, or other authorized forms when equipment is issued and properly sized and fitted by AFE personnel. Return ACDE to the AFE facility upon completion of training, alert tour, deployment or Temporary Duty (TDY).

2.17.5. Maintain proficiency in donning, doffing, buddy dress, and Aircrew Contamination Control Area (ACCA) decontamination procedures including open air processing as applicable.

2.17.6. Securely store all AFE to prevent damage or theft while in their possession. Receipt for NVG on AF IMT 1297, or other authorized forms when issued by AFE sections. Flight helmets, oxygen masks, and D-1 ACDE bags will not be palletized unless placed in a durable nesting box to prevent damage.

2.17.7. Perform preflight inspections on all assigned or prepositioned AFE as required by appropriate aircraft manuals, TOs, local policies, and HHQs directives.

2.17.8. In and Out-process through respective AFE sections.

2.17.9. **(Added-AFSOC)** Ensure AFE assets are returned to the AFE shop for required inspections and maintenance. Ensure aircrews are briefed and understand local turn in procedures for NVGs; NVGs are required to be returned to AFE after each mission. (T-3)

2.17.10. **(Added-AFSOC)** Ensure Night Vision Goggles (NVG) receive a preflight/post flight inspection and documented to include visual acuity for preflight. Units will use AFSOC Form 301, *AFSOC Aircrew NVG Preflight Log* (Optional requirement for STS). This form has entries for the date, time, goggle number, aircrew name, aircrew signature, viual acuity (L)/(R) and AFE Post Flight.

2.17.11. **(Added-AFSOC)** Do not perform any modifications or use any unauthorized AFE assets without prior coordination through HQ AFSOC/A3TL channels. (T-2)

2.18. Support Agencies:

2.18.1. Egress elements are responsible for removal and installation of integrated parachutes, survival kits and oxygen connectors as outlined in applicable Job Guides. Additionally, Egress personnel will locate inadvertent beacon activation on the flightline. AFE personnel will locate inadvertent beacon activations within their shops/vehicles, and on flightlines where Egress personnel are not assigned. Egress responsibilities are further defined in AFI 21-101, *Aircraft and Equipment Maintenance Management.*

2.18.2. Medical Treatment Facility (MTF):

2.18.2.1. Optometry Clinic: Provides optometry support for chemical warfare eyepieces, contact lenses, screening of users for laser visors, high contrast visors, and night vision devices. Additionally, perform annual eye exams on maintainers of NVG, and modifies aircrew spectacle temple bars used with the MBU-13/P mask IAW AFJI 44-117, *Ophthalmic Services*.

2.18.2.1.1. **(Added-AFSOC)** Ensure all AFE technicians performing NVD maintenance receive an annual eye exam and the results are documented on a AF Form 1098, *Special Task Certification and Recurring Training,* or equivalent.

2.18.2.2. Flight Medicine: Conducts quarterly visits to AFE sections to ensure compliance with TO 15X-1-1, *Maintenance Instructions, Oxygen Equipment*, standards. MAJCOMs and ANG units will determine visit frequency for geographically separated units. The flight surgeon inspects AFE shops for compliance with occupational health and safety standards and assists in resolving mask-fitting problems. Records of such visits are maintained IAW the Air Force Records Disposition Schedule (RDS) located at **https://www.my.af.mil/gcss-af61a/afrims/afrims**/.

2.18.2.2.1. **(Added-AFSOC)** Units will utilize the AFSOC AFE Flight Surgeon Inspection Checksheet (**Attachment 3**) and retain the completed checksheet for one year.

2.18.2.3. Medical Supply: Inspects and maintains first aid kits as applicable IAW applicable directives and replaces unserviceable components as necessary. Medical supply personnel will provide, or assist AFE units in acquiring, first aid kits, isopropyl alcohol, gauze pads, and other medical supplies used for cleaning and maintaining AFE.

2.18.2.4. Bioenvironmental Engineering: Conducts occupational health surveillance IAW AFI 48-145, *Occupational Health Program*. Determines adequacy of controls established for occupational health hazards.

2.18.2.5. Avionics: Ensure all Joint Helmet Mounted Cueing System (JHMCS) related AFE issues are routed through AFE FEO/Superintendent for resolution. Coordinates inspection of JHMCS maintenance helmets through AFE FEO/Superintendent.

2.18.2.5.1. Conducts solder repairs for AFE items as required.

2.18.3. Maintenance elements are responsible for the removal and installation of escape slides, wing well and over wing life rafts, 25-man life rafts, and 46-man life rafts (to include the Age Limited Kits).

2.19. (Added-AFSOC) Direct Support Operators (DSO) Commanders and Personnel.

2.19.1. **(Added-AFSOC)** DSO units will supply funding to the SOSS for initial and replacement parts to support flight equipment requirements.

2.19.2. **(Added-AFSOC)** DSOs will only be assigned to a single unit and maintain one set of flight equipment to be used on various MDS as much as possible. For example, a DSO that is primarily assigned to the unit that tracks the ARMS records will be the unit that is responsible for the DSO's flight equipment. This will reduce the amount of equipment maintained per individual and assist in proper tracking of equipment. (T-3)

2.19.3. **(Added-AFSOC)** Each DSO is responsible for their equipment and will ensure AFE assets are returned on time for inspections and post deployment accountability.

2.20. (Added-AFSOC) Forward Arming and Refueling Point Personnel (FARP).

2.20.1. **(Added-AFSOC)** FARP units will supply funding to the SOSS for initial and replacement parts to support flight equipment requirements.

2.20.2. **(Added-AFSOC)** FARP personnel will only be assigned to a single unit and maintain one set of flight equipment to be used on various MDS. FARP Personnel will utilize the same unit that tracks ARMS records to maintain their personnel flight equipment. This will reduce the amount of equipment maintained per individual and assist in proper tracking of equipment.

2.20.3. **(Added-AFSOC)** Each personnel is responsible for their equipment and will ensure AFE assets are returned on time for inspections and post deployment accountability.

2.20.4. **(Added-AFSOC)** FARP and Aerial Bulk Fuel Delivery System (ABFDS) AFE equipment requirements are addressed in AFI 23-201, *Material Management*. HQ AFSOC/A4 funds individual AFE items for FARP teams (excluding NVDs) and the users' organization is responsible for funding individual AFE items for Aerial Bulk Fuel Delivery System personnel.

2.20.5. **(Added-AFSOC)** If applicable, coordinate with the local Fuels Management flight for maintenance/fitting of Forward Aerial Refueling Point and Aerial Bulk Fuel Delivery System team members AFE assets (i.e., helmet and oxygen mask to include oxygen connectors). Storage of this equipment will be at the discretion of the AFES. The Fuels Management flight will be responsible for funding and obtaining parts required for maintenance. Additionally, the Fuels Management flight will provide the AFES with a POC to contact if AFE is overdue prescribed inspection intervals. Consult AFI 23-201, *Fuels Management*, if additional guidance is required. (T-3)

Chapter 3

AFE PROGRAM MANAGEMENT

3.1. Purpose. This chapter provides guidance to assist AFE personnel in administering key areas necessary for effective management of the AFE program.

3.2. Budgeting:

3.2.1. Each AFE activity must use established DoD and USAF budgeting procedures to ensure their AFE programs are properly funded.

3.2.2. Each AFE activity will prepare and submit a detailed annual budget and financial plan to their appropriate commanders and resource advisors. Submit unfunded requirements during mid-year and end-of-year calls IAW MAJCOM procedures.

3.2.2.1. **(Added-AFSOC)** Each AFES will forward information copies of Unfunded Requests (UFR) to HQ AFSOC/A3TL. (T-2)

3.2.2.2. **(Added-AFSOC)** AFE personnel need to closely coordinate with their Wing/Group Resource Advisor (RA) and Financial Management (FM) offices to ensure AFE requirements are identified during various budget drills. (T-3)

3.3. Supply Accounts:

3.3.1. The OSS AFE section will budget for and establish their own supply account as specified by AFMAN 23-110, Vol 2, Part 13, Chapter 8.

3.3.2. When appropriate, local contingency plans will include qualified AFE technicians who will assume supply custodial responsibilities at deployed AFE locations.

3.3.3. Ensure custodians receive base supply customer training as needed IAW AFMAN 23-110, *Supply Manual*, Volume 2, Part 13, and the Education and Training Course Announcements (ETCA) site at: **https://etca.randolph.af.mil**/.

3.3.4. Develop procedures to track supply, equipment and clothing expenditures so as to provide quantitative requirements to the unit commander and resource manager to assist in and justify budgeting and funding requirements.

3.3.5. To ensure/justify equipment authorizations, units will maintain a current printed copy of the TORC screen for each NSN. This product will be used as the configuration data resume list. Refer to AFH 170-1, *Resource Manager's Handbook* (projected to be AFPAM 65-605).

3.3.5.1. **(Added-AFSOC)** TORC screens must be printed and signed annually. Each ASC and NSN must have a TORC screen printed with the applicable configuration codes. Units will also maintain a Master Configuration Data List (MCDL) as a guide to show authorization levels of each item. The MCDL will include NSN, nomenclature, ASC (reason for authorization), rationale for BOI (example: authorizations, spares and mobility), total on-hand and shortage/overage. Retain copies of the TORC and MCDL in TAB B of Custodian Account/Custody Receipt Listing (CA/CRL) for each account. ANG units should utilize AFEMS Ad-Hoc configuration document (Combined TORC/TINC) provided by NGB/A4RMS through their installation LRS EAE. (T-3)

3.3.6. Ensure applicable Force Activity Designators (FAD) code is used when requisitioning AFE. When ordering time-change items, use TEX Code 8 to by-pass base level stock (if remaining service-life is inadequate to meet mission needs) and advice code "2G" to ensure assets received from depot have the most service-life remaining on item.

3.3.6.1. **(Added-AFSOC)** SOSS/OSS support elements will use the FAD Code of the flying unit they are supporting to order supplies and equipment.

3.3.7. Report time-change component requirements IAW TO 00-20-9 and HHQs directives. AFRC associate units will provide information copies to their respective AFRC NAF.

3.3.8. Use AS 538, AS 450, AS 660, aircraft configuration instructions, mission requirements, Logistics Details (LOGDET), AFEMS, MAJCOM specific guidance and this instruction to determine the basis of equipment required.

3.3.9. Each supply account custodian must submit supply difficulty and mission impact letters as required.

3.4. Air Force Cost Analysis Improvement Group/Cost Per Flying Hour (AFCAIG/CPFH) Program:

3.4.1. Aircraft AFE components either on or off aircraft, to include prepositioned, used solely for flying operations are included as part of the CPFH program. In addition, aircrew equipment (other than uniforms and personal items are CPFH expenses. To purchase these items, use EEIC 644 for Materiel Support Division (MSD) items, EEIC 605 for General Support Division (GSD) items, and EEIC 61952 for Government Purchase Card (GPC) items. Units should use the most recent FY standardized CPFH RC/CC and PFMR/ORG codes applicable to their unit. Equipment items are not funded through the CPFH program.

3.4.2. AFE and A4 AFCAIG/CPFH managers will identify and define, (by decision-tree method), total aircrew performance program AFCAIG/CPFH requirements for each MDS aircraft configuration within the command that adhere to HAF and MAJCOM guidance. Items not passing the decision-tree method for AFCAIG/CPFH AFE funding will be considered non-fly items.

3.4.3. **(Added-AFSOC)** AFES will coordinate with the MXG RA through OG RA on CPFH purchases in excess of $100K.

3.5. Equipment Redistribution. In the event AFE becomes excess to organizational needs, the AFE superintendent will notify respective MAJCOM, ANG, or NAF FMs for possible redistribution prior to turn-in.

3.6. Transfer of AFE:

3.6.1. During aircraft transfers or movement of AFE, communication between depot, modification agencies, and gaining or losing units is required. Comply with the instructions in AFI 21-103, E*quipment Inventory, Status, and Utilization Reportin*g, AFMAN 23-110, Volume 2, Part 2, Chapter 15, *Asset Reporting, Redistribution, and Disposal*, and TO 00-20-1, *Aerospace Equipment Maintenance General Policies and Procedures*.

3.6.1.1. **(Added-AFSOC)** Aircraft transfers will be accomplished by providing the full AFI 11-2MDS-Series AFE configurations. When properly coordinated between gaining and losing units of the same MDS AFE may retain the equipment as long as the minimum

ferrying equipment is provided and the gaining and losing units remain within their authorized equipment levels. Additionally, AFE equipment will have a minimum of 14 days left on 30 day inspections, 6 months for 365 or over inspections, and the losing unit must notify the gaining Superintendent of aircraft that will remain TDY on station longer than 8 months away from the assigned base. (T-3)

3.7. Control (QC). AFE QC programs are designed to provide feedback to technicians, trainers, supervisors, and managers to eliminate defects and deviations from established guidance. (T-3)

3.7.1. QI Requirements. AFE QIs are 1P071, highly experienced/qualified 5-level technicians or civilian/contractor equivalent trained and certified using the Quality Assurance/Quality Control Certification Lesson Plan located on the AF AFE CoP or SharePoint. AFE QIs will augment the AFE QA Inspector as required. (T-2)

3.7.2. Quality Control Inspection (QCI). QCI is a process of visual examination (without disassembly) of specific AFE items to ensure the highest level of product quality.

3.7.2.1. Perform QCIs on at least 10 percent of each type of equipment inspected weekly (pre-flight and post-flight inspections do not require QCIs), and 100 percent of all survival kits, repacked parachute assemblies, repacked multi-place life rafts, repacked escape slides and any items received from other supporting agencies. QCIs must be performed prior to the next flight. Additionally, 100 percent of all 3-skill level work will receive a QCI until the individual is certified on that task. (T-2)

3.7.2.1.1. **(Added-AFSOC)** When performing QCI on equipment that also requires IPI one person may perform both inspections (QCI and IPI) if properly qualified and certified.

3.7.3. Ensure IPIs are performed by current and qualified 1P071 (or equivalent) personnel. IPIs will be documented on locally developed forms coordinated with AFE Superintendent and AFE QA inspector. The form will remain on file until the next repack, repair, or aircraft transfer. IPIs will be performed during inspection and repack of parachutes, multi-place life rafts, repacked escape slides. IPIs will be performed on survival kits at the direction of the MAJCOM as some survival kits may not have IPI criteria. (T-2)

3.7.4. Maintain a two-person concept when servicing equipment requiring IPI(s) to include at least one certified 1P0X1 technician and one IPI certified 1P071 (or equivalent). The IPI certified 1P071 will validate accomplishment of the IPI tasks associated with the equipment. Only the person(s) performing the inspection, repack, and repair will annotate the parachute logs and records. The IPI inspector will annotate the appropriate locally developed IPI checklist. (T-2)

3.7.4.1. **(Added-AFSOC)** AFE IPI inspectors are 1P071 (or equivalent) technicians trained and certified in the IPI process and appointed by the Operations Group commander (or equivalent). Highly experienced 5-level technicians may be appointed as an exception when adequate 7-skill level manpower is not available. Only qualified/certified individuals who have demonstrated high proficiency on the task or equipment item being evaluated will be considered for IPI duties. (T3)

3.7.5. All discrepancies must be corrected prior to the equipment being placed back in service. When possible, the original technician (inspector) will correct all discrepancies. (T-2)

3.7.5.1. **(Added-AFSOC)** The original QA inspector will conduct a follow up after the technician has corrected all discrepancies to ensure T.O. guidance was followed. The QA inspector will then sign the QA documents and close the discrepancy. (T-3)

3.7.6. Monitor QC documentation (e.g. AF IMT 2420, *Quality Control Inspection Summary*, or equivalent) to identify positive and negative trends. Provide QCI documentation to the AFE QA function monthly or earlier if a negative trend is identified. (T-3) Note: MAJCOMS may designate an electronic process for QC documentation (i.e. FERMS, AFEQAP, or equivalent).

3.7.6.1. **(Added-AFSOC)** The quality assurance documentation will be kept for at least one year.

3.7.7. AFE personnel certified to clear "Red-X" discrepancies will be annotated on the automated SCR or designated by unit commander via appointment letter for units that do not have access to an automated SCR or as determined by applicable MAJCOM and ANG. AFE "Red-X" certified personnel will be a 1P071 (or equivalent). The first O-6 in the chain of command may waive the 7-level requirement for a SSgt (E-5) or SrA (E-4) to clear "Red-X" discrepancies based on their experience and technical expertise; such a waiver will terminate once a sufficient quantity of 7-levels are available. (T-2)

3.8. Composite Tool Kit (CTK) Program. The objectives of the CTK program are to prevent and eliminate Foreign Object Damage (FOD) to aircraft, engines, missiles, training and support equipment, and to reduce tool cost through effective control of assets.

3.8.1. Establish a CTK and lost tool procedure program to control and account for tools used in each AFE section IAW AFI 21-101, Chapter 10, and AFMAN 23-110, Vol 2, Part 13, Chapter 8, as well as MAJCOM, and wing/unit directives.

NOTE: AFE sections are authorized to manually track all their CTKs, or ALERTS is authorized as well for AFE sections to track their CTKs. AFE sections are not required to use the automated Tool Accountability System (TAS). Units will develop local tracking procedures that will include quantity of serviceable/unserviceable oxygen connectors dispatched to and from the flightline (if applicable).

3.8.1.1. **(Added-AFSOC)** Tool tracking will be standardized throughout each AFE Flight as approved by the AFE Superintendent. (T-3)

3.8.2. Each tool, item of equipment, or consumable contained in a CTK has an assigned location identified either by inlay cuts in the shape of the item, shadowed layout, or silhouette. No more than one item is stored in a cutout, shadow, or silhouette except for tools issued in sets such as drill bits, allen wrenches, apexes, or paired items (e.g., gloves, booties). ***NOTE:*** Personal tools are NOT authorized on the flightline or in any maintenance area. (e.g., Mini-Mag type flashlights, Leatherman type multi-tools, buck knives).

3.8.3. Units must place the 9-digit Equipment Identifier (EID) on all CTKs, tools not assigned to a box, and dispatchable equipment that is of sufficient size. The 9-digit EID must be placed on the outside of dispatchable CTKs. Tools located inside the tool box may be

marked with less than 9-digits but must contain the 4-digit World Wide Identification (WWID) and identifying characters that tie the tool back to the CTK. For example, tools inside an assigned dispatchable CTK "U6JG00001" may be marked "U6JG1".

3.8.4. Inventory requirements. As a minimum, account for all CTKs, tools, and dispatchable equipment at the beginning and end of each shift, when moving from aircraft to aircraft, annually, and when custodians change. ***NOTE:*** Annual inventories do not replace inventories conducted each shift.

3.8.5. Tool Accountability. AFE Flight commanders, superintendents and section NCOICs, through CTK custodians, are responsible for tool and equipment accountability and control (knowing where tools are and who has responsibility for them.) When a person signs for a tool or piece of equipment, they are accountable for the item until it is returned to the AFE section and accountability transfers back to the CTK custodian.

3.9. Technical Orders (TO), Publications, Operating Instructions (OI) and Product Quality Deficiency Reports (PQDR):

3.9.1. A recommended TO and publications list is at (see **Attachment 1**). The list is for use as a reference guide only and is not all-inclusive. The list will help you determine your requirements and is not a mandatory requirement list.

3.9.1.1. AFE sections will maintain specific TOs for items serviced by the unit. AFE sections are authorized to use electronic TOs; they will be filed and maintained IAW TO 00-5-1, TO 00-5-3, and AFI 21-303. Also, MAJCOMs and ANG units will supplement this instruction with requirements for maintaining electronic TOs as applicable.

3.9.1.2. MAJCOMs, ANG, NAFs, and units will determine when optional procedures listed in TOs are mandatory within their respective commands or units and publish a comprehensive list.

3.9.1.3. Proposed changes to Air Force TOs (AFTO IMT 22), Deficiency Reports (DR), and Suggestions (AF IMT 1000) affecting AFE will be sent to respective MAJCOM or NAF (info copy of the DR) according to TO 00-5-1, and AFI 38-401, *The Air Force Innovative Development Through Employee Awareness (IDEA) Program.*

3.9.1.3.1. Units will utilize the computer based Innovative Development through Employee Awareness (IDEA) Program Data System (IPDS) to submit suggestions.

3.9.1.4. The AFE Superintendent is the OPR on all AFE related proposed TO changes. Unless the task is performed by the supporting wing/base TODO, the AFE Superintendent will then establish procedures within the group to assign improvement report numbers to the AFTO Form 22 IAW numbering scheme per TO 00-5-1. Route all AFTO FORM 22s and DRs to the AFE QA for coordination and approval prior to sending to AFE Superintendent for validation and processing. The AFE Superintendent and AFE QA inspector will evaluate all AF IMT 1000 pertaining to AFE. Note: AMC active duty bases will route AFTO form 22s through their respective Phoenix Star office. (T-2)

3.9.2. Policy, procedures, and responsibilities for PQDR submission and exhibit handling and processing are outlined in TO 00-35D-54, *USAF Materiel Deficiency Reporting and Investigating System*.

3.9.3. Operating Instructions (OI). Units may develop unit OIs or local directives, which address local mission requirements.

3.9.3.1. **(Added-AFSOC)** The group AFE Superintendent serves as the focal point for all group AFE administrative actions. Unit noncommissioned officer in charge (NCOIC) is responsible for preparing and maintaining correspondence and local directives. Operating instructions (OI) will be approved and signed by unit commander or designated representative. OIs should address issues to meet local mission requirements, specifically; response to emergency action (recall), radio operation, vehicle control and use, fire protection, explosive and ground safety, security standards and practices, each functional area, and T.O. familiarization. Send unit OIs to the group AFEO/AFE Superintendent for coordination and review. The group AFEO/AFE Superintendent will review OIs annually (Does not apply to AFRC units). (T-2)

3.9.3.2. **(Added-AFSOC)** Address only internal AFE procedures in OIs. Address procedures involving interaction and procedures involving organizations outside of AFE functions (maintenance, medical, safety, support, operations, etc.) in the wing/group supplement to this instruction. To ensure continuity throughout the unit, the AFE Superintendent will address wing-wide AFE procedures in the wing/group supplement. ANG AFE Superintendents will determine best course of action for addressing local internal and external AFE procedures via wing supplement and/or OIs ensuring that mission requirements are met IAW this supplement. (T-2)

3.9.4. **(Added-AFSOC)** Establish a publications and T.O. familiarization program to ensure prompt dissemination of task-essential correspondence. This program should also include message traffic, inspector general cross-feed, publications, etc. (T-2)

3.10. Aircrew Flight Equipment Facilities:

3.10.1. Facilities will be maintained IAW applicable Air Force Occupational, Safety, and Health (AFOSH) and TO 15X-1-1, *Maintenance Instructions, Oxygen Equipment*, 12S10-2AVS9-2, *Maintenance Manual, Intermediate with Illustrated Parts Breakdown, Image Intensifier Set, Night Vision, Type AN/AVS-9 (V),* and 14D3-11-1, *Operation, Inspection, Maintenance, and Packing Instructions for Emergency Personnel Recovery Parachute (Chest, Back, Seat Style, and Torso Harness)* standards. The sensitivity of AFE items requires environmental and climatic controls. Refer to AFI 32-1024 and AFH 32-1084, 14S and 14D series technical orders for specific guidance on spatial and environmental requirements.

3.10.2. Store items neatly and separately to prevent co-mingling of serviceable, reparable, and unserviceable items. Provisions will be made to protect shelf stock components from dust, impurities, and direct sunlight.

3.10.3. Ensure sufficient work and storage areas are available for inspections and storage. When necessary, pad and cover work benches and storage bins with material to provide smooth surfaces and edges.

3.10.4. **(Added-AFSOC)** All sections will ensure equipment and supplies are properly tagged IAW AFMAN 23-122, *Materiel Management Procedures*.

3.10.5. **(Added-AFSOC)** AFE shops require strict security. As a minimum, AFE sections are considered "limited access areas"; therefore, appropriate measures will be taken to control visitors and safeguard AFE. (T-3)

3.11. Industrial Hygiene. Personnel will follow universal precautions, including the use of impermeable gloves when contact with body fluids is likely, IAW AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*, and AFI 48-101, *Aerospace Medical Operations*, when servicing AFE items.

3.11.1. **(Added-AFSOC)** AFE personnel will wear impermeable gloves as specified by Bioenvironmental Engineering Flight when performing post flight and periodic oxygen mask inspections. Post infectious control guidelines in maintenance areas (**Attachment 3**).

3.12. Resource Protection and Control:

3.12.1. Installation commanders designate controlled areas and storage facilities IAW AFI 31-101, *Air Force Installation Security Program.* Units will establish a resource protection program that meets DoD and Air Force protection criteria IAW AFI 31-101.

3.12.2. Maintain munitions storage facilities within AFE sections IAW DOD 5100.76-M, *Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives,* AFI 31-101 and AFMAN 91-201, *Explosives Safety Standards*.

3.12.3. AFE sections storing firearms will ensure facilities are maintained IAW AFI 31-101.

3.12.4. Ensure internal circulation control procedures are established to control visitors and safeguard and monitor AFE IAW AFI 31-101 and TO 15X-1-1. Upgrade visitor flow control procedures during heightened force protection conditions as necessary to protect AFE items.

3.12.5. Units will maintain classified material consistent with AFI 33-201V2, *Communications Security (COMSEC) User Requirements*.

3.13. Safety:

3.13.1. Administer mishap prevention, AFOSH, and operational risk management programs tailored to the needs of AFE personnel. Refer to AFI 90-901, *Operational Risk Management*, AFPAM 90-202, *Operational Risk Management (ORM) Guidelines and Tools*, AFI 91-202, *The US Air Force Mishap Prevention Program*, and AFI 91-301 for application into the AFE program.

3.13.2. Supervisors must attend Supervisor Safety Training IAW AFI 91-301.

3.13.3. Contact local wing or group safety staff, bioenvironmental engineering services, and fire department to ensure section hazards are identified and corrective actions are addressed.

3.13.4. Supervisors must develop a safety, fire protection, and health On-the-Job Training (OJT) program as outlined in AFI 91-301, Attachment 5.

3.13.5. Units will maintain and store chemicals in Occupational Safety and Health (OSHA) approved facilities or containers. Quantities on hand will be consistent with Hazardous Material Pharmacy policy.

3.14. Hazardous Communications (HAZCOM) Program:

3.14.1. Each AFE section will ensure hazards in the work environment are identified to Military Public Health (MPH) for resolution.

3.14.2. Document the training provided, and abatement equipment for each individual exposed to shop hazards on the individual's AF IMT 55, *Employee Safety and Health Record*.

3.14.3. Units will coordinate with the responsible agency to perform periodic review of Material Safety Data Sheet (MSDS) for currency and document appropriately.

3.15. Explosive Safety. Establish and develop an explosive and munitions storage safety program IAW AFMAN 91-201 and AFI 91-202. Develop a local directive and review it annually.

3.16. Mishap Prevention. A mishap prevention program tailored to the needs of AFE personnel will be administered using the applicable portions of AFI 91-202. The local wing or group safety staff should be contacted to ensure all shop hazards are addressed and procedures are established.

3.17. Operational Risk Management (ORM). The FEOs, AFE superintendents, and the AFE section NCOICs will ensure ORM or other risk management programs and techniques are fully implemented IAW AFI 90-901, *Operational Risk Management*, and AFPAM 90-902, *Operational Risk Management (ORM) Guidelines and Tools.*

3.18. USAF Aircrew Flight Equipment Awards Program:

3.18.1. Individual Award. These awards are established to recognize outstanding individual accomplishments and enhance the visibility of AFE personnel. Each calendar year, one MAJCOM staff member, FEO, senior NCO, NCO, Airman, ARC SNCO, ARC NCO, ARC Airman, and applicable civilian categories will be recognized for outstanding performance and initiative.

3.18.1.1. **(Added-AFSOC)** Each year, each wing/group may submit one nominee for each of the following categories: AFEO, SNCO, NCO, Airman, Civilian, and Unit. Each year the MAJCOM may select and submit a staff member winner for AF MAJCOM Staff Member of the year. AFRC units will follow guidance IAW AFRCI 36-2807, *AFRC Operations Awards*. ANG units may submit packages by responding to NGB/A3OS annual solicitation for nominations.

3.18.2. Unit Award. This MAJCOM level award is established to recognize outstanding unit accomplishments and enhance the visibility of the unit's AFE program. Each calendar year, two operations group AFE programs are recognized for outstanding performance and initiative. One represents small programs, and the other large programs.

3.18.2.1. **(Added-AFSOC)** The definition of a small program is a single unit with AFE assigned that are not consolidated under the SOSS/OSS or an SOSS/OSS that is combined of two or less units. The large program is defined as not a single unit and must be combined with three or more units under the SOSS/OSS.

3.18.3. Units submit nominations via electronic mail to respective MAJCOMs as outlined in AFI 36-2807, *Headquarters United States Air Force Deputy Chief of Staff Air and Space Operations Annual Awards Program*.

3.18.4. Once MAJCOM and ANG winners have been selected, nominees for Air Force-level awards will follow the same procedures as stated in **paragraph 3.18.3**, submitting nominees to HQ USAF/A3O-AT. Additional information and samples are available on the USAF Aircrew Flight Equipment CoP website at: **https://wwwd.my.af.mil/afknprod/ASPs/CoP/OpenCoP.asp?Filter=OO-OP-AF-61**.

3.18.5. **(Added-AFSOC)** The nominee must not have been on a control roster during the preceding calendar year; the last Enlisted Performance Report (EPR) must be rated "outstanding"; the nominee must have completed all required levels of Professional Military Education (PME) in-residence, by correspondence, or be presently enrolled and must have met PT standards during the entire proceeding calendar year. Do not submit copies of EPRs, photographs, or other material.

3.18.5.1. **(Added-AFSOC)** AFSOC Outstanding Flight Equipment Officer of the Year Award. Individual must be an Air Force rated officer who is qualified and current in the primary aircraft of assignment and possess the L prefix to their AFSC IAW the prerequisites of AFMAN 36-2105, *Officer Classification*.

3.18.5.2. **(Added-AFSOC)** AFSOC Outstanding Aircrew Flight equipment Senior NCO of the Year Award. Individual must be an Air Force senior NCO in grades E-7 or E-8 (Date Of Rank (DOR) before 1 Sept of year considered for award) and possess a primary AFSC 1P0X1 (7- or 9-skill level).

3.18.5.3. **(Added-AFSOC)** AFSOC Outstanding Aircrew Flight Equipment NCO of the Year Award. Individual must be an NCO in grades, E-5 or E-6 (DOR 1 Sept of year considered for award) and possess a primary AFSC 1P0X1 (5- or 7-skill level).

3.18.5.4. **(Added-AFSOC)** AFSOC Outstanding Aircrew Flight Equipment Airman of the Year Award. Individual must be in grades of E-1 through E-4 Airman Basic through Senior Airman, and possess a primary AFSC 1P0X1 (3- or 5-skill level).

3.18.5.5. **(Added-AFSOC)** AFSOC Outstanding Aircrew Flight Equipment Large/Small Program of the Year Award. Each Wing could nominate themselves as either a Small or Large Program as applicable by description in AFI 36-2807, *Headquarters United States Air Force Deputy Chief of Staff Operations, Plans and Requirements Annual Awards Program*.

3.18.5.6. **(Added-AFSOC)** AFSOC Outstanding Aircrew Flight Equipment Staff Member Award. Individual must be an Air Force NCO in the grades of E-5 through E-8 and possess a primary AFSC commensurate with grade.

3.18.6. **(Added-AFSOC)** Send nomination packages for receipt at HQ AFSOC/A3TL each year; to include AF Form 1206 and current individual fitness assessment history. A board of senior officers and/or chief master sergeants will be convened to evaluate all nomination packages and make recommendations to the HQ AFSOC/A3 who will make the final selection. Individual award winning packages will be sent for Air Force-level competition; therefore following the prescribed format is essential. A HQ USAF board selects winners in

each category based solely on information contained in the nomination folders using the following elements contained in AFI 362807, *Headquarters United States Air Force Deputy Chief of Staff Air and Space Operations Annual Awards Program,* and official nomination procedures announcement message.

3.19. Automated Life Support Management Systems (ALSMS). ALSMS is a management tool for use by AFE personnel. Units are authorized to use ALSMS to best suit their needs, only until conversion to ALERTS is complete. Units tracking equipment with the ALSMS program are not required to duplicate the data maintained in the computer on status boards, shop inspection cards, or forms. AFE superintendents will standardize equipment tracking methods within their respective groups. Ensure back-up is maintained to prevent loss of data.

3.20. Automated Life-sustaining Equipment Record and Tracking System (ALERTS). Air Mobility Command (AMC) is the MAJCOM responsible for the development and certification of the ALERTS program and will host an annual working group (MAJCOM POCs) to optimize ALERTS efficiency. Travel and per diem will be unit funded. This program will serve as a replacement for ALSMS for all USAF AFE functions. See **Chapter 6** of this instruction for details on ALERTS.

3.20.1. MAJCOM POCs will develop and publish a MAJCOM implementation plan for all AFE areas to fully integrate ALERTS.

3.21. Integrated Maintenance Data System (IMDS)/G081. Automated tracking systems (i.e., IMDS, G081, etc.) will be used as directed by technical order and MAJCOM A3T (or equivalent) guidance. AFE personnel will ensure, through Maintenance Operations Flight (MOF) Plans, Scheduling, and Documentation Section, that all aircraft installed AFE items are loaded in Maintenance Information System (MIS) for control purposes. ***EXCEPTION:*** Use of subject automated tracking systems in the ANG is optional, unless specifically directed by technical order.

3.22. (Added-AFSOC) Premeditated Jump, Jump Support Operations and Requirements.

3.22.1. **(Added-AFSOC)** AFI 11-410, *Personnel Parachute Operations,* is the authority guidance for premeditated jump operations.

3.22.2. **(Added-AFSOC)** See AFI 11-410, Chapter 5, for malfunction reporting requirements.

3.22.3. **(Added-AFSOC)** AFJI 13-210(I) prescribes qualifications and duties for malfunction officers/NCOs.

3.22.4. **(Added-AFSOC)** See AFI 11-410, Chapter 7, for rigger requirements.

3.22.5. **(Added-AFSOC)** Drop Zone Controller (DZC) and Drop Zone Safety Office/NCO (DZSO) requirements:

3.22.5.1. **(Added-AFSOC)** When AFE personnel are assigned DZC/DZSO duties follow guidance in AFI 13-217, *Drop Zone and Landing Zone Operations.*

3.22.6. **(Added-AFSOC)** When AFE personnel are assigned Malfunction Officer/NCO duties follow guidance in AF(J) 13-210(I), *Joint Airdrop Inspection Records, Malfunction/Incident Investigations, and Activity Reporting*.

Chapter 4

TECHNICIAN TRAINING

4.1. Purpose. The purpose of this chapter is to establish minimum training requirements for AFE personnel and provide guidance on conducting AFE OJT programs.

4.1.1. AFE Technician Training. AFE training is an instructional process that leads to task qualification through technician continuation training or upgrade and qualification training conducted IAW AFI 36-2201, *Developing, Managing, and Conducting Training*, AFSC 1P0X1 AFE CFETP, and **Table 4.1** of this instruction. The training program must ensure AFE personnel, including military, civilian and contractor equivalent, become and remain task qualified. The documentation of training is paramount to the success of the training program.

4.1.1. **(AFSOC)** Static Line Parachute Systems (MC-1) J3AZR2A754 0M1A, Static Line Parachute Systems (MC-6) J7AZR1P051 0S1A, Ram Air Parachute Systems (MC-4/5) J3AZR2A754 0R1A and Airdrop Specialist Course L9AZA2T251 00AA or sister service equivalent courses are mandatory if assigned to Special Tactics Units or Units supporting premeditated jump operations. (T-2)

4.1.1.1. ALERTS is authorized for use as a fully automated electronic equivalent AFE technicians' AF Form 623, *Individual Training Record*. Units that automate their records do not need to hand carry hard copies when deploying per AFI 36-2201, Volume 3, *Air Force Training Program On the Job Training Administration*.

NOTE: Training Business Area (TBA) is an authorized AF Form 623 automated electronic equivalent alternative for those units that do not have access to ALERTS.

4.1.1.1.1. **(Added-AFSOC)** All units will utilize TBA for training documentation. (T-2)

4.1.1.1.2. **(Added-AFSOC)** Units no longer need to maintain hardcopy AF Form 623, Individual training record folder, or AF Form 623A, On-The-Job training record continuation sheet. (T-2)

4.1.1.1.3. **(Added-AFSOC)** Units will input ECI/CDC participation into the journal area of TBA using the following format: COURSE NUMBER AND TITLE, NUMBER OF VOLUMES, DATE COMPLETED. (T-2)

4.1.1.1.4. **(Added-AFSOC)** Units will input formal training into the journal area of TBA using the following format: COURSE NUMBER AND TITLE, DATE COMPLETED. (T-2)

4.1.1.1.5. **(Added-AFSOC)** TBA does not have the capability to input AF Form 1098, *Special Task Certification and Recurring Training*. Until such time, use the procedures outlined in the TBA applications users guide, paragraph 5.1.16., complete task evaluation, to track AF Form 1098 tasks. Begin journal entry with "1098 TRNG." ARCNet is an approved alternative to TBA for ANG units to document AF Form 1098 requirements. (T-2)

4.1.2. **(Added-AFSOC) CFETP Training terms defined.**

4.1.2.1. **(Added-AFSOC)** Fundamentals–serving as, or being an essential part of, a foundation or basis; basic; underlying: fundamental principles; the fundamental structure. The understanding of the basic function of an item or task.

4.1.2.2. **(Added-AFSOC)** Administer–to manage; have executive charge of: to administer guidance. Ensure the ability to provide oversight to a program or objective.

4.1.2.3. **(Added-AFSOC)** Perform–to accomplish a task or set of tasks in the proper manner or order.

4.1.2.4. **(Added-AFSOC)** Use–to properly utilize an item for its intended purpose.

4.1.2.5. **(Added-AFSOC)** Procure–the understanding of how to properly gain an item or piece of equipment. To order, purchase, or transfer an item to your control.

4.1.2.6. **(Added-AFSOC)** Submit–to present for the approval, consideration, or decision of another or others: to submit a plan; to submit an application.

4.1.2.7. **(Added-AFSOC)** Evaluate–to judge or determine the significance, worth, or quality of; assess: to evaluate the results of a task or function.

4.1.2.8. **(Added-AFSOC)** Care–see Maintain, this supplement, **Paragraph 4.1.2.11**.

4.1.2.9. **(Added-AFSOC)** Modify–to change or add to an existing item IAW T.O. or other approved guidance. This includes sewing, cutting, drilling, sanding, dremmel tool operations, etc.

4.1.2.10. **(Added-AFSOC)** Interpret–to understand the meaning and intentions of drawing, schematic, blue prints, diagram, sketch, and/or depiction.

4.1.2.11. **(Added-AFSOC)** Maintain–to perform preventive, periodic, inflation, pre/post inspections and ensure serviceability IAW T.O. and other approved guidance.

4.1.2.12. **(Added-AFSOC)** Fabricate–to build or assemble from parts and pieces. This includes sewing, cutting, drilling, sanding, dremmel tool operations, etc.

4.1.2.13. **(Added-AFSOC)** Inspect–See AFI 11-301, Vol 1, AFSOCSUP, **Paragraph 4.1.2.11**.

4.1.3. **(Added-AFSOC)** Task Certification will be accomplished after the trainer/trainee has completed training and the trainee feels competent enough to complete a task evaluation with the trainer. The trainer/trainee will accomplish a task evaluation, once the evaluation is complete and the trainer is satisfied that the trainee has met the required objectives outlined in the CFETP, the trainer/trainee will "sign" the task as complete. The trainee is now qualified to conduct the task without supervision. (T-2)

4.2. Responsibilities:

4.2.1. AFE Superintendent, (or civil service or contractor equivalent):

4.2.1.1. The AFE superintendent, with assistance from NCOICs, will develop and tailor a Master Task Listing (MTL) using the current CFETP IAW AFI 36-2201.

4.2.1.2. Identify all mission related training requirements to meet MDS-specific and ancillary unit needs for wartime and peacetime operations using AFSC 1P0X1 CFETP.

4.2.1.3. Develop a rotation plan to ensure all assigned technicians are trained and remain proficient in all AFE sections within the shops (flotation, parachute, fabrication, helmet, oxygen, etc.)

4.2.1.4. **(Added-AFSOC)** Ensure trainers and task certifiers are qualified and a current letter signed by the squadron commander is available designating these individuals IAW AFI 36-2201. (T-2)

4.2.2. NCOICs, (or civil service or contractor equivalent):

4.2.2.1. Manage the overall OJT program for their respective AFE section.

4.2.2.2. Ensure all trainees are evaluated by a qualified task evaluator/certifier. Trainees who fail evaluation(s) will be re-entered into training. MAJCOMs and ANG units will supplement this instruction with requirements outlining accomplishment and frequency of task evaluations, and task re-certification.

4.2.2.3. Ensure all technicians scheduled to attend formal training courses have completed all prerequisites before attendance.

4.2.2.4. Evaluate all technical school graduates (AFSC 1P031A and 1P031B) to ensure proficiency levels as specified in the approved CFETP.

4.2.2.4.1. Report training deficiencies using the Customer Service Information Line (CSIL) IAW AFI 36-2201. Send information copies of Air Education and Training Command (AETC) questionnaires concerning recent technical school graduates to respective MAJCOM or ANG, as applicable.

4.2.2.5. Plan, schedule, evaluate, and administer training.

4.2.2.6. Counsel trainees and take administrative actions as necessary.

4.2.2.7. Document all training IAW AFI 36-2201, current CFETP, any additional guidance from HHQs and this instruction.

4.2.2.8. Maintain an OJT record for technicians IAW AFI 36-2201. Use of automated technician training records (ALERTS et. al.) is authorized. For those units that do not have access to ALERTS, Training Business Area (TBA) is an authorized alternative.

4.2.2.9. Ensure periodic ancillary training and task qualification training is conducted as required.

4.2.2.10. Establish a 6-month recurring training program on infrequently maintained systems (e.g., ACES II drogue chute) to ensure proficiency levels are maintained.

4.2.2.10.1. **(Added-AFSOC)** Critical tasks that have not been completed in 180 days will be re-certified prior to completing them unsupervised. These critical items include all emergency/Free fall/ Static line/reserve parachutes AN/ANVIS 9. This list is not all inclusive and may be added to by the AFE Superintendent. As a minimum the items listed above will require re-certification prior to task completion. Refer to AFI 11-410, *Personnel Parachute Operations*, for qualification/ certification requirements for parachutes used for premeditated parachute operations. (T-2)

4.2.2.11. **(Added-AFSOC)** The NCOIC will evaluate personnel qualifications to ensure required training is provided. Establish policies to ensure as many personnel as possible

are trained, qualified, and certified to operate special equipment. Do not allow personnel to work unsupervised on tasks for which they are not certified. Record qualification evaluation and other pertinent training information on individual training documents. Review task qualifications of assigned personnel to provide additional training as necessary when new, revised, or changed T.O.s are received, or equipment modified. (T-2)

4.2.2.12. **(Added-AFSOC)** Emergency Ground Egress Training. Training in emergency ground egress is a mandatory safety requirement for all AFE personnel. Initial qualification emergency ground egress training will be administered to all newly assigned personnel prior to performing any tasks aboard unit aircraft. NCOICs are responsible to ensure all assigned personnel are egress trained. (T-2)

4.2.3. AFE Task Evaluator/Certifier:

4.2.3.1. The AFE task evaluator/certifier is highly qualified and experienced in AFE tasks and has completed the Air Force Training Course (J6AJI3S2X1 001) or the Task Certifier Course (J6AJS3S2X1 000).

4.2.3.2. Record task evaluations according to instructions provided in the respective CFETP when a trainee performs a task to required standards IAW AFMAN 36-2245, *Managing Career Field Education and Training*.

4.2.3.3. Reevaluate all newly assigned personnel, including military, civilian, and contractor equivalent in previously certified areas.

4.2.3.4. Evaluate all AFE personnel using pass and fail criteria. Document all technician task evaluations on prescribed AF Forms.

4.2.3.5. **(Added-AFSOC)** Task evaluations:

4.2.3.5.1. **(Added-AFSOC)** Task evaluations (third party certification conducted by personnel other than the trainer of the task) are evaluations of each step in the TO for a given task. (T-2)

4.2.3.5.2. **(Added-AFSOC)** The tasks in **Table 4.2**, if assigned to the unit, will be evaluated and will require recertification on an 18 month cycle in order to maintain wartime skills. (T-3)

Table 4.2. (Added-AFSOC) Tasks to Maintain Wartime Skills on an 18 Month Cycle.

Use Special Instructions (SPINS)/Air Tasking Order (ATO)	
Advanced Survival Radio/Global Positioning Satellite (GPS)	
Aircrew Laser Eye Protection (ALEP)	
Inspect	AN/AVS-9 (F4949)
Assemble	AN/AVS-9 (F4949)
Disassemble	AN/AVS-9 (F4949)
Repair	AN/AVS-9 (F4949)
Adjust Visual Acuity	AN/AVS-9 (F4949)

Inspect	PVS-7/P NVG
Assemble	PVS-7/P NVG
Disassemble	PVS-7/P NVG
Repair	
Adjust for Visual Acuity	PVS-7/P NVG
Inspect	PVS-14 NVG
Assemble	PVS-14 NVG
Disassemble	PVS-14 NVG
Repair	PVS-14 NVG
Adjust for Visual Acuity	PVS-14 NVG
Inspect	PVS-15 NVG
Assemble	PVS-15 NVG
Disassemble	PVS-15 NVG
Repair	PVS-15 NVG
Adjust for Visual Acuity	PVS-15 NVG
Inspect	PVS-18 NVG
Assemble	PVS-18 NVG
Disassemble	PVS-18 NVG
Repair	PVS-18 NVG
Adjust for Visual Acuity	PVS-18 NVG
Fit	FV-9
Inspect	FV-9
Fit	Block 0
Inspect	Block 0
Fit	Block 0+
Inspect	Block 0+
Fit	Block 1
Inspect	Block 1
Fit	Block 2
Inspect	Block 2
CONOPS	Aircrew CBRN Protection
Setup/Tear-down	Mitigation Aircrew Contamination Control Area (ACCA) Procedures
Manage	Mitigation Aircrew Contamination Control

	Area (ACCA) Procedures
Process Equipment	Mitigation Aircrew Contamination Control Area (ACCA) Procedures
Process Aircrews	Mitigation Aircrew Contamination Control Area (ACCA) Procedures
Joint Chemical	Mitigation Aircrew Contamination Control Area (ACCA) Procedures—Agent Detector (JCAD)
Inspect	Global Positioning System (GPS) Receivers
Load	Global Positioning System (GPS) Receivers
Collect and Update Almanac	Global Positioning System (GPS) Receivers
Inspect	PRC-112 Series
Battery Tracking	PRC-112 Series
Update Software (Home station/Deployed)	PRC-112 Series
Perform Program Loading Operations	PRC-112 Series
Responsibilities	AIRCREW ARMORY
Set-up	AIRCREW ARMORY
Arms Room Attendant	AIRCREW ARMORY
Clearing Barrel Supervisor Responsibilities	AIRCREW ARMORY
Issue	AIRCREW ARMORY
Load	AIRCREW ARMORY
Clear	AIRCREW ARMORY
Handle	AIRCREW ARMORY
Store Weapons/Ammunition	AIRCREW ARMORY
Receipt/Turn-in	AIRCREW ARMORY
Perform Inspections	AIRCREW ARMORY
Transporting Weapons/Ammunition	AIRCREW ARMORY

4.2.3.5.3. **(Added-AFSOC)** If the tasks in **Table 4.3** have not been performed within 90 days prior to a deployment, then training must be accomplished and documented in TBA in this format "1098 Pre-deployment training".

Table 4.3. (Added-AFSOC) Tasks to be Completed Within 90 Days Prior to a Deployment.

Use Special Instructions (SPINS)/Air Tasking Order (ATO)	
Advanced Survival Radio/Global Positioning Satellite (GPS)	
Inspect	AN/AVS-9 (F4949)
Assemble	AN/AVS-9 (F4949)
Disassemble	AN/AVS-9 (F4949)

Repair	AN/AVS-9 (F4949)
Adjust Visual Acuity	AN/AVS-9 (F4949)
Inspect	PVS-7/P NVG
Assemble	PVS-7/P NVG
Disassemble	PVS-7/P NVG
Repair	
Adjust for Visual Acuity	PVS-7/P NVG
Inspect	PVS-14 NVG
Assemble	PVS-14 NVG
Disassemble	PVS-14 NVG
Repair	PVS-14 NVG
Adjust for Visual Acuity	PVS-14 NVG
Inspect	PVS-15 NVG
Assemble	PVS-15 NVG
Disassemble	PVS-15 NVG
Repair	PVS-15 NVG
Adjust for Visual Acuity	PVS-15 NVG
Inspect	PVS-18 NVG
Assemble	PVS-18 NVG
Disassemble	PVS-18 NVG
Repair	PVS-18 NVG
Adjust for Visual Acuity	PVS-18 NVG
Inspect	Global Positioning System (GPS) Receivers
Load	Global Positioning System (GPS) Receivers
Collect and Update Almanac	Global Positioning System (GPS) Receivers
Inspect	PRC-112 Series
Battery Tracking	PRC-112 Series
Update Software (Home station/Deployed)	PRC-112 Series
Perform Program Loading Operations	PRC-112 Series

4.2.4. AFE Trainer:

4.2.4.1. Experienced 5-skill level technicians who have completed the Air Force Training Course (J6AJI3S2X1 001) or the Training the Trainer Course (J6AJS3S2X1 001).

4.2.4.2. Must be qualified on the tasks they instruct.

4.2.4.3. Will document training as appropriate IAW current CFETP and AFI 36-2201.

4.2.5. Trainee:

4.2.5.1. Must actively participate in opportunities for qualification and skill-level upgrade training (UGT).

4.2.5.2. Must progress to and maintain knowledge, qualifications, and appropriate skill-level within their assigned specialty.

4.2.5.3. Must schedule their on and off-duty time to complete upgrade Career Development Course (CDC) and self-training requirements.

Table 4.1. AFE PERSONNEL TRAINING REQUIREMENTS.

NOTE: Lists all Air Force AFE mandatory and desirable training. MAJCOMs will supplement this table with their unique requirements. Acronyms: AFECTI is AFE Continuation Training Instructor and FEO is Flight Equipment Officer.

COURSE TITLE	1P031	1P051	1P071	1P091	AFECTI	T1P0X1	FEO
Aircrew Flight Equipment Apprentice, J3ABR1P031 003	M						
Combat Survival Training, S-V80-A (Note 5 & 10)	D	D	D	D	D	D	M
Water Survival School – Parachuting, S-V86-A (Notes 1, 5 & 10)	D	D	D	D	D	D	M
Arctic Survival Training, S-V87-A	D	D	D	D	D	D	D
Water Survival School Non- Parachuting, S-V90-A (Note 5 & 10)	D	D	D	D	D	D	M
Academic Instructor Course, MAIS001 (Note 4 [& 7, AFECTIs only])			D	D	M	M	
Night Vision Goggles Instructor Course (Note 6)					D	D	
Maintenance of Panoramic Night Vision Goggles (PNVG), J7AZT1P051 0G1A (Note 3)	D	D	D	D	D	D	
Maintenance of Joint Helmet Mounted Cueing System (JHMCS), J7AZT1P051 0J1A (Note 3)	D	D	D	D	D	D	
Maintenance of Combat Survivor Evader Locator (CSEL) radio, J7AZT1P051 0C1A	D	D	D	D	D	D	

(Note 3)							
Trainer for Combat Survivor Evader Locator (CSEL) radio, J7AZT1P051 0C2A (Note 3)	D	D	D	D	D	D	
Contingency Wartime Planning Course, MCADRE002			D	D			
Introduction to Personnel Recovery, PR101	D	D	D	D	D	D	D
USAF Life Sciences Equipment Investigation Course, J3AZR1P071 0L1A			D	M	D	D	M
Physiological Training (Notes 2, 7 & 10)	D	D	D	D	M	D	M
Airborne (Parachutist) Course, L5AQA1XXXX 0A1A	D	D	D	D	D	D	D
USAF Underwater Egress Training, S-V84-A (Note 8)	D	D	D	D	D	D	D
Static Line Parachute Systems (MC-1), J3AZR2A754 0M1A (Note 9)	D	D	D	D			
Static Line Parachute Systems (MC-6), J7AZR1P051 0S1A (Note 3 & 9)	D	D	D	D			
Ram Air Parachute Systems (MC-4/5), J3AZR2A754 0R1A (Note 9)	D	D	D	D			
Automatic Ripcord Release Assembly (8600F6), J5AZA2A754 0F6A (Note 9)	D	D	D	D			
Emergency Medical Technician					D	D	
Water Safety Instructor Training					D	D	
AFE Program Managers Course 3J5ACC1P0X1 000 (Y120004)			D	D			D

LEGEND: M = Mandatory; D = Desirable

NOTES:

1. This course may be substituted with course S-V90-A, Water Survival Training, Non-parachuting.
2. Physiological Training is required initially and a MDS specific refresher every 5 years thereafter for enlisted AFECTIs. Refer to AFI 11-403.
3. These mobile training team courses are for personnel performing maintenance and/or instruction.
4. Completion of Principles of Instruction (J3AZR3S200 011 or J3AZT3S200 011), SAC Aircrew Life Support Instructor Course (Y120006), or ACC Classroom Instructor Course (Y120022) satisfies this requirement.
5. Mandatory for ANG AFECTI, and active duty AFECTI assigned to AFSOC only.
6. Required for personnel teaching VV-01, and ANG AFECTI only. AMC personnel maintaining NVGs will attend.
7. MAJCOM Functional Managers may waive this requirement based on training capability.
8. This course only applies to instructors who train aircrew operating helicopters.
9. Required for units supporting AFSOC units. Refer to AFI 11-410 for additional guidance as applicable.
10. Mandatory for ANG 9-levels.

Chapter 5

AIRCREW FLIGHT EQUIPMENT CONTINUATION TRAINING (AFECT)

5.1. Purpose. AFECT consists of ground training events (not ancillary training) listed in **Table 5.1** of this instruction and is provided for each aircrew member, designated non-rated personnel, and passengers to refresh and enhance their proficiency and knowledge in all AFECT events. This chapter establishes specific requirements and applies to all AFECT Instructors (AFECTI), aircrew and personnel who fly. Training equipment will be configured to mirror operational equipment and all training will be realistic, hands-on and student centered to the maximum extent possible. This is the standard method for developing aircrew proficiency. AFECT will be conducted in a distraction-free facility/environment.

5.2. Responsibilities:

5.2.1. AFECT will be conducted IAW **Table 5.1** of this instruction. MAJCOMs will supplement this instruction to tailor AFECT courses to fulfill their specific requirements. The 361 TRS/TRR will update their AFE Air Force Master Lesson Plans (AFMLP) based on current safety information provided by the Air Force Safety Center and MAJCOMs. AFE Superintendent/FEO, upon notification from their MAJCOMs, will download the update information from the AFE AFMLP CoP website: **https://wwwd.my.af.mil/afknprod/ASPs/CoP/OpenCoP.asp?Filter=AE-OP-00-01**.

5.2.2. AFECT instructors may be an FEO, qualified instructor aircrew, or AFE (1P0X1) training instructor. MAJCOMs and ANG units will supplement this instruction with requirements for assigning and certifying AFECT instructors.

5.2.2.1. Emergency egress training will be taught by a FEO (rated officer) or by an appointed rated officer and qualified instructor aircrew designated in writing by the group FEO. ***EXCEPTION:*** Civil service and contractor equivalent may conduct AFECT course(s) if specifically hired for that purpose and ANG AFECTIs.

5.2.2.1.1. **(Added-AFSOC)** Emergency egress may be taught by a unit assigned Mission Designed Series (MDS) qualified aircrew instructor with an —"I" or —"E" prefix.

5.2.2.2. **(Added-AFSOC)** 1P0X1 Aircrew Flight Equipment Continuation Training Instructor (AFECTI) will be certified every 18 months by the AFEO or AFES to conduct AFE training. Certification will be documented in TBA, use the procedures outlined in the TBA applications users guide, **Paragraph 5.1.16**, complete task evaluation, to track certification. Begin journal entry with instructor certification. ARCNet is an approved alternative to TBA for ANG units to document AF Form 1098 requirements. AFE instructors assigned to the SOSS training flight should periodically be assigned to the various shops within the operations group. This is intended to provide program continuity, prevent career stagnation, and maintain technical proficiency (Does not apply to AFRC). (T-2)

5.2.3. **(Added-AFSOC)** Directing, evaluating, and monitoring (AFECT) programs and certifying those personnel responsible for providing AFE training. Every 6 months the AFEO or AFES will attend and evaluate AFE training sessions for the following: course

presentation and instructor knowledge, condition and use of training aids, student involvement and hands-on aircrew demonstrated proficiency training. This will be documented on the AETC Form 281, *Instructor Evaluation Checklist*, and maintained for 2 years. The AFES will review and approve use of all AFE lesson plans and training aids (Does not apply to ARC units). (T-2)

5.2.4. **(Added-AFSOC)** The AFES will (Does not apply to AFRC units):

5.2.4.1. **(Added-AFSOC)** Coordinate and develop the wing AFE training schedule (Does not apply to AFRC units). (T-2)

5.2.4.2. **(Added-AFSOC)** Monitor AFE training currency and identify training shortfalls and trends (Does not apply to AFRC units). (T-2)

5.2.4.3. **(Added-AFSOC)** Coordinate and schedule instructor augmentation requirements when needed (Does not apply to AFRC units). (T-2)

5.2.4.4. **(Added-AFSOC)** Provide for preparation and maintenance of AFE training equipment and facilities (Does not apply to AFRC units). (T-2)

5.2.4.5. **(Added-AFSOC)** Provide a realistic training environment for all AFE training (Does not apply to AFRC units). (T-2)

5.2.4.6. **(Added-AFSOC)** Ensure quality, accuracy, and safety of continuation training programs (Does not apply to AFRC units). (T-2)

5.2.4.7. **(Added-AFSOC)** Ensure all crewmembers are briefed on changes to AFE or new equipment items prior to placing in service (Does not apply to AFRC units). (T-2)

5.2.5. **(Added-AFSOC)** Section or squadron NCOIC will:

5.2.5.1. **(Added-AFSOC)** Provide feedback to ensure AFE training program remains abreast of mission needs. (T-3)

5.2.5.2. **(Added-AFSOC)** Provide qualified instructor augmentation when required by the Special Operations Support Squadron (SOSS). (T-3)

5.3. AFECT Event Descriptions. Lead Commands, IAW AFPD 10-9, *Lead Operating Command Weapon Systems Management*, will be OPR for developing core curriculum for each of the following blocks of instruction. AFECT event instruction may be consolidated as long as curriculum requirements are met and individual events are tracked by the designated identifiers in Aviation Resource Management System (ARMS). Lead commands will provide AFECT event guidance in applicable AFI 11-2MDS-series, Vol 1 publications.

5.3.1. Aircrew Flight Equipment Familiarization (LL01): One time event, per base assignment, conducted prior to the first flight at home station to familiarize aircrew members with local AFE items availability, issue, use, pre-flight, and post-flight procedures. This training will be provided for subsequent re-assignments to the same base.

5.3.2. Emergency Egress Training, Ejection Seat (LL02): Evaluates aircrew and passenger ability to demonstrate proficiency in air and ground emergency egress/ejection procedures. In aircraft with multi-crew ejection seat capability, stress importance of aircrew coordination actions in emergency situations. Ensure aircrews are aware of their responsibilities for conducting safety and passenger briefings IAW AFI 11-202, Vol 3.

5.3.3. Emergency Egress Training, Non-Ejection Seat (LL03): Evaluates aircrew and passenger ability to demonstrate proficiency in air and ground emergency egress procedures. Stress the importance of aircrew coordination, aircrew and passenger responsibilities and use of appropriate emergency egress equipment. Ensure aircrews are aware of their responsibilities for conducting safety and passenger briefings IAW AFI 11-202, Vol 3.

5.3.4. Aircrew Chemical Defense Training (ACDT) (LL04): An academic and equipment training session in which the aircrew member demonstrates and performs donning, doffing, and buddy dressing procedures using either the first or second generation ACDE or Aircrew Eye/Respiratory Protection (AERP) equipment. This training also includes information on hazards and limitations of wearing the equipment properly and improperly, preflight procedures, aircraft integration, and parachute descent emergency procedures. Each aircrew will demonstrate procedures during their initial class; subsequent classes require a minimum of 10% of aircrew participants to dress out and demonstrate ACCA decontamination processing procedures.

5.3.5. Egress Training with ACDE (LL05): Evaluates the aircrew's ability to demonstrate proficiency in the use of primary as well as secondary air and ground egress procedures while wearing ACDE. Training will stress the unique changes in procedures to include added difficulties aircrew would and could experience as a result of wearing ACDE.

5.3.6. Aircrew Flight Equipment Training (AFET) (LL06) (formerly Aircrew Life Support Equipment [ALSE] Training): An academic and equipment training event, in which aircrew members demonstrate their ability to locate, preflight, and use all aircrew and passenger AFE carried aboard unit aircraft or issued to aircrew members. This training includes the limitations and safety issues related to AFE. Additionally, include aircrew clothing items and information on hazards associated with improper wear and failure to use only authorized clothing and equipment items.

5.3.7. Aircrew Flight Equipment (AFE) Fit Check (LL07): Ensure a comprehensive fit check of all AFE gear worn during flight in ejection seat aircraft (e.g., helmet and O2 mask, survival vest, torso harness and anti G-suit) is accomplished every 4-months unless otherwise directed by AFI 11-202, Volume 1, Aircrew Training, and AFI 11-2MDS-series, Vol 1. AFE gear worn during flight in non-ejection seat aircraft (e.g., helmet and O2 mask) will be fit checked upon initial assignment, with no periodic refit required unless otherwise directed by AFI 11-202, Volume 1, Aircrew Training, and AFI 11-2MDS-series, Vol 1. Aircrews performing duties on aircraft without individually fit AFE requirements are exempt from this requirement. Fit checks will be documented as a separate event, AFE Fit Check (LL07), on AF Form 1522, ARMS Additional Training Accomplishment Report, or equivalent and tracked in the ARMS data system. AFE Fit Check (LL07) is a grounding event. (T-2)

5.3.7.1. Fit checks may be accomplished concurrently with other training events such as Emergency Egress Training (LL02); however, real world equipment is not authorized for use during training. (T-2)

5.3.7.2. Fit checks on individually fit ACBRN equipment will be conducted upon initial issue and every three years thereafter. ACBRN fit checks will be documented in the Flight Equipment Records Management System (FERMS) or equivalent HAF A3O-AI approved tracking system and are not a grounding item. (T-2)

5.3.8. With the exception of ARC, AFMC, and AFSPC units, which do not have SERE (1T0X1) personnel assigned, AFE sections are not authorized or manned to conduct the Code of Conduct/SERE training outlined in AFI 16-1301, Survival Evasion Resistance Escape (SERE) Operations.

5.4. Formal Training Requirements:

5.4.1. All aircrew members must attend formal training requirements as identified in AFI 16-1301.

5.4.2. All AFECT instructors must meet the minimum formal training requirements contained in **Table 4.1** of this instruction and be assigned using guidelines established by respective MAJCOMs.

5.4.3. To obtain formal supplemental course allocations for AFE personnel, forward the full name, rank, Social Security Number (SSN), and organization of personnel requiring training to the appropriate MAJCOM AFE focal point at least 60 days in advance of the requested training date. AFRC and ANG will request quotas IAW AFRC and ANG procedures.

5.4.3.1. **(Added-AFSOC)** Requests for courses will be forwarded to MAJCOM POC NLT 1 November each year. (T-2)

5.4.4. The group FEO or AFE superintendent will control and manage the wing's AFE formal supplemental course allocations. Cancellations or substitutions will be accomplished by contacting the appropriate MAJCOM or ANG AFE focal point not later than 30 days prior to class start date. Return all allocations that cannot be used to the appropriate MAJCOM or ANG AFE focal point for redistribution at least 30 days prior to class start date.

5.5. AFECT Requirements:

5.5.1. Minimum Training Requirements. **Table 5.1** of this instruction specifies the required AFECT events and frequencies for aircrew members and passengers.

5.5.2. Failure to accomplish AFECT at the required intervals IAW AFI 11-2MDS-series, Vol 1/Ready Aircrew Program (RAP) tasking memo, will result in grounding or non-combat mission ready status.

5.5.3. If an aircrew member, current in all AFECT events, is TDY to perform flying duties to a location where a training capability does not exist and the individual becomes due in an AFECT event, training must be accomplished before first flight at home station. AFRC and ANG FMs will determine time frame required to complete training upon arrival at home station.

5.5.4. Emergency Egress and Parachute Descent Training (PDT) should be given concurrently when practical (ejection or non-ejection aircraft).

5.5.5. Flight Surgeons will receive AFECT at frequencies determined IAW MDS-specific guidance.

5.5.6. Aircrew members arriving PCS or visiting aircrews, such as those assigned to the inspector general, test squadrons, etc., are not required to re-accomplish egress or PDT if source documentation of currency can be obtained (e.g., ARMS) and they are current in the assigned aircraft. However, training on local unit specific AFE and rescue requirements will be accomplished.

5.5.7. Aircrew members previously qualified in a given ejection seat equipped aircraft and currently in transition to a different model of the aircraft, or undergoing upgrade training in the same type of aircraft, may receive egress training at the regular interval from date last accomplished, if the escape systems and procedures are the same in both aircraft models.

5.5.8. Aircrew members in transition from one type of ejection seat equipped aircraft to another and awaiting a Fighter Training Unit (FTU) slot will receive Emergency Egress and PDT at intervals determined by respective MAJCOM.

5.5.9. Student aircrew members assigned to an FTU will receive emergency egress and PDT training IAW applicable syllabus.

5.5.10. Initial and periodic ACDE training will be conducted IAW appropriate 11-2MDS-series, Vol 1 publications, this instruction, applicable TOs, and approved AFMLPs.

5.5.11. An aircrew member may be credited with ACDT (LL04) during local operational readiness exercises provided all AFECT requirements and objectives are satisfied (i.e. crewmember donned chemical defense ensemble and subsequently processed through ACCA).

5.6. AFECT Safety. Safety is paramount when planning and conducting AFECT. As a minimum, the following will apply:

5.6.1. The group FEO or AFE superintendent, with assistance from the local safety office, will ensure ORM or other risk management programs or techniques are fully implemented, documented in unit lesson plans (LP), and tailored to their specific operation and location for all AFECT events.

5.6.2. The AFE superintendent will develop and publish an Emergency Action Plan (EAP) for use during any training event where injury is likely, (e.g., AFE class if signal flares are activated). The EAP will be included in the unit LP, briefed by the lead instructor prior to each training event, and understood by every instructor and student prior to event start.

5.7. Passenger and Incentive Flyer Training:

5.7.1. Passengers scheduled for flight aboard ejection seat equipped aircraft will receive, as a minimum, emergency egress, PDT, and AFE training no earlier than 72 hours prior to flight. If the 72 hours are exceeded before flight, training will be re-accomplished. Emergency egress training includes cockpit familiarization, use of oxygen/communication controls and switches, and manual bailout procedures training, if applicable.

5.7.1.1. Incentive/FAM riders flying over water beyond gliding distance to land will also receive water survival academics and hands on training with life preservers/life rafts.

5.7.2. Non-rated personnel who fly occasionally to perform official duties (e.g., enroute ground support, security, etc.) will receive emergency egress, PDT, and AFE training at intervals determined by respective MAJCOM.

5.7.3. Passengers scheduled for flight aboard non-ejection seat equipped aircraft will be briefed on emergency procedures and AFE as depicted in appropriate aircraft passenger briefing guides. The aircraft commander or their designated representative may conduct this briefing.

5.8. Training Documentation:

5.8.1. All completed AFECT events will be documented on AF IMT 1522, *ARMS Additional Training Accomplishment Report*, or equivalent and maintained as a record of class attendance IAW AFI 37-139. Only those event identifiers shown in **Table 5.1** of this instruction will be used to identify AFECT events.

5.8.2. Upon completion of training, one or more rosters will be signed by the instructor and forwarded to appropriate office for input into ARMS. The OSS AFE Flight staff will keep a duplicate copy of the rosters on file.

5.8.2.1. **(Added-AFSOC)** AFE will not keep records of Emergency Egress Training, Ejection Seat (LL-02) or Emergency Egress Training, Non-Ejection Seat (LL-03). IAW **Paragraph 5.2.2.1.1**, the AFEO may appoint other qualified aircrew members to conduct this training. When the AFEO uses this option the AFE section is not required to track or keep a copy on file. When required to retain records those records will be maintained for 2 years. (T-2)

5.8.3. Instructors will provide written documentation to individuals who are from another unit (i.e., Inspector General, HHQs staff, and visiting aircrews) so their records can be updated at home station.

5.8.4. FTU and Basic Fighter Training (BFT) student rosters will be maintained until graduation.

5.8.5. AFE is not responsible for maintaining ARMS or managing and tracking aircrew training status for AFECT events in ARMS.

5.9. Training Aids and Equipment:

5.9.1. Emergency ground and air egress and ejection seat training will be accomplished using the appropriate Egress Procedures Trainer (EPT) when available or the actual aircraft only when an EPT is not available. Non-ejection seat egress training will be conducted using actual aircraft to the maximum extent possible.

5.9.2. Units may use the actual aircraft installed ejection seat for egress training when designated training devices are not available provided all ejection seats are made safe by qualified egress personnel.

5.9.3. For ACDT and egress training, aircrew members are required to wear all clothing and AFE items typically worn during contingency operations unless specifically prohibited by this instruction.

5.9.4. AFECT instructors will inspect training devices and aids prior to use to ensure they are properly configured, safe, and operational for training. The AFE superintendent or their designated representative will perform annual inspections of all AFE training devices and aids to ensure they are current and safe for training use. This includes displays, ACDE, AFE, and personnel lowering devices. Inspections will be documented appropriately.

5.9.4.1. **(Added-AFSOC)** AFE training equipment inspection will be documented in FERMS. (T-2)

5.9.4.2. **(Added-AFSOC)** Units are not authorized to substitute AFE training equipment for operational equipment. (T-2)

5.9.5. Training equipment will mirror operational equipment to the maximum extent possible. Equipment used for training will be clearly marked "FOR TRAINING USE ONLY" and stored to prevent co-mingling with operational equipment. When training equipment does not exist (i.e., night vision devices, combat survival radios, etc.), MAJCOMs may designate the use of operational equipment for training as long as the training does not damage or destroy the integrity of the equipment.

5.9.5.1. **(Added-AFSOC)** AFSOC units may use the following operational equipment as long as it does not cause damage to the end item. Due to item costs and availability the PRC-112 radio, NVG, and AERPS mask may be used for limited training. (T-2)

5.10. Lesson Plans Development Guidance:

5.10.1. AFECT Air Force Master Lesson Plans. AFMLPs are documents developed to prescribe instructional requirements, teaching points, and instructor-student activities essential to the accomplishment of training objectives for all AFECT. AFMLPs are designed to include the minimum training requirements and are essential for supervisors and instructors to ensure lesson objectives are completed.

5.10.2. Only approved AFMLPs developed by the 361 TRS/TRR AFE CDC Writer, Sheppard AFB, TX will be used to conduct AFECT. The AFMLPs, developed by the 361 TRS/TRR, are complete and ready be downloaded once they have been approved by Lead MDS MAJCOM. Units should delete information from the AFMLPs that does not pertain to their mission or unit. MAJCOMs will use AFMLPs developed by the 361 TRS/TRR. Furthermore, ARC units that have AFECTIs who are solely responsible for conducting code of conduct continuation training events will only use lesson plans approved by AFRC/A3TS or NGB/A3OS.

5.10.3. The FEO or AFE superintendent must tailor down the AFMLP and produce an AFECT Master Lesson Plan (MLP) to meet their wings mission needs. AFECT MLP are un-personalized lesson plans used for control and standardization within an organization or unit that has been developed from the AFMLP by deleting unnecessary information based on a units equipment or MDS. Group FEO/AFE superintendents who identify a need for a new AFMLP will forward request to MAJCOMs or Lead MDS MAJCOM for review of new requirement(s). Approved requests will be forwarded, and all data from Subject Matter Expert (SME) for development of AFMLP to 361 TRS/TRR AFE CDC Writer, Sheppard AFB, TX.

5.10.4. AFECT LP. Lesson plans are documents developed from the AFECT MLP and prepared for use by each instructor to organize and present information. A personalized lesson plan contains information to aid the instructor. This is accomplished by writing personal instructional notes and material on the right-hand side of the AFECT MLP. The lesson plan must be validated with approved reference materials that can be produced upon request.

5.10.5. All AFE MLPs and AFECT LPs used to conduct AFECT will be reviewed annually by the group FEO or AFE superintendent. Annual reviews will be documented as directed by individual MAJCOMs.

5.10.5.1. **(Added-AFSOC)** Lesson plans will have a change page in front of the LP, which will include all changes since the last review. Changes will include, but are not

limited to, safety investigation lesson learned, technical order changes, deficiency reports, MAJCOM guidance, and WR-ALC/GRV directions. Annual review will be documented on title page of AFECT LP's. (T-2)

5.10.6. Higher headquarters correspondence (e.g., messages, Flight Crew Information Files [FCIF], etc.) directing the inclusion of information not covered in AFECT AFMLPs or lesson plans will be added as directed by the 361 TRS/TRR.

5.10.7. Designated Lead MAJCOM MDS SMEs will assist the 361 TRS/TRR in validating AFMLPs biennially during the World Wide AFE Workshop MAJCOM breakouts. If more frequent reviews are deemed necessary; the requesting MAJCOM will coordinate and fund for the CDC Writer to attend MAJCOM conference to accomplish the review with SMEs. The 361 TRS will notify the MAJCOMS of any changes to the AFMLPs and group FEO/AFE superintendent will update their MLPs upon notification by their MAJCOMs.

5.10.8. **(Added-AFSOC)** Unit AFE continuation training will include realistic "hands-on" training, maximum student participation, student demonstrated knowledge and proficiency, and training aids to enhance the learning objectives. (T-2)

Table 5.1. AFECT REQUIREMENTS (T-2)

ARMS EVENT IDENTIFIER	COURSE TITLE	EVENT FREQUENCY
LL01	Aircrew Flight Equipment Familiarization	Initial (Notes 1, 3)
LL02	Emergency Egress Training, Ejection Seat (Note 6)	(Notes 3, 5)
LL03	Emergency Egress Training, Non-Ejection Seat (Note 6)	(Notes 3, 5)
LL04	Aircrew Chemical Defense Training (ACDT)	(Note 5)
LL05	Egress Training with ACDE (Note 6)	Initial (Note 2)
LL06	Aircrew Flight Equipment (AFE) Training	(Note 5)
LL07	Aircrew Fit Check	(Note 1, 3, 7)

NOTES:
1. Accomplished before first flight at base of assignment.
2. Must be accomplished one time in assigned MDS aircraft before first flight using ACDE.
3. Grounding items: LL01, LL02, LL03 and LL07.
4. AFECT courses may be combined as long as all required training is accomplished.
5. Training frequencies are identified in AFI 11-202, Volume 1, *Aircrew Training*, and AFI 11-2MDS-series, Vol 1.
6. Qualified instructor aircrew are only allowed to teach LL02, LL03, and LL05 and must be current in the event being taught.
7. All MDSs will use the following Fit Check frequencies until AFI 11-202 and/or AFI 11-2MDS-series, Vol 1s can be updated, at which time Note 5 will apply: Ejection seat aircrews = initially and every 4-months. Non-ejection seat aircrews = initially, no periodic refit is required. Aircrews performing duties on aircraft without individually fit AFE requirements are exempt from this requirement.

5.11. (Added-AFSOC) Aircrew Flight Equipment Continuation Training Instructor (AFECTI) Certification and Recertification Procedures.

5.11.1. **(Added-AFSOC)** The FEO and AFES will be certified in writing by the Operations Group commander (or equivalent) to conduct AFECT. (T-2)

5.11.2. **(Added-AFSOC)** All other AFECTIs (officers and civilians) must be certified by the FEO or AFES to conduct any portion of AFECT. **Note**: Refer to **Paragraph 5.2.2.1** of this supplement for egress training. AFECTIs are certified only after successfully completing the instructor qualification training and certification requirements of this supplement. AFRC unit AFECTIs will be certified by the group or squadron FEO or AFES. (T-2)

5.11.3. **(Added-AFSOC)** As a minimum, qualification training will include attendance at applicable courses specified as mandatory in **Table 4.1**, and an evaluation by the FEO or AFES of a "start-to-finish" presentation of each event or specific area of an event to be certified to conduct. This includes all instructional materials and procedures for the event or specific area to be certified. Officers who instruct are not required to attend Academic Instructors Course or equivalent. ANG waiver is applicable to those that meet criteria set forth in the waiver. (T-2)

5.12. (Added-AFSOC) AFECTI Certification. The FEO or AFES will certify each AFECTI initially and every 18 months thereafter (every 24 months for ANG units). The FEO and AFES will use the appropriate lesson plan to perform instructor evaluations. Not applicable to AFRC units. (T2)

5.12.1. **(Added-AFSOC)** Initial certifications are required for each event. Subsequent instructor evaluations are required for only one event. (T-2)

5.13. (Added-AFSOC) AFECTI. Enlisted and civilian instructor certifications will be documented on AF Form 1098 or equivalent electronic tracking system IAW AFI 36-2201, Vol 3, and maintained in the individual's OJT record. Documentation of FEO and qualified aircrew member certifications to conduct AFECT will be by a memorandum signed by the FEO or AFES. (T-2)

Chapter 6

AUTOMATED LIFE-SUSTAINING EQUIPMENT RECORDS

6.1. Overview. The ALERTS and APWEB are automated global data management systems developed to allow "total asset visibility" of AFE items and associated documentation processes. ALERTS is capable of supporting the entire AFE community to automate the data management processes for most inspection, training, supply, and administration documents. The vision of ALERTS is to provide the ability and means of improving the performance methods and administration needs of the AFE community and support agencies using current COTS hardware, software, and the military (.mil) network.

6.2. Automated Document and Management Systems:

6.2.1. ALERTS. Once fully fielded, ALERTS will be used by all AFE functions within the Air Force IAW this chapter and MAJCOM supplements thereto. ALERTS Computer Based Training (CBT) is a mandatory training requirement prior to any individual using ALERTS in all organizations.

6.2.2. ALSMS. ALSMS is a management tool used by AFE personnel. AFE units are authorized to continue using the ALSMS program to best suit their needs until they are designated by their MAJCOMS to be upgraded to ALERTS. Units tracking AFE items with the ALSMS program are not required to duplicate the data maintained in the computer on status boards, shop inspection cards, or forms. AFE superintendents will standardize equipment tracking methods within their respective groups.

6.2.3. Aircrew Protection Website (APWEB) can be accessed at: **https://private.amc.af.mil/a3/a37t/dot/DOTL/UnitData/UnitDataHomeFrame.cfm**. All units that are not using ALERTS will use APWEB to document their end item data IAW the APWEB user manual. Each unit will provide all relevant data on each item to include; contract numbers, lot numbers, dates of manufacture, dates of expiration, back order quantities, off-base requisition numbers, and quantities deployed. The data contained within this site must be complete, verified, and validated by their respective MAJCOM prior to the unit being upgraded to ALERTS.

6.3. Responsibilities:

6.3.1. Air Force ALERTS Office of Primary Responsibility (OPR). HQ AMC is the primary OPR for the development, implementation, maintenance, and certification of ALERTS. The OPR will:

6.3.1.1. Coordinate with the contract support team, AFE MAJCOM FMs, and the Aircrew Performance Executive Council (APEC).

6.3.1.2. Oversee the support contracts and serve as the Contracting Officer Technical Representative (COTR) to resolve funding, project, and personnel issues.

6.3.1.3. Sponsor and assist the support team representatives for ALERTS throughout the recertification process.

6.3.1.4. Coordinate with the Task Manager (Contractor Project Manager) to manage requests for enhancements to ALERTS.

6.3.1.5. Establish Memorandum of Agreement between HQ AMC, 77 AESG, and HQ USAF for ALERTS liaison position at 77 AESG.

6.3.2. 77 AESG Sustainment Integrated Process Team Personnel (648 AESS/TAL). 648 AESS/TAL personnel in conjunction with the contractor's liaison position at 77 AESG will:

6.3.2.1. Manage, input, and maintain work unit code and national stock number support data for AFE items except for COTS/NDI unless formally approved in accordance with the established COTS/NDI approval process.

6.3.2.2. Coordinate on all aspects of provisioning for sustainment of AFE items (i.e., illustrated parts breakdown [IPB] and or assembly definitions, etc.).

6.3.2.3. Notify the ALERTS liaison and or the Air Force ALERTS OPR of the TCTO to be updated in the inspection definition prior to release of any TCTO.

6.3.2.4. Extract, analyze, and make decisions based on data extract reports.

6.3.3. AFCFM, MAJCOM and ANG FM, NAF. The AFCFM, MAJCOM and ANG FMs, and NAFs will:

6.3.3.1. Extract, analyze, and make decisions based on data extract reports.

6.3.3.2. Extract data for specialized high-level reports, (i.e., Annual Report to Congress for ACDE equipment, AFCAIG/CPFH program, etc).

6.3.3.3. Establish an ALERTS POC within their command who will serve as the primary conduit to the Air Force ALERTS OPR and their units.

6.3.3.4. Certify all AFCAIG/CPFH items loaded in ALERTS.

6.3.4. AFE Superintendents/Supervisors. Through ALERTS, AFE superintendents/supervisors will:

6.3.4.1. Ensure documentation quality control.

6.3.4.2. Input data through specialized program management modules, (e.g., supply, quality control, etc).

6.3.4.3. Prepare equipment, personnel, aircrew, and aircraft for contingency operations through ALERTS.

6.3.4.4. Extract, analyze, and formulate decisions from reports in preparation of equipment, training, personnel, aircrew, and aircraft for daily and contingency operations.

6.3.4.5. Validate that assigned personnel have completed the CBT prior to authorizing the use of ALERTS.

6.3.4.6. AFE superintendent will serve as the group OPR and the unit's overall POC for ALERTS issues and is responsible for all unit actions. And, will serve as the primary conduit to the MAJCOM ALERTS OPR.

6.3.5. AFE Technician. Through ALERTS, the AFE technicians will:

6.3.5.1. Document the results from AFE item inspections to include all routine and TCTO inspections and modifications.

6.3.5.2. Document results from AFE items, supply inventories, and transactions.

6.3.5.3. Document aircraft and AFE item and maintenance actions.

6.3.5.4. Document aircraft's AFE items configuration loading and unloading.

6.3.5.5. Document corrective actions from quality control inspections.

6.3.5.6. Ensure training records are correct.

6.4. ALERTS General Areas:

6.4.1. Requesting Modifications or New Capabilities:

6.4.1.1. Purpose. ALERTS serves as the single focal point program in the documentation of all AFE processes. To meet the rapidly changing needs of the AFE community, the following process will be used to manage requests for modifications and new ALERTS capabilities outside of the scope of the current support contract. This process is described below.

6.4.1.2. Changes to Policy/Procedure Documents and or ALERTS Processes. The identifying user will accomplish the following:

6.4.1.2.1. Provide a written proposal of the complete suggested process to their MAJCOM FM.

6.4.1.2.2. The MAJCOM FM will validate the need and forward the proposed process to the Air Force ALERTS OPR.

6.4.1.2.3. The Air Force ALERTS OPR will forward the proposal to the support contractor for evaluation.

6.4.1.2.4. The support contractor will evaluate the proposed process and determine the technical feasibility.

6.4.1.2.5. If the need is technically feasible, the Air Force ALERTS OPR will validate and forward to all using commands for their input. MAJCOM ALERTS POCs have 10 working days to evaluate proposals. Negative replies are required. If the need applies to only the proposing command, the Air Force ALERTS OPR will validate the need and proceed to the next step.

6.4.1.2.5.1. If all MAJCOMs' POCs do not agree, the proposal will be forwarded to HQ USAF/A3O-AT for final resolution.

6.4.1.2.5.2. If all ALERTS MAJCOMs' POCs agree, the support contractor will determine the cost for development and implementation.

6.4.1.2.6. Once the technical feasibility and cost analysis are received, the proposal will be forwarded to the APWG and APEC for final determination and a funding solution.

6.4.1.2.6.1. If approved and funding has been secured, the Air Force ALERTS OPR will initiate the development and implementation process.

6.4.1.2.6.2. If disapproved, the submitting command will be notified by the Air Force ALERTS OPR and or the APEC of their decision and rationale for disapproval.

6.4.2. Software Problem Report (SPR):

6.4.2.1. Users will submit SPRs through the established procedures contained in APWEB or ALERTS websites. Users should contact their local Work Group Managers to validate there is not connectivity problems locally before contacting the help desk or submitting an SPR. There are 3 types of SPRs, which are described as follows: ***NOTE:*** The inability to connect or a slow response from the APWEB or ALERTS servers does not constitute a problem with these systems.

6.4.2.1.1. Category 1. An identified requirement is nonfunctional.

6.4.2.1.2. Category 2. An identified requirement is nonfunctional, but there is a valid work-around to accomplish a required task.

6.4.2.1.3. Category 3. Administrative or cosmetic only and do not affect the function of the programs.

6.4.2.2. Users will fill out all required information on the SPR submittal form to include detailed descriptions of the problem when required.

6.4.3. AFE Automated Information Technology (AIT) Barcode Marking Standard. All AFE units with acquisition authority will refer to their responsibilities paragraphs contained within this instruction and **Attachment 2** for implementing the AF AFE AIT barcode marking standard for AFE supplies.

6.4.4. Standards.

6.4.4.1. Nomenclature Standard. To ensure a common standard for nomenclatures within ALERTS, units will use the technical order IPBs or manufacturer's manuals when establishing items. Items or equipment not addressed in IPBs, formal technical orders, or manuals will be assigned a nomenclature by 77 AESG or 642 CBSG.

6.4.4.2. Air Force Kit/Aircraft Configuration Naming Standards. To ensure global data reporting capability, units will use the identified standards contained within ALERTS. Request additional templates IAW **paragraph 6.4.1** of this Instruction.

6.4.4.3. Item Supply Detail Data. All relevant data on these screens will be tracked by all AFE units. If the data is not available units will use the standard established below for all unknown data fields.

6.4.5. Data Entry Standards:

6.4.5.1. Within APWEB, units attempting to enter data that is unavailable will use "UNK" for unknown text fields, and 01/01/1900 for unknown date fields. All unknown data fields that are not mandatory will be left blank.

6.4.5.2. Within ALERTS, all unknown data fields not mandatory will be left blank. For mandatory fields, units will use the APWEB standard.

6.4.5.3. All contract number and lot number entries must include the full contract and lot number and be entered into ALERTS exactly as they appear on the item. This will ensure there is no confusion when data is recalled.

6.4.6. LOGIN Standard for AFE Personnel and Aircrew. LOGIN standard is case sensitive and includes the last name, first initial, and last six numbers of individual's SSN. AFE units

must scan the one-dimensional bar code on the backside of the aircrew's military identification card for the ALERTS login.

6.4.7. APWEB and ALERTS Data Protection; For Official Use Only (FOUO):

6.4.7.1. Reports generated from APWEB/ALERTS will be considered FOUO, unless otherwise marked, and must be protected IAW DoD and AF instructions.

6.4.7.2. Reports containing personnel data, i.e., SSN will have the privacy act statement affixed.

6.4.7.3. Aircraft tail number location in ALERTS must use the last six digits as the standard (***EXAMPLE:*** 99-0011). This will allow full integration of the new automated forecasting system and the requirements established by 84 MUSG/GJ (OO-ALC) for properly tracking and forecasting time change items for replacement.

6.4.8. Configuration Data File (CDF) Process:

6.4.8.1. The CDF established for accountable equipment items will be maintained in AFEMS IAW AFMAN 23-110. Accountable and non-accountable equipment end item authorizations will be documented and maintained in APWEB/ALERTS. Air Staff, MAJCOMs, and 77 AESG when experiencing acquisition difficulties, may direct units to document authorizations and on-hand quantities within these programs.

6.5. ALERTS Operations Areas:

6.5.1. Aircraft Accident Data Records. Upon notification from a competent authority, the AFE superintendent, squadron system administrator, or AFE NCOIC will freeze all AFE records for equipment involved in a mishap. To ensure data fidelity for the safety review board, these records will remain frozen until such time as determined by the involved MAJCOM Staff Judge Advocate or delegated authority. Once authority has been granted, the AFE superintendent will notify the contractor help desk to unfreeze the records.

6.5.2. Data Review Requirement. AFE superintendents and NCOICs or designated individual will review APWEB and ALERTS to validate data accuracy every 180 days.

6.5.3. CTK Procedures. AFE specialized equipment used on the flightline will be marked and managed IAW AFI 21-101, *Aircraft and Equipment Maintenance Management*, and **Chapter 3** of this instruction.

6.5.4. Equipment Accountability. ALERTS specialized equipment will be marked and managed IAW AFI 33-112, *Computer Systems Management*.

6.5.5. ALERTS Data Record Transfer Process:

6.5.5.1. Units using ALERTS to transfer equipment, personnel, or aircraft records to other ALERTS enabled units will use the ALERTS electronic data transfer process.

6.5.5.2. Units using ALERTS to transfer equipment, personnel, or aircraft records to non-ALERTS enabled units will still use the ALERTS electronic data transfer process. However, the information will be stored under a general identified Personnel Accounting System (PAS) code until the receiving unit comes online with ALERTS. The sending unit will also provide paper copies of all required forms.

6.5.6. AF IMT 1297, *Temporary Issue Receipt*, Process. AFE units with ALERTS fully implemented can use ALERTS in lieu of the AF IMT 1297 to transfer responsibility of the item. MAJCOMs may implement more restrictive accountability procedures as required.

6.5.7. Contact Memory Button (CMB) Processes and Mounting. MAJCOMs will develop their own implementation process for units using the CMB.

6.5.8. Interaction with Mobility Inventory Control & Accountability System (MICAS). Air Staff or MAJCOM will provide the APWEB or ALERTS data associated with MICAS to data managers when requested through these programs.

6.5.9. Deployment and Multi-Command or Multi-Unit Operations:

6.5.9.1. Units will use the guidance in the ALERTS user and process manuals for these operations. Units who do not have any ALERTS specialized equipment or are not connected to the ALERTS site while deployed will refer to **paragraph 6.5.10** for documentation procedures.

6.5.9.2. Non-ALERTS units, or units not using CMB, which service multi-place aircraft will preposition a copy of all AFE items inspection records on the aircraft prior to all deployments.

6.5.10. Units will develop documentation procedures to update ALERTS data when connectivity is not available or if they do not have the necessary hardware to use ALERTS in the unconnected mode. This will include all maintenance actions, QA, and any other actions.

6.5.11. DoD, Air Force and AFTO Forms/IMT, and Other Documentation (NL555, *Battery Inspection Label*) Within the Sections/Shops. Units implementing ALERTS do not have to use serviceability tags to identify equipment in service, storage, or otherwise used unless specifically required in AFMAN 23-110 or required by Air Force technical orders. Units will use condition code tags when turning in equipment to supply IAW AFMAN 23-110. MAJCOMs may implement more restrictive accountability procedures to distinguish serviceability of equipment as required.

6.5.12. ALERTS will use a single type of inspection record for all AFE items when applicable.

6.5.13. AF Form 623 (Automated). ALERTS is the primary electronic equivalent authorized means to provide the capability to electronically track all AFE technician training. MAJCOMS will develop an implementation process for using the electronic ALERTS AF Form 623. ***NOTE:*** TBA is an authorized AF Form 623 automated electronic equivalent alternative for those units that do not have access to ALERTS.

Chapter 7 (Added-AFSOC)

DEPLOYMENT AND CONTINGENCY OPERATIONS

7.1. (AFSOC) Purpose. This chapter establishes broad policies governing responsibility and preparation for the deployment of AFE. It also establishes requirements for deployment and distribution of ACDE for all aircrew members. Units without a Counter-Nuclear, Biological, Chemical (C-CBRN) defense, Designed Operational Capability (DOC) or deployable Global Reach Lay down (GRL), Weapons of Mass Destruction (WMD), Unit Type Codes (UTC) are exempt from these requirements. This guidance will be superseded by AFI 11-301, Vol 3 when published.

7.2. (AFSOC) Responsibilities.

7.2.1. **(AFSOC) MAJCOM.**

7.2.1.1. **(AFSOC)** Establish command-specific supplement and route through ASC/WNUW Aircrew Flight Equipment CBRN Liaison, with final approval authority resting with HQ USAF/A3O-AT. (T-2)

7.2.1.2. **(AFSOC)** The AFE CBRN Liaison assigned to the Chemical-Biological Defense Systems Branch (ASC/WNUW), Aberdeen Proving Grounds, Maryland, is the focal point for all AFE CBRN program policy, plans procedures, equipment, budget and training standards. (T-2)

7.2.1.3. **(AFSOC)** Monitor and review the Unit Type Code (UTC) requirements for changes in missions and requirements. (T-2)

7.2.1.4. **(AFSOC)** Provide test assets to support surveillance testing of AFE and ACBRNE. (T-2)

7.2.1.5. **(AFSOC)** Ensure standardized guidance is provided for aircraft and AFE configurations. (T-2)

7.2.1.6. **(AFSOC)** Ensure AFE manning (grade/skill level) meets UTC and Manpower Force (MANFOR) requirements. (T-2)

7.2.2. **(AFSOC) Group and Squadron Commanders.**

7.2.2.1. **(AFSOC)** Will ensure compliance with this chapter and keep AFE personnel abreast of the group's existing and forthcoming contingencies and commitments. (T-2)

7.2.2.2. **(AFSOC)** Ensure unit's annual financial plan includes a budget for maintaining AFE to meet all probable peacetime and wartime missions. (T-2)

7.2.2.3. **(AFSOC)** Ensure that forthcoming mobility commitments are provided adequate support from organizations within the wing/group. (T-2)

7.2.3. **(AFSOC) Group AFEO/AFES and Squadron AFEO/NCOIC.**

7.2.3.1. **(AFSOC)** The AFEO/AFES and NCOICs are responsible for UTC manning and unit mission contingency operation. (T-2)

7.2.3.2. **(AFSOC)** Utilize **Attachment 4-8** for deployment operations. (T-3)

7.2.3.3. **(AFSOC)** The AFEO/AFES will ensure units have standardized deployment operating instructions that cover recall, deploy, employ, and redeploy AFE personnel, equipment, and supplies. These instructions will include all necessary information required to setup, employ, resupply, and staff the ACCA used by each unit. (T-3)

7.2.3.4. **(AFSOC)** When deployed, identify equipment shortages resulting in mission impairment through the Status of Resources and Training System (SORTS) reporting process IAW AFI 10-201, *Status of Resources and Training System*. (T-2)

7.2.3.5. **(AFSOC)** Ensure copies of MSDSs are available for each type of hazardous material being shipped to deployed locations. (T-2)

7.2.3.6. **(AFSOC)** Ensure items listed in LOGDET and Contingency Operations/Mobility Planning and Execution System (COMPES) listings are on hand and serviceable. Units must also review and comply with theater specific reporting instructions for specialized AFE requirements. Squadron NCOICs, through the AFEO/AFES, squadron commander, and operations group commander will notify their MAJCOM of shortfalls in their mobility packages. (T-2)

7.3. (AFSOC) Pilot and Non-pilot Units.

7.3.1. **(AFSOC)** Pilot units, with assistance from non-pilot units, are responsible for developing and maintaining the standard LOGDET for each UTC assigned. The unit must comply with responsibilities IAW AFMAN 10-401, *Operation Plan and Concept Plan Development and Implementation.* The goal is a uniform package for all units using the UTC. Coordinate change requests through respective MAJCOM AFE POC's. (T-2)

7.3.2. **(AFSOC)** Non-pilot units will review assigned UTC equipment listings on a biennial basis. Provide the pilot unit with suggested changes. Units will get MAJCOM approval to deviate from pilot unit UTC. This includes additions, substitutions, and use of non-standard equipment. (T-2)

7.4. (AFSOC) Mobility Preparation, Personnel.

7.4.1. **(AFSOC)** Ensure AFE personnel are trained to process and handle hazardous cargo IAW AFMAN 24-204(I), *Preparing Hazardous Materials for Military Air Shipments*. At least two AFRC/ANG personnel (per unit) will be trained and qualified to handle hazardous materials. (T-2)

7.4.2. **(AFSOC)** If applicable, ensure personnel are qualified in unit assigned aircrew weapons to include issue, operations, cleaning, and security requirements. (T-2)

7.4.3. **(AFSOC)** All personnel will be current in essential ancillary training and wartime skills identified in CFETP 1P0X1 prior to deployment. (T-2)

7.4.4. **(AFSOC)** Deployable equipment and trained technicians will be available for AFE and ACCA operations. AFSOC units will utilize aircrew decontamination procedures validated and approved by HQ USAF/A3O-AT and technicians will be thoroughly trained in ACCA operations. (T-2)

7.4.5. **(AFSOC)** All aircrews will have their individual AFE combat configured prior to the first employment mission. Squadron NCOICs will proactively pursue critical data related to each deployment including number of AFE personnel required, number of deploying aircrew,

number of deploying aircraft, and any special personnel requirements or equipment required. (T-2)

7.4.6. **(AFSOC)** When wartime scenarios call for a UTC change, or when exercise or other peacetime support needs must be evaluated, the following factors should be considered in making associated manpower requirements determinations: hours of operation, numbers of aircraft and aircrews, and types and numbers of equipment at the deployed location. To provide supervisory responsibility for deployed technicians, aircraft, and equipment, a 5-skill level (staff sergeant or higher when available) AFE technician will be deployed when five or more aircraft are tasked. AFE Superintendents and NCOICs are responsible for UTC manning and unit mission contingency operation. Requests for temporary manning assistance should be submitted through the Functional Manager. (T-2)

7.5. (AFSOC) Equipment.

7.5.1. **(AFSOC)** Units must coordinate with each other, as well as their respective Groups to ensure appropriate and adequate equipment and supplies are deployed. (T-2)

7.5.2. **(AFSOC)** Units experiencing a shortage of AFE may work with units with similar MDS aircraft to satisfy requirements. Coordinate all equipment requirements through respective MAJCOMs to ensure other units' deployment capabilities are not hampered. (T-2)

7.5.3. **(AFSOC)** Ensure mobility bins or boxes are available for transportation and storage of AFE and supplies. Bins will be pre-packed to the maximum extent possible at all times. (T-3)

7.5.4. **(AFSOC)** Include portable or deployable equipment racks, workbenches, storage bins, and computers in contingency package. Facility considerations will include all AFE requirements. (T-3)

7.5.5. **(AFSOC)** Ensure sufficient quantities of equipment, parts, supplies, forms, inspection records, T.O.s and computers are packed to support extended combat operations. (T-2)

7.5.6. **(AFSOC)** Units will maintain sufficient quantities of technical data, tools, equipment repair parts, and supplies to support surge-type operations under bare-base conditions for a minimum of 60 days without resupply. Sufficient test equipment should be available to meet deployment commitments and have current calibrations. Equipment and supplies designated for contingency commitments should be prepackaged to the maximum extent at all times. These assets should not be used as a source of supply for daily peacetime operations at home station. (T-2)

7.5.7. **(AFSOC)** Ensure equipment stored in the mobility bins or boxes are inventoried and inspected for serviceability at least once every 180 days. In addition to FERMS a locally developed form will be used on each bin or box to document this inspection. Constant maintenance of mobility stock levels must be accomplished to support ongoing operations. Additional consideration should be given to the potential for follow-on tasking from a deployed location. (T-2)

7.5.8. **(AFSOC)** Home station AFE sections will maintain a copy of all deployed information (mobility bin inventories, bin inspection forms, HAZDECs, MSDSs, deployed Custodian Authorization/Custody Receipt Listing (CA/CRL), Test Measurement and

Diagnostic Equipment (TMDE) record) to support reach back support and reconstitution efforts. (T-2)

7.5.9. **(AFSOC)** Ensure all accountable, deployable AFE equipment items are assigned use code "A" for mobility on the CA/CRL. (T-2)

7.5.10. **(AFSOC)** Ensure TMDE assets are calibrated to the maximum extent possible prior to deployments. Inspection should be staggered to prevent all TMDE coming due at same time and all TMDE should be carefully packaged to prevent damage. (T-2)

7.5.11. **(AFSOC)** Ensure shelf life items have a minimum of 12 months remaining prior to deployment when possible. (T-2)

7.6. (AFSOC) Deployment.

7.6.1. **(AFSOC)** The Deployment Phase of the operation will be the combination of preparation and a time limited execution of actions. These deployment actions will normally start with tasking notifications and continue until all AFE personnel, equipment and aircraft have left home station.

7.6.2. **(AFSOC)** During pre-deployment and subsequent deployment phases, aircraft must be configured for contingency operations, as required (refer to AFI 11-301, Vol 2, AFSOCSUP, *Maintenance and Configuration Requirements for Aircrew and Aircraft-Installed Life Support Equipment (LSE),* and applicable aircraft configuration instructions for contingency configuration requirements). (T-2)

7.6.3. **(AFSOC)** Appropriate agencies as identified IAW AFI 31-101 must be notified to arrange weapon and ammunition issue or pickup. (T-2)

7.6.4. **(AFSOC)** Ensure deploying AFE and accompanying inspection forms are sanitized of data pertaining to unit of assignment or activity. (T-2)

7.6.5. **(AFSOC)** All deploying aircrews will have individual AFE combat configured prior to the first employment mission. The following actions are required:

7.6.5.1. **(AFSOC)** Personnel locator beacons will be placed in the appropriate mode based on established theater requirements or as directed by battle staff. (T-2)

7.6.5.2. **(AFSOC)** Configure aircraft AFE for appropriate contingency operations.

7.6.5.3. **(AFSOC)** Establish procedures to ensure extra, sanitized copies of deploying aircraft and aircrew AFE records accompany deploying aircraft and aircrews.

7.7. (AFSOC) Employment.

7.7.1. **(AFSOC)** As applicable, upon arrival at deployed location, AFE supervision will establish contact with the Survival Recovery Center (SRC) and CE Readiness NBC control center personnel to coordinate plans for Aircrew Contamination Control Area (ACCA) construction and operation during stages of alert. ACCA operations should be collocated with ground Crew Contamination Control Area (CCA) operations to the maximum extent possible. Refer to AFI 11-301, Vol 3, *Aircrew Flight Equipment (AFE) Combat Operations* (forthcoming). (T-2)

7.7.2. **(AFSOC)** Visit planned primary and back up ACCA processing locations. Consider environmental impact of area (standing water, hills, and trip hazards), distance to site(s), and accessibility. Ensure all AFE personnel are briefed on the exact locations identified. (T-2)

7.7.3. **(AFSOC)** Each AFE section should establish an organizational Non-classified Internet Protocol Router Network (NIPRNET) and Secret Internet Protocol Router Network (SIPRNET) account to ensure effective communications. If an organizational SIPRNET account is not available, efforts should be taken to gain access to the SIPRNET for conduct of deployed operations. (T-2)

7.7.4. **(AFSOC)** Follow Theater, MAJCOM, and unit specific guidance for employed area operations and redeployment. (T-2)

7.7.5. **(AFSOC)** Units should report all shortfalls through deployed leadership to minimize impact on theater capability. (T-2)

7.7.6. **(AFSOC)** Should manning requirements and mission needs dictate, deployable augmenter's resources may be trained in shelter operations and ACCA processing. However, they will not be trained or assigned in a capacity requiring AFE technical expertise (AFSC 1P0X1). (T-2)

7.8. (AFSOC) Weapons.

7.8.1. **(AFSOC)** When applicable ensure AFE technicians are qualified annually (18 months for ANG) on weapons handling procedures, operations, cleaning, and security requirements, as applicable, for M9 (9mm) and M16/M4 weapons IAW AFPD 16-8, *Arming of Aircrew, Mobility, and Oversea Personnel*, AFI 31-207, *Arming and Use of Force by Air Force Personnel*, AFMAN 31-229, *USAF Weapons Handling Manual*, AFI 36-2226, *Combat Arms Program*, and each commands specific arming policies as required. (T-2)

7.8.2. **(AFSOC)** AFE personnel assigned to units with a mobility requirement are assigned to arming Groups B and C, as applicable. Ensure AFE personnel are selectively armed when tasked to issue, store, and protect weapons at deployed locations, under field conditions, and in support of ACCA operations IAW AFI 31-101, *Air Force Installation Security Program* and AFI 31-207, *Arming and Use of Force by Air Force Personnel.* (T-2)

7.9. (AFSOC) Counter-Nuclear, Biological, Chemical (C-NBC) Defense Operations.

7.9.1. **(AFSOC)** Ensure the full Basis Of Issue (BOI) for aircrew C-NBC operations (refer to Table 2.3. of AFI 11-301, Vol 2) is available to each aircrew member deployable to a chemical or biological threat area. Aircrews will be sized, fitted and issued a D-1 Bag; remaining assets may be maintained as ready to issue bulk storage. Aircrews deploying into chemical or biological threat areas will hand carry one complete ACDE/AERP (D-1 "mini" bag). Units must also comply with theater specific reporting instructions for C-NBC requirements when the D-1 Bag is insufficient to meet their requirements. (T-2)

7.9.2. **(AFSOC)** Unit AFE personnel will maintain individual aircrew sizing information in Flight Equipment Records Management System (FERMS) and be responsible for requisitioning, fitting, and maintaining ACDE/AERP equipment, and be readily available for donning and doffing operations. Issue one checklist for each BOI. (T-2)

7.9.3. **(AFSOC)** Ensure aircrews are trained on handling, use and installation of lithium batteries IAW AFMAN 23-122, *Materiel Management Procedures,* Chap 5, Section 5C, Para 5.3.3.3. (T-2)

7.9.4. **(AFSOC)** AFE personnel will be trained in ACCA operations management, and aircrew processing procedures. Only qualified AFE personnel will fit, inspect, maintain, and decontaminate ACDE as required by appropriate T.O.s and this instruction. (T-3)

7.9.5. **(AFSOC)** Close coordination should be maintained between AFE and the flying unit in order to ensure ACDE is prepared for issue or deployments. Units will maintain a sufficient amount of blower batteries and C2A1 filters to support UTC requirements. These items may be bulk stored for mobility. (T-3)

7.9.6. **(AFSOC)** Crewmembers should use their individually issued or fitted "above the shoulder" ACDE for ground training. Operational ensembles will not be used for such training resulting in damage to war readiness assets (e.g., water survival training, etc.). Crewmembers will turn-in ACDE to AFE immediately after the threat or the exercise has been terminated. Operational above the shoulder equipment will be worn for airborne training events and airborne exercises. (T-3)

7.9.7. **(AFSOC)** Do not store batteries in the blower or communication units. If replacing blower batteries, ensure you replace both of them to prevent an unequal electric current draw. (T-2)

7.9.8. **(AFSOC)** For training purposes, the standard CWU-27/P flight suit adequately replicates the CWU-66/P or -77/P suits. Do not use operational “CWU-66/P or -77/Ps” for training purposes. (T-2)

7.9.9. **(AFSOC)** Aircrew Chemical Ensemble (ACE).

7.9.9.1. **(AFSOC)** ACE is the primary aircrew below-the-shoulder chemical protective garment. (T-2)

7.9.9.2. **(AFSOC)** Aircrews are responsible for tracking service-life/laundering of ACEs (30 days unpackaged/10 washes, whichever occurs first). When the ACE is removed from package, annotate the date removed with permanent ink on the laundry instruction label. This will allow crew member to track use of ACE. Launder IAW TO 14P3-1-131, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Aircrew Chemical-Defense Ensemble. (T-2)*

7.9.10. **(AFSOC)** Crew members will turn-in ACDE/AERP equipment to AFE immediately after the threat or exercise is terminated. (T-3)

7.10. (AFSOC) Medical Concerns. AFE supervisors must be aware of and ready to combat the physiological and psychological effects of ground and aircrew personnel operating in CBRN Individual Protective Equipment (IPE). Awareness of these concerns and individual familiarity with protective equipment are essential toward optimizing performance while wearing IPE. (T-2)

7.10.1. **(AFSOC)** Physiological Effects. Heat stress can be a significant thermal burden for personnel wearing CBRN protective clothing. Heat stress can influence human cognitive activity, which could be critical in an ACCA or flying situation, requiring efficient and error-free performance. Personnel must adapt to wearing ground/aircrew IPE. (T-2)

7.10.2. **(AFSOC)** Psychological Effects. Supervisors must always be aware of the psychological effects personnel experience when they are wearing protective clothing. These effects may include claustrophobia, apprehension, paranoia, disorientation, distorted bodily sensations, hallucinations, confusion, and panic. Frequent training in IPE reinforces familiarization and confidence in proper donning procedures. IPE training should also reduce the adverse physical and psychological effects associated with repeated or prolonged wearing of IPE. (T2)

7.11. (AFSOC) Safety. CBRN defense clothing is designed to absorb and contain liquid and vapor agents. Therefore, the safety of individuals wearing CBRN defense clothing is influenced by the following factors: exposure levels, ambient temperature, wind, humidity, moisture, inclement weather, physical exertion, anxiety, stress, and individual health. (T-2)

7.11.1. **(AFSOC)** Exposure Levels. The level of contamination encountered by aircrew members is determined by the concentration, type of agent or toxin, and exposure time. Although direct contact with a CBRN hazards represents the greatest danger to aircrew and AFE personnel, vapor exposure is more likely. (T-2)

7.11.2. **(AFSOC)** CBRN agents can be "reactivated" through heat or humidity. Use contamination avoidance principles to prevent contamination and exposure. **Note:** Sensor devices may not detect lower levels of contamination to include levels sufficient to start Meiosis. (T-2)

7.12. (AFSOC) ACCA. The purpose of the ACCA is to establish a location to provide detection, contamination control, and processing provisions for aircrew members into a toxic free environment. The ultimate responsibility for meeting the operational requirements of an ACCA clearly falls on the AFE personnel. (T-2)

7.12.1. **(AFSOC)** ACCA requirements remain consistent regardless of their size or location. Likewise, systematic processing procedures for over pressurized systems (collective protection) and an open-air environment remain the same. (T-2)

7.12.2. **(AFSOC)** Contact Hazard Area (CHA). Is a defined room, space, or area within the boundary of the ACCA to identify and possibly contain contact hazards? Use absorbent materials to contain the hazard and use chlorine solutions to neutralize the chemical or biological agents. Accomplish separation by the removal of contaminated items during the doffing process. (T2)

7.12.3. **(AFSOC)** Vapor Hazard Area (VHA). Is where only the possibility of a vapor or inhalation hazard exists. The purpose of a VHA is to separate all airborne hazards before they process into a Toxic Free Area (TFA). Over-pressurized systems use vapor locks to prevent off-gassing hazards from getting any further into the shelter. In open-air processing, the VHA is a large open space. This assists in reducing vapors. The further a crewmember travels and the larger the volume of air flow in the VHA, the greater the contamination diminishing effect. (T-2)

7.12.4. **(AFSOC)** Toxic Free Area. This area should not contain a hazard. While operating in this area, there is no need for respirators or protective clothing. In open-air processing, however, locate the TFA main personnel rest area outside the defined boundary of the ACCA and at least 200 yards away. Shifting wind direction or the accumulation of contaminated materials, (potential hazard effects from off-gassing or agent re-suspension), or the noise

associated with general ACCA operations, necessitates the need for locating the TFA away from the ACCA in an open-air environment. With over pressurized systems, the entire structure past the point of the airlock is the TFA. (T-2)

7.12.5. **(AFSOC)** Entry and Exit Control Points (ECP). These may be separate or all-inclusive. In open-air ACCA, the ECP's are different. One is located at the start of the processing area where personnel enter, and the other is located at the opposite end where personnel exit. This ensures the one-way flow of processing. Hardened shelters and other over-pressurized shelter systems use air lock entryways to prevent any outside contaminants from getting into the TFA. In most cases, the ECP will be the same. Establish ECP to monitor the flow of individuals in and out of the ACCA or shelter. Keep documentation on processing at the ECP. This documentation helps record the attendance, exposure, and historical aspects of ACCA operations. (T-2)

7.13. (AFSOC) ACCA Planning. Accomplish the establishment of an open-air ACCA through multi-agency interaction. The EOC will coordinate efforts to ascertain as much information as possible. It is important to begin the planning and establishment of an open-air ACCA well before the threat arises. As a part of the planning, prepare AFE personnel for rapid repositioning and to operate from multiple locations. Also, ensure there are enough processing lines to process 50% of aircrew members within a 12 hour period. (T-2)

7.13.1. **(AFSOC)** Due to detection limitations and because the agents themselves are so dangerous, it is imperative that everyone who arrives at the ACCA assume contamination until it can be determined otherwise. (T-2)

7.13.2. **(AFSOC)** Alarm conditions are not the sole factors affecting the posture of a unit's decontamination facility. Mission requirements, flight plans, intelligence activity, target destination, and other aspects will also impact alarm posture. If it is determined a chemical threat is possible during any portion of a mission, aircrew members will deploy to and return from their mission in full ACBRN as specified in aircrew procedures and CONOPS. Aircrew members returning from a chemical or biologically contaminated area may radio ahead to inform commanders of possible contamination and ask for the ACCA to be built up. When notified, commanders should pass this information to AFE personnel to provide sufficient lead-time before the arrival of any crewmember. (T-2)

7.13.3. **(AFSOC)** Rapidly changing conditions, alarm postures, mission requirements, CBRN threat analysis, intelligence information, 24-hour a day operations, inspection and maintenance workloads, will all effect AFE's ability to plan and sustain ACCA operations. (T-3)

7.14. (AFSOC) ACCA Manager. The ACCA Manager will be the focal point for ACCA operations. The ACCA manager will be the supervisor most qualified to conduct CBRN operations as defined by the senior ranking AFE individual per shift. The ACCA manager will be responsible for coordinating with CE readiness and the CBRN Control Center on all issues pertaining to ACCA operations. See **Attachment 9** (ACCA Managers Procedures for specific procedures required by the ACCA manager). Qualified technicians will be assigned to the various stations within the ACCA as directed by the ACCA manager. (T-2)

7.14.1. **(AFSOC)** Duties include, but are not limited to, ensuring the ACCA line is properly staffed, monitoring work and proper rest cycles, site location, equipment requirements,

coordinating waste disposal with CE, and coordinating medical aid for personnel showing signs of illness. (T-2)

7.14.2. **(AFSOC)** The ACCA manager will remain outside the line. The ACCA manager will direct movement of attendants (AFE personnel) within the line. If directed to move, attendants must process prior to moving. Medical and Intel personnel should stay in the VHA. If necessary have runners to transport sick/contaminated personnel or classified material from the LHA to the edge of the VHA. (T-2)

7.15. (AFSOC) General ACCA Processing Procedures. AFMAN 11-301 includes detailed procedures, training guides and station set-up procedures. Ensure this guidance is reviewed by all personnel prior to ACCA set-up and subsequently used to set-up each station of the ACCA. (T-2)

7.15.1. **(AFSOC)** AFMAN 11-301 includes diagrams for setting up each station showing the orientation of the station into the wind direction and location of the basic components. ACCA managers will determine additional set up requirements to support their specific operation. (T-2)

7.15.2. **(AFSOC)** Attendant and Aircrew Procedures Charts. These charts should be printed in large enough print to allow aircrew to read along while processing. Attendants must be well trained on ACCA procedures prior to the actual processing. These charts provide a checklist style format for the attendant to follow during the process. (T-2)

7.15.3. **(AFSOC)** Ensure that personnel store known contaminated items separately to avoid cross-contamination. If the crewmember has suspected contamination on a piece of equipment, remove it immediately (do not remove respiratory protective equipment) and use an M-295 decon kit around the affected area. (T-2)

7.15.4. **(AFSOC)** Special mission requirements such as units with limited manning may dictate a condensed ACCA process. In the event of a condensed ACCA processing requirement, the ACCA manager may determine that a single attendant will accomplish all Area 1, Area 2 and Area 3.1 procedures, and a second attendant accomplishes Area 3.2 and Area 4 procedures. Under this situation, the ACCA manager must ensure the intent of each substation requirement is met, and special consideration is given to ensuring all vital steps are completed. Additionally, the ACCA manager should consult CE Readiness personnel, if available, to accomplish a risk analysis for this type of operation. (T-2)

7.16. (AFSOC) Hardened Operations Facilities Procedures. Use procedures outlined in AFMAN 11-301. These procedures have been adapted to the specific requirements for hardened operations but resemble the standard procedures as much as possible to allow for familiarity of operations regardless of the scenario. (T-2)

Chapter 8 (Added-AFSOC)

AFSOC SPECIAL TACTICS

8.1. (AFSOC) Special Operations Wing (SOW), Special Tactics Group (STG), Special Operations Group (SOG) and Special Tactics Operations Support Squadron (OSS) Commanders.

8.1.1. **(AFSOC)** Appoint an AFE Senior NCO to serve as the group AFE Superintendent (AFES) to assist in the management of the ST AFE Program. This individual and manpower positions will be assigned and organizationally aligned to the OSS when a subordinate STS resides in or with the Group. The group AFES is responsible to the STG/CC, through the OSS/CC, for the management of the group AFE program to include equipment, manpower, training, and budget. (T-2)

8.1.1.1. **(AFSOC)** Will ensure AFE is appropriately equipped, manned, trained and funded for all required tasks to include cargo airdrop if applicable. (T-2)

8.1.1.2. **(AFSOC)** Primary responsibility for QA resides with the STG or SOG and maybe delegated to subordinate OSS. (T-3)

8.1.1.3. **(AFSOC)** Will ensure AFE facilities meet standards in AFI 32-1024, *Standard Facility Requirements*, and AFH 32-1084, *Facility Requirements*. Ensure all AFE items are stored/maintained within approved AFE facilities and IAW applicable technical data. This will include adequate facilities to support ST airdrop requirements. (T-2)

8.1.1.4. **(AFSOC)** Ensure funds are allocated for the continued management of all AFE programs and contingency plans. This includes establishing an Operations & Maintenance (O&M) budget for AFE sections. (T-2)

8.1.1.5. **(AFSOC)** STG commanders may request waivers to requirements of this publication when unique or unusual circumstances affect the unit's ability or requirements to implement stated policy or procedure. Forward requests by letter or message to HQ AFSOC/A3TL for approval, ensure to include facts describing the specific requirement that is creating the problem and explaining why a waiver is required. HQ AFSOC/A3T is the waiver authority for this supplement. (T-3)

8.2. (AFSOC) ST AFES.

8.2.1. **(AFSOC)** Ensure AFE personnel are trained and certified IAW **Chapter 4**. (T-2)

8.2.2. **(AFSOC)** All civil service and contractor equivalent personnel internal and external new hires for this career field must be a graduate of the prior Aircrew Life Support (AFSC 1T1X1) and/or Survival Equipment (AFSC 2A7X4) technical training courses (or equivalent), sister-service equivalent courses, or FAA certified equivalent background. Ensure this is written into the position(s) requirement, contract, and/or Statement of Work as applicable. (T-2)

8.2.3. **(AFSOC)** AFE Superintendents are functional OPRs on all related proposed TO changes and will establish procedures within the group to assign improvement report numbers. As the functional experts, Superintendents are responsible for reviewing,

evaluating, and processing group-initiated AFTO Form 22 dealing with AFE related issues to ensure reports are correct, prior to submitting reports to higher headquarters. (T-2)

8.2.4. **(AFSOC)** Conduct annual assessments of each ST squadron. Maintain records of such visits for at least 2 years IAW AFI 33-364, *Records Disposition – Procedures and Responsibilities*. (T2)

8.2.5. **(AFSOC)** Prepare and evaluate AFE related portions of local support agreements. The AFES is responsible for conducting an annual review. Units providing host support to tenant units will maintain authorized AFE according to support agreements and directives. Forward a copy of support agreements to HQ AFSOC/A3TL. (T-2)

8.2.6. **(AFSOC)** Monitor status of deficiencies identified during SAVs, UEIs or CCIPs, and unit self-assessments until corrective actions have been completed. Corrective actions will be documented as prescribed by governing instructions or as required to reflect current status and actions taken. (T-2)

8.2.6.1. **(AFSOC)** Will ensure the QA program is administered IAW AFI11-301, Vol 1. (T-2)

8.2.6.2. **(AFSOC)** Open AFE QA no-notice inspections, SAVs, UEIs or CCIPs, and unit self-assessment discrepancies will be reviewed monthly until closed by the appropriate authority. (T2)

8.2.7. **(AFSOC)** Review and approve local In-Process Inspection (IPI) tasks annually for applicability, and ensure IPI qualified personnel are annotated on a Special Certification Roster (SCR), designated by unit commander via appointment letter. (T-2)

8.2.7.1. **(AFSOC)** Review and approve Malfunction Officer (MO) duties, the minimum grade of E-4 is required. The MO must be designated, in writing, by the unit commander IAW AFJ 13210(I), *Joint Airdrop Inspection Records, Malfunction/Incident Investigations, and Activity Reporting*, Ch 3, 3-1, para 2. (T-2)

8.2.7.2. **(AFSOC)** Review and approve Special Tactics Malfunction Officer (MO) duties, All approved MOs must be in the grade of E-5 or higher, maintain a 7 skill level and completion of the Life Science Equipment Investigation course J3AZR1P071 0L1A. The MO must be designated, in writing, by the unit commander IAW AFJ 13-210, Ch 3, 3-1, para 2. (T-2)

8.2.7.3. **(AFSOC)** . Will ensure MO is trained and conducts annual refresher training IAW AFJ 13-210(I). This will be documented as initial and annual refresher using journal entries in TBA. (T-2)

8.2.8. **(AFSOC)** Ensure AFE personnel are knowledgeable of unit Operational Plans (OPLANS), Designed Operational Capabilities (DOCs), Special Instructions (SPINS), and Unit Type Codes (UTCs) as they relate to the operation and maintenance of AFE at deployed locations. (T-2)

8.3. (AFSOC) Special Tactics Squadron (STS) and Special Tactics Training Squadron (STTS) Commanders.

8.3.1. **(AFSOC)** Funded, or unfunded AFE authorizations earned through AF AFE and Cargo Airdrop Manpower Standards, will be assigned to the respective ST unit manning documents (UMD). (T2)

8.3.2. **(AFSOC)** ST squadron commanders will assume all responsibilities outlined in **Paragraph 2.14**, for those AFE personnel assigned to their UMDs. (T-2)

8.3.3. **(AFSOC)** ST AFE sections will be aligned under the ST squadron logistics/combat support flight. (T-2)

8.3.4. **(AFSOC)** ST squadron commanders will assume responsibility for funding of support/test equipment, tools, repair parts and sustainment items in support of assigned AFE sections utilizing O&M or other funds available through the ST Program Objective Memorandum (POM) process and Battlefield Airman Management System (BAMS). (T-3)

8.3.5. **(AFSOC)** ST Commanders will ensure cargo parachute rigging requirements are accomplished IAW AFJ 13-210(I).

8.3.6. **(AFSOC)** Overseas ST units will fall under associated SOG/OSS AFES for program oversight for example; QA program, SAVs, supply, training; local AFES will share results or findings with ST AFES. The ST AFES will provide oversight for ST specific policy/guidance, equipment decisions, and other ST specific requirements that are identified and met. (T-3)

8.3.7. **(AFSOC)** Ensure units reporting malfunctions send a unit representative to the Malfunction Review Board (MRB). (T-2)

8.4. (AFSOC) ST AFE NCOIC.

8.4.1. **(AFSOC)** NCOICs will adapt guidance in **Paragraph 2.15** for use in each ST squadron. (T-2)

8.4.2. **(AFSOC)** ST AFE sections will establish supply/munition accounts separate from the OSS. Munition responsibilities will only encompass AFE specific requirements. Munition accounts are only required if AFE munitions are maintained or stored as part of the ST support mission. (T-3)

8.4.3. **(AFSOC)** ST AFE sections will develop Memorandums of Agreement for use of facilities external to those that are ST-owned to support AFE equipment maintenance operations as required and route to CCs for approval. (T-3)

8.4.4. **(AFSOC)** Day to day QA responsibilities for ST AFE sections will reside within the Special Tactics Squadrons. Follow and adapt guidance from **Paragraphs 2.12, and 3.7** for implementation at the unit level. Ensure trend analysis forms and other requirements set in this supplement are forwarded to the appropriate QA or AFE Superintendent on a monthly basis. (T-2)

8.4.5. **(AFSOC)** AFE sections that support ST requirements may assume cargo rigging responsibilities as required in the event that AFSC 2T2 and/or normal aerial delivery functional support is not available. (T-3)

8.4.6. **(AFSOC)** If hand held lasers are issued or stored in the AFE section, a laser safety program is required IAW AFOSH STD 48-139, *Laser Radiation Protection Program*. NCOICs will ensure the applicable Laser (Danger) signs are posted. Ensure assigned

personnel are familiar with the extreme dangers of these devices and trained IAW AFOSH STD guidance.

8.4.6.1. **(AFSOC)** Ensure lasers are accounted for and stored properly. (T-3)

8.4.6.2. **(AFSOC)** Remove all batteries and ensure any safety mechanisms are engaged prior to storage. (T3)

8.4.6.3. **(AFSOC)** Document and train all required training for all individuals involved in the handling of the lasers. (T-3)

8.4.7. **(AFSOC)** Ensure the users are trained on the proper use and care of all life sustaining related equipment prior to issue. (T-3)

8.4.8. **(AFSOC)** AFE personnel are authorized to perform communication and audio modifications to all helmets utilized by ST unit personnel. These modifications consist of the drilling of extra holes for communication cables and the attachment of external apparatuses used on these helmets. Ops-core, MICH, ACH, and Pro-Tec helmets are classified as individual equipment and will be modified by certified methods IAW applicable guidance. (T-2)

8.4.8.1. **(AFSOC)** All modification procedures will be captured in local instructions and forwarded to the HQ AFSOC/A3TL for approval prior to implementation. (T-2)

8.4.9. **(AFSOC)** The AFE section will provide annual training as necessary, per AFI 11-410, for jumpers packing their own main parachutes. This training will be scheduled by the appropriate team representatives. A jumper will only pack the main parachutes of Military Free fall parachutes that they will be jumping and only when a waiver has been issued by the respective chain of command IAW AFI 11-410. (T-1)

8.4.10. **(AFSOC)** Jumpers are authorized and will be expected to pack the main parachute they will be jumping on all Advanced Parachute Systems and Tandem Parachutes, when qualified on these systems. A waiver is not required for packing the main of Advanced Parachutes Systems and Tandem Parachutes. (T-3)

8.5. (AFSOC) Operator responsibilities.

8.5.1. **(AFSOC)** The term operator includes personnel in the following career fields: Combat Control, Special Tactics Officer, Pararescue, Combat Rescue Officer, Air Liaison Officer, Tactical Air Control Party, and Special Operations Weather personnel.

8.5.2. **(AFSOC)** All operators will ensure equipment is returned to the AFE section for all required inspections. (T-3)

8.5.3. **(AFSOC)** Equipment must be safeguarded from damage during use as much as feasible. Ensure equipment is cleaned and stored in the designated cases for transport and storage. (T-3)

8.5.4. **(A FSOC)** Operators are responsible to validate the functional testing of their helmets, oxygen masks, NVGS, and other equipment prior to each mission (Pre-Flight). If the equipment does not function properly, the operator will return equipment to the AFE section as soon as possible. This is essential to ensuring the equipment is fully functioning prior to field use. (T-2)

6.6. Adopted Forms

AFTO IMT 22, *Technical Order Improvement Report and Reply*

AF IMT 55, *Employee Safety and Health Record*

AFTO Form 392, *Parachute Repack Inspection and Component Record*

AF Form 623, *Individual Training Record*

AF IMT 1000, *Idea Application*

AF IMT 1297, *Temporary Issue Receipt*

AF IMT 1522, *ARMS Additional Training Accomplishment Input*

AF IMT 2420, *Quality Control Inspection Summary*

AFTO Form 46, *Prepositioned Life Support Equipment*

AFTO Form/IMT 781A, *Maintenance Discrepancy and Work Document*

DANIEL J. DARNELL, Lt Gen, USAF
DCS, Operations, Plans and Requirements

(AFSOC)

J. MARCUS HICKS, Maj Gen, USAF
Director of Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

The following is a list of publications that are required to effectively manage an AFE Program. FEOs, AFE superintendents, supervisors, and technicians should possess a working knowledge of these documents. This list is not all-inclusive. This list also includes general information TOs pertaining to inspection, maintenance, storage, and use of personal flying and survival equipment. Specific TOs for items authorized within the unit are required to maintain AFE.

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AFI 10-201, *Status of Resources and Training System*, 13 Apr 2006

AFPAM 10-219, Volume 6, *Planning and Design of Expeditionary Airbases*, 01 Feb 2006

AFI 10-401, Air Force *Operations Planning and Execution*, 07 Dec 2006

AFI 10-402, Volume 1, *Mobilization Planning and Personnel Readiness*, 09 Aug 2007

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AFI 10-601, *Capabilities-Based Requirements Development*, 31 Jul 2006

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AFMAN 23-110, Volume 4, Part 1, *Air Force Equipment System Policy and Procedures*, 01 Jul 2008

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AFMAN 33-363, *Management of Records*, 1 Mar 2008

AFI 33-364, *Records Disposition--Procedures and Responsibilities*, 22 Dec 2006

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AFMAN 36-2236, *Guidebook for Air Force Instructors*, 12 Nov 2003

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Abbreviations and Acronyms

(Added-AFSOC) ABFDS—Aerial Bulk Fuel Delivery System

AC—Aircraft Commander

ACC—Air Combat Command

ACCA—Aircrew Contamination Control Area

ACDE—Aircrew Chemical Defense Ensemble

ACDT—Aircrew Chemical Defense Training

AEF—Air and Space Expeditionary Forces

AERP—Aircrew Eye/Respiratory Protection

(Added-AFSOC) AESG—Aeronautical Equipment Systems Group

AETC—Air Education and Training Command

AEW—Air Expeditionary Wing

AFCAIG/CPFH—Air Force Cost Analysis Improvement Group/Cost Per Flying Hour

AFCAT—Air Force Catalog

AFCFM—Air Force Career Field Manager

AFE—Aircrew Flight Equipment

AFECT—Aircrew Flight Equipment Continuation Training

(Added-AFSOC) AFECTI—Aircrew Flight Equipment Continuation Training Instructor

AFH—Air Force Handbook

AFI—Air Force Instruction

AFIND—Air Force Index

AFJI—Air Force Joint Instruction

AFJMAN—Air Force Joint Manual

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFMS—Air Force Manpower Standard

AFOSH STD—Air Force Occupational, Safety, and Health Standard

AFPAM—Air Force Pamphlet

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFSC—Air Force Specialty Code

(Added-AFSOC) AFSOC—Air Force Special Operations Command

AIT—Automated Information Technology

ALERTS—Automated Life-sustaining Equipment & Record Tracking System

ALSMS—Automated Life Support Management System

AMC—Air Mobility Command

ANG—Air National Guard

ANGIND—Air National Guard Index

APEC—Aircrew Performance Executive Council

APWEB—Aircrew Protection Website

(Added-AFSOC) APWG—Aircrew Protection Working Group

AQL—Acceptable Quality Levels

ARC—Air Reserve Component

ARMS—Aviation Resource Management System

AS—Allowance Standard

BFT—Basic Fighter Training

BOI—Basis Of Issue

C—Celsius

(Added-AFSOC) CBRN—Chemical, Biological, Radiation, Nuclear

(Added-AFSOC) CDD—Capabilities Decision Document

(Added-AFSOC) CE—Civil Engineer

CFETP—Career Field Education and Training Plan

(AFSOC) CFETP—Career Field Education and Training Plan

(Added-AFSOC) CHA—Contact Hazard Area

(Added-AFSOC) CI—Compliance Inspection

(Added-AFSOC) COMPES—Contingency Operations/Mobility Planning and Execution System

COR—Contracting Officer Representative

CPI—Critical Point Inspection

CTK—Composite Tool Kit

CMB—Contact Memory Button

CMS—Capabilities-based Manpower Standard

COTS—Commercial-Off-The-Shelf

COTS/NDI—Commercial-Off-The-Shelf/Non-Developmental Item

(Added-AFSOC) CUI—Compliance Unit Inspection

DCS—Deputy Chief of Staff

(Added-AFSOC) DOC—Design Operational Capability

DRU—Direct Reporting Unit

DSN—Defense Switched Network

(Added-AFSOC) DSO—Direct Support Operator

DSV—Detected Safety Violation

EEIC—Element of Expense/Investment Code

EPT—Egress Procedures Trainer

F—Fahrenheit

FAA—Federal Aviation Administration

(Added-AFSOC) FARP—Forward Area Refueling Point

FEO—Flight Equipment Officer (Rated)

(AFSOC) FEO—Flight Equipment Officer (Rated)

(Added-AFSOC) FERMS—Flight Equipment Records Management System

FM—Functional Manager

FOA—Field Operating Agency

FOD—Foreign Object Damage

FTU—Formal Training Unit (Flying)

HABD—Helicopter Aircrew Breathing Device

HEED—Helicopter Emergency Egress Device

HHQ—Higher Headquarters

IAW—In Accordance With

(Added-AFSOC) ICD—Initial Capabilities Document

ID—Identification

(Added-AFSOC) IG—Inspector General

(Added-AFSOC) IMDS—Integrated Maintenance Data System

IPB—Illustrated Parts Breakdown

(Added-AFSOC) IPE—Individual Protective Equipment

IPI—In-Process Inspection

(AFSOC) IPI—In-Process-Inspection

(Added-AFSOC) IPT—Integrated Process Team

(Added-AFSOC) ISSA—Interservice/Intraservice Support Agreements

JACKS—Joint Acquisition Chemical Biological Radiological Nuclear Knowledge System

JCIDS— Joint Capabilities Integration Development System

LOGDET—Logistics Detail

MAJCOM—Major Command

(Added-AFSOC) MCDL—Master Configuration Data List

(Added-AFSOC) MCL—Master Configuration List

MDS—Mission Design Series

MFM—MAJCOM Functional Manager

(Added-AFSOC) MRB—Malfunction Review Board

N/A—Not Applicable

NAF—Numbered Air Force

NCO—Noncommissioned Officer

NCOIC—Noncommissioned Officer In Charge

NSN—National Stock Number

NVD—Night Vision Devices

NVG—Night Vision Goggles

(Added-AFSOC) O&M—Operations and Maintain

OI—Operating Instruction

OJT—On-The-Job Training

OPLAN—Operations Plan

OPR—Office of Primary Responsibility

(Added-AFSOC) ORI—Operational Readiness Inspection

OSS—Operations Support Squadron

OSS&E—Operational Safety, Suitability, & Effectiveness

OT&E—Operational Test and Evaluation

PAI—Primary Aircraft Inventory

PCS—Permanent Change of Station

PE—Personnel Evaluations

(Added-AFSOC) PII—Personally Identifiable Information

POC—Point of Contact

(Added-AFSOC) POM—Program Objective Memorandum

PQDR—Product Quality Deficiency Report

QA—Quality Assurance

QCI—Quality Control Inspection

(AFSOC) QCI—Quality Control Inspector

QI—Quality Inspector

(Added-AFSOC) R&D—Research and Development

RC—Rigger Check

(Added-AFSOC) RDT&E—Research Development Testing and Evaluation

(Added-AFSOC) SAV—Staff Assistance Visit

(Added-AFSOC) SCR—Special Certification Roster

(Added-AFSOC) SDD—System Development and Demonstration

(Added-AFSOC) SERE—Survival, Evasion, Resistance, and Escape

(Added-AFSOC) SERP—Sustainment Engineering Requirements Plans

(Added-AFSOC) SME—Subject Matter Expert

(Added-AFSOC) SORTS—Status Of Resources and Training System

SOW—Statement Of Work

(Added-AFSOC) SPINS—Special Instructions

(Added-AFSOC) SPO—Special Program Office

(Added-AFSOC) SRC—Survival Recovery Center

(Added-AFSOC) SSM—Systems Support Manager

(Added-AFSOC) STG—Special Tactics Group

(Added-AFSOC) STS—Special Tactics Squadron

(Added-AFSOC) STTS—Special Tactics Training Squadron

(Added-AFSOC) TAS—Tool Accountability System

TBA—Training Business Area

(AFSOC) TBA—Training Business Area

TCTO—Time Compliance Technical Order

TDV—Technical Data Violation

TDY—Temporary Duty

(Added-AFSOC) TFA—Toxic Free Area

(Added-AFSOC) E-TIMS—Electronic-Technical Information Management Systems

TMDE—Test, Measurement, and Diagnostic Equipment

TO—Technical Order

TPFDD—Time-Phased Force Deployment Data

(Added-AFSOC) TRB—Training Review Board

UCR—Unsatisfactory Condition Reports

UEI—Unit Effectiveness Inspection

(Added-AFSOC) UFR—Unfunded Requirement

UMD—Unit Manpower Document

(AFSOC) UMD—Unit Manpower Document

UMPR—Unit Manning Personnel Roster

(Added-AFSOC) UPGL—Undergraduate Program Guidance Letter

UTC—Unit Type Code

(Added-AFSOC) VHA—Vapor Hazard Area

(Added-AFSOC) WIT—Wing Inspection Team

WST—Water Survival Training

WUC—Work Unit Code

(Added-AFSOC) WWID—World Wide Identifier

(AFSOC) WUC—Work Unit Code

TERMS

Acceptable Quality Levels (AQL)—An AQL denotes the maximum allowable number of minor findings that a process or product may be charged for the task to be rated "Pass".

Aircrew Contamination Control Area (ACCA)—A self-sustaining aircrew only decontamination control area that minimizes cross contamination to aircrew and is staffed by certified AFE personnel.

Aircrew Chemical Defense Ensemble (ACDE) Equipment—Individually fitted aircrew unique chemical protective equipment for the sole purpose of protecting operators from chemical/biological warfare agents who fly into and out of a chemically contaminated environment.

Aeromedical Evacuation (AE)—Movement of patients under medical supervision between medical treatment facilities (MTF) by fixed-wing aircraft by qualified AECMs.

Aeromedical Evacuation Crew Members (AECM)—Qualified flight nurses (FN), aeromedical evacuation technicians (AET), and unqualified student trainees under the direct supervision of a qualified instructor or FN, performing AE duties.

Aircrew Flight Equipment (AFE)—AFE encompasses all equipment that was formerly known as aircrew life support equipment, is part of the 412A life support system, or as designated by NGB/A3OS.

Aircrew Eye/Respiratory Protection (AERP) Equipment—AERP equipment is designed to protect the crewmember from toxic chemical exposure to the head, neck, face, eyes, and respiratory tract. This equipment is designed to provide protection without imposing operational or physiological burdens, degrading mission capability, or combat effectiveness.

Area of Operations (AO) (DoD)—An operational area defined by the joint force commander for land and maritime forces. Areas of operation do not typically encompass the entire operational area of the joint force commander, but should be large enough for component commanders to accomplish their missions and protect their forces. Also called AO. See also area of responsibility; joint operations area; joint special operations area.

Arctic Flight—Any flight conducted above the 50th parallel of north latitude.

Antarctic Flight—Any flight conducted below the 56th parallel of south latitude.

Bare Base—A base having minimum essential facilities to house, sustain, and support operations to include, if required, a stabilized runway, taxiways, and aircraft parking areas. A bare base must have a source of water that can be made potable. Other requirements to operate under bare base conditions form a necessary part of the force package deployed to the bare base.

Chemical Threat Area (CTA)—An area that may be subject to attack with chemical warfare agents from a number of sources.

D—1 Bag—One complete Aircrew Chemical Defense Ensemble carried by aircrews when deploying to chemical threat environment.

D—Bags—Full compliment of ACDE equipment. May or may not include the D-1 bag during deployment.

Desolate Terrain Flight—Any flight conducted over uninhabited areas (excluding the Continental United States [CONUS]) exceeding one hour flight time.

Detected Safety Violation (DSV)—A DSV is an unsafe act by an individual. The inspector must stop the unsafe act immediately. Do not document a separate DSV on an individual undergoing a personnel evaluation since the unsafe act automatically results in a "Fail" rating on the PE. Use the word "Safety" when a safety violation is committed during a PE.

Ground Crew Contamination Control Area (CCA)—Area managed by civil engineering readiness flight to safely process ground crew personnel

In-Process Inspection (IPI)—An additional inspection or verification step at a critical point in the installation, assembly, or reassembly of a system, subsystem or component. These inspections are either TO, MAJCOM, or locally directed and are accomplished by qualified personnel as identified on the Special Certification Roster. The term In-Process Inspection (IPI) is the same as Critical Point Inspection (CPI) and/or Rigger Check (RC) as found in various different service manuals and will be the only term used on all inspection sheets.

Logistics Detail (LOGDET)—The LOGDET defines standard passenger and equipment movement requirements for each UTC. Equipment detail is provided at the NSN level. Lists all material in an UTC, prioritizes increment movement, provides increment characteristics, and is the standard equipment listing for planning.

Major Discrepancy/Finding—A major discrepancy is defined as a condition that would endanger personnel, jeopardize equipment or system reliability, impact safety of flight or warrant discontinuing the process or equipment inspection. Any major discrepancy will result in an automatic inspection failure. All discrepancies will be documented for trends.

Minor Discrepancy/Finding—A minor discrepancy is defined as an unsatisfactory condition that requires repair or correction, but does not endanger personnel, impact safety of flight, jeopardize equipment reliability or warrant discontinuing a process or equipment operation. A minor discrepancy is one that will not affect the operation of the equipment but prevents the equipment from being 100 percent compliant with current directives. All discrepancies will be documented for trends.

Nomex®—Nomex® fabric is a high-temperature resistant and inherently flame retardant synthetic fabric with no-hot-melt point or drip characteristics. The fabric is light in weight, will not support combustion, but will begin to char at 700° to 800° F. The fabric has good abrasion resistance similar to nylon and is also nonabsorbent like nylon and other synthetic fabrics.

Operational Support Crewmember—Personnel on flying status but not occupying a UMD "A" prefix position.

Operation Plan (OPLAN) (DoD)—Any plan, except for the Single Integrated Operational Plan (SIOP), for the conduct of military operations. Plans are prepared by combatant commanders in response to requirements established by the Chairman of the Joint Chiefs of Staff and by commanders of subordinate commands in response to requirements tasked by the establishing unified commander. An OPLAN identifies the forces and supplies required to execute the CINC's Strategic Concept and a movement schedule of these resources to the theater of operations. The forces and supplies are identified in Time-Phased Force Deployment Data (TPFDD) files. OPLANs will include all phases of the tasked operation. The plan is prepared

with the appropriate annexes, appendixes, and TPFDD files as described in the Joint Operation Planning and Execution System manuals containing planning policies, procedures,and formats. OPLANs are prepared in either a complete format (OPLAN) or as a Concept Plan (CONPLAN). The CONPLAN can be published with or without a TPFDD file. An OPLAN for the conduct of joint operations that can be used as a basis for development of an Operation Order (OPORD).

Overwater Flight—Any flight taking off or landing over water, exceeding power-off glide or auto-rotational distance from land.

Passenger (PAX)—Individual aboard aircraft for the purpose of transportation.

Personnel Evaluation (PE)—A PE (formally known as a Task Evaluation) is an over-the-shoulder (direct or indirect) evaluation of a maintenance action or inspection by an individual or team. Use PEs to evaluate job proficiency, degree of training and compliance with technical data. A PE may consist of a full or partial evaluation of the maintenance action or inspection being performed.

Pilot Unit—Unit designated by the MAJCOM FM to handle LOGDET management responsibilities for an UTC. Pilot units are listed in the header record of each UTC and LOGDET.

Primary Aircraft Inventory (DoD)—The aircraft assigned to meet the primary aircraft authorization. Also called PAI.

Primary Crewmember—Any person, rated or nonrated, and required on aircraft to accomplish flying mission.

Technical Data Violation (TDV)—A TDV is an observation of any person performing maintenance without the proper technical data available, available but not in use or not following the correct sequence of steps (if directed). The technician must have knowledge of all general directives associated with the job prior to performing the task. However, those directives applicable to the task being performed must be present at the job site. Do not document a separate TDV on an individual undergoing a PE, since failure to use technical data automatically results in a "Fail" rating.

Theater (DoD)—The geographical area outside the continental United States for which a commander of a combatant command has been assigned responsibility.

Unit Manpower Document (UMD)—A detailed staffing list reflecting the distribution of staffing allocations into a finite structure of authorizations (by work center).

Unit Type Code (UTC)—A five-character, alphanumeric code that uniquely identifies each type unit of the Armed Forces.

Unsatisfactory Condition Reports (UCR)—A UCR is an unsafe or unsatisfactory condition, other than a DSV, chargeable to the work center supervisor. UCRs will be documented even when it is not possible to determine who created the condition.

Attachment 2

AIR FORCE STANDARD AFE AUTOMATED INFORMATION TECHNOLOGY (AIT) BARCODE MARKING

Contractors and suppliers for all AFE systems to include subcomponents shall use bar code nameplates, labels, or direct part markings IAW DoD MIL-STD-130 Change 1, DoD UID Guide, and this document. Use of an advanced part marking technology like bar codes and 2D symbols is essential to the AFE community being able to facilitate automated "removal and replace" features of automated programming and product support/maintenance. Exceptions to use of machine-readable nameplates will be considered, on a case-by-case basis, in accordance with practical or good business sense (e.g., part too small for nameplate, part immersed in fuel tank, etc.). AFE will consider other advanced part marking technology should they become commercially practicable, driven by DoD requirements, and or advantageous to the government in the future.

Marking Requirements.

Human Readable Information (HRI) and Machine Readable Information (MRI) are required for current AIT systems to provide the necessary advances in efficiency. Defense Federal Acquisition Regulation Supplement (DFARS) and the DoD has mandated the use of Data Matrix ECC 200 as the standard format for UID MRI markings. Overarching guidance for the construct and application of Data Matrix markings is contained in MIL-STD-130 and DoD UID Guide located at www.acq.osd.mil/dpap/UID. Specific examples are given here for manufactures and suppliers for implementation.

AFE has three different situations that require or can require different markings and they are:

a. UID Serialized Lot Batch; Items controlled with serial numbers and lot numbers
b. UID Serialized Data Stream; Items controlled with serial numbers only
c. Non UID/Non Serialized Lot Batch; Items that do not meet the UID requirement and are not controlled with serial numbers.

See **figure**s **1** – **6** for specific examples of the labels and data streams.

HRI Marking Requirements. The following HRI data is required (as a minimum):

- Manufacturer's Commercial and Government Entity (CAGE) code, 5 alpha/numeric characters

- Item Lot Number

> ***NOTE:*** The Lot Number **MUST** be unique within the manufacturer's CAGE (Lot Numbers cannot be repeated on other part numbers)

- Item Serial Number

> ***NOTE:*** Air Force contracts typically require 5 digit serial numbers (minimum), sequentially assigned, not to be repeated until serial number 99,999 has been reached

- Item manufacturer's Part Number

> ***NOTE:*** The weapon system Specification Number does not meet this requirement

- Contract Number (CNCT#), 13 alpha/numeric characters

- Date of Manufacture; Year and Day of manufacture in Julian Date format

> ***NOTE:*** Markings and/or attachments shall make no reference to item installation requirements/procedures or shelf/service lives.

MRI Data Construct.

Data Matrix ECC200 markings shall be developed based on UID Data Construct #2 using Data Identifiers (DIs) in accordance with MIL-STD-130 and the DoD UID Guide (see **Figure 2**). To facilitate durability throughout the scanning life cycle, the largest symbol size, including quiet zone, shall be fitted within the available marking real estate. The symbol's internal module (cell) sizes shall be no smaller than 0.0075 inch (0.19 mm) and no larger than 0.025 inch (0.64 mm). Marks shall contain **only** the data elements identified below:

> ***NOTE:*** The parentheses surrounding the Data Identifier are NOT encoded in the 2D symbol.

- (17V) Manufacturer's Commercial and Government Entity (CAGE) code, 5 alpha/numeric characters.

- (1T) Item production Lot Number, IAW HRI requirement, Maximum 20 alpha/numeric, including special characters (- or/).

> ***NOTE:*** The lot number **MUST** be unique within the manufacturer's CAGE (Lot Numbers cannot be repeated on other part numbers)

- (S) Item Serial Number, IAW HRI requirement, Maximum 20 alpha/numeric including special characters (- or/).

- (1P) Manufacturer's Item Part Number, Maximum 20 alpha/numeric including special characters (- or/).

> ***NOTE:*** The weapon system Specification Number does not meet this requirement.

- (8K) Contract Number (Cont No), Maximum 13 alpha/numeric characters.

NOTE: For this data element the dashes are not transmitted in the data stream.

- (4D) Date of Manufacture (DOM) in Julian Date format, five numeric characters:

EXAMPLE: **06151 = 31 May 2006**

The first two positions are the last two digits of the year; the last three positions are the Julian Date (001 through 366)

Figure 1. Sample UID Serialized Lot Batch Data Plate/Label.

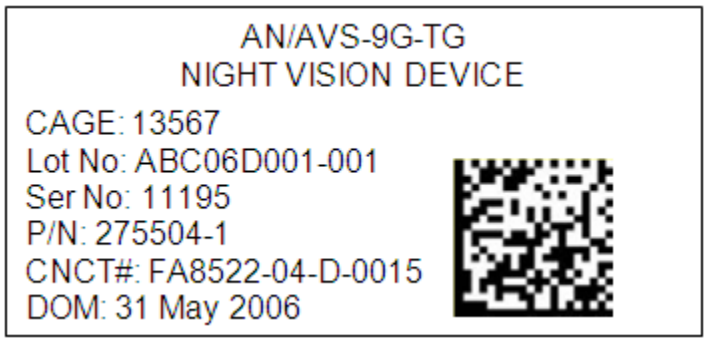

Figure 2. Sample UID SERIAZLIZED LOT BATCH Data Stream.

[)> $^{R}_{S}$ 06 $^{G}_{S}$ 17V 12345 $^{G}_{S}$ 1T ABC06D123-001 $^{G}_{S}$ S 12345678 $^{G}_{S}$ 1P 123456789-ABCDEFGH $^{G}_{S}$ 8K FA8522-04-D-0015 $^{G}_{S}$ 4D 06130 $^{R}_{S}$ $^{E}_{O T}$

Figure 3. Sample UID Serialized Data Plate/Label.

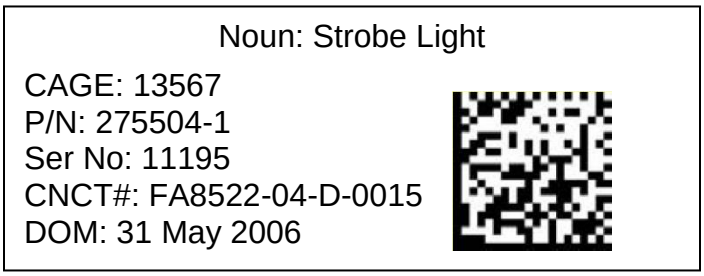

Figure 4. Sample UID Serialized Data Stream.

[)> RS 06 GS 17V 12345 GS 1P 123456789-ABCDEFGH GS S 12345678 GS 8K FA8522-04- D-0015 GS 4D 06130 RS EOT

Figure 5. Sample Non UID/Non Serialized Lot Batch Data Plate/Label.

Noun: Screw

CAGE: 13567
Lot No: ABC06D001-001
P/N: 275504-1
CNCT#: FA8522-04-D-0015
DOM: 31 May 2006

Figure 6. Sample Non UID/Non Serialized Lot Batch Data Stream.

[)> RS 06 GS 17V 12345 GS 1T ABC06D123-001 GS 1P 123456789-ABCDEFGH GS 8K FA8522-04-D-0015 GS 4D 06130 RS EOT

Attachment 3 (Added-AFSOC)

INFECTIOUS CONTROL GUIDANCE

(Post this attachment in all areas that perform equipment maintenance that has the potential for body fluid contact)

1. TO AVOID CONTACT WITH FLUIDS, WEAR NITRILE GLOVES AT ALL TIMES WHILE WORKING ON OXYGEN EQUIPMENT.
2. TREAT ALL IDENTIFIED BLOOD, BODY FLUIDS, AND TISSUE AS IF THEY ARE INFECTED. WEAR NITRILE GLOVES WHEN DEALING WITH ANY POSSIBLE INFECTIOUS MATERIAL.
3. WASH HANDS THOROUGHLY AFTER REMOVING GLOVES OR IMMEDIATELY AFTER COMING IN CONTACT WITH POTENTIALLY INFECTIOUS MATERIAL.
4. PLACE POTENTIALLY INFECTIOUS WASTE IN IMPERVIOUS (PLASTIC) BAGS AND DISPOSE OF THEM AS LOCAL REGULATIONS REQUIRE. CONTACT THE LOCAL MEDICAL GROUP INFECTION PREVENTIONIST OR BIOENVIRONMENTAL ENGINEERING OFFICE AT _____..
5. CLEAN ALL BLOOD AND BODY FLUIDS AS SOON AS POSSIBLE WITH DETERGENT AND WATER. USE A SOLUTION OF 5.25% SODIUM HYPOCHLORITE (HOUSEHOLD BLEACH) DILUTED AT 1 TO 10 PARTS WATER FOR DISINFECTION, OR OTHER SUITABLE DISINFECTANT. IF BLEACH CANNOT BE OBTAINED, 70% ALCOHOL IS A SUITABLE SUBSTITUTE.
6. TO PREVENT POSSIBLE INFECTION FROM SPLASHING OR SPLATTERING OF INFECTIOUS MATERIAL, USE SURGICAL MASK AND EYE PROTECTION.

Attachment 4 (Added-AFSOC)

IN-PROCESS INSPECTION (IPI) LISTING

Table A4.1. MC1-1C/D PARACHUTE ASSEMBLY IN-PROCESS INSPECTION CHECKSHEET.

DATE	**RIGGER(S)**	
LCN#	**CANOPY SERIAL #**	**Aircrew Flight Equipment**

EMP #	INITIALS	STEP
		1. Check for proper layout and suspension line continuity. Ensure control lines are not routed around any suspension lines. **REF: 14D1-2-466-2, Pg. 0011 00-14, Para. 4-7**
		2. Check for flat fold of canopy, ensure proper air channel. Ensure information panel is on top. Ensure control lines are in proper suspension line groups (L/R). **REF: 14D1-2-466-2, Pg. 0011 00-24 Note, Pg. 0011 00-26, Para. 20-21**
		3. Canopy long-folded. Inspect deployment bag tie to static line loop, approximately 3 inch loop. **REF: 14D1-2-466-2, Pg. 0011 00-26 to 31**
		4. Check that deployment bag locking loops extend 2 inches beyond locking stow loop hoods and that first stow is in upper right corner. **REF: 14D1-2-466-2, Pg. 0011 00-36 thru 39, Para. 3-11**
		5. Check to verify there is approximately 8 to 10 inches of suspension line left unstowed and there is a minimum of 8 stows on each panel. **REF: 14D1-2-466-2, Pg. 0011 00-40, Para. 15-16, NOTE**
		6. Ensure the risers are still in the proper layout prior to tying connector links. **REF: 14D1-2-466-2, Pg. 0011 00-40, Last NOTE**
		7. Ensure tie webbing is properly routed through connector links, top/bottom tie loops and protector cover tie loop. **REF: 14D1-2-466-2, Pg. 0011 00-41, Para. 2-4**
		8. Check routing of webbing on closed flaps; webbing should pass through lower end flap, static line, left side flap, upper flap, under static line and through right side flap. Ensure the webbing does not interfere with static line. **REF: 14D1-2-466-2, Pg. 0011-45, Para. 5 & NOTE**

		9. Check for proper stowing of static line. Confirm AFTO Forms 391 and FERMS been properly annotated? **REF: 14D1-2-466-2, Pg. 0011 00-50, Para. 2a-b & 00-25-241 Pgs. 1-14 & AFI 11-301, AFSOCSUP**
Current as of:		Reviewed by:
Note: ALL REFERENCES ARE FROM T.O. 14D1-2-466-2		

Table A4.2. MC-4 MAIN PARACHUTE ASSEMBLY IN-PROCESS INSPECTION CHECKSHEET.

DATE		**RIGGER(S)**	
LCN #		**CANOPY SERIAL #**	**Aircrew Flight Equipment**
EMP #	**INITIALS**	**STEP**	
		1. Check for proper layout by performing line continuity check. Ensure control lines run free thru proper grommets and are not twisted. Ensure that main canopy ripcord release and risers are correctly installed on the harness, and canopy flaking is complete. **REF: TO 14D1-2-468-2, WP 0014 00-2, Para. 1 thru 00-11, Para. 4**	
		2. Ensure canopy S-folding and tail folding are properly completed. Ensure deployment brakes are set properly. Check that slider is pulled up to bottom of canopy, ensuring free movement along centered suspension lines. **REF: TO 14D1-2-468-2, WP 0014 00-11, Para. 5 thru 00-25, Para. 12**	
		3. Check the four suspension line locking stows. Ensure first stow is on the right side and stows are no longer than 1inch through retainer bands. Bridal ring is free of canopy material. **REF: TO 14D1-2-468-2, WP 0014 00-29, Para. 2 thru 00-30, Para. 4**	
		4. Check for properly stowed suspension lines that are no longer than 1 inch through retainer bands. Ensure approximately 12 inches of suspension lines remains after the last stow. **REF: TO 14D1-2-468-2, WP 0014 00-31, Para. 5-6**	
		5. Watch positioning of deployment bag into main container ensuring toggles are facing inward and suspension lines are at bottom of main parachute container. **REF: TO 14D1-2-468-2, WP 0014 00-32, Para. 2&3**	
		6. Check completed pack for proper flap closing sequence. (Bottom, left, right, top). Ensure all packing aids are removed. **REF: TO 14D1-2-468-2, WP 0014 00-34, Para. 7**	
		7. Have AFTO Forms 391 and FERMS been properly annotated? **REF: T.O. 00-25-241, Pgs. 1-14 & AFI 11-301, AFSOC Sup**	
Current as of:			Reviewed by:

Note: ALL REFERENCES ARE FROM T.O. 14D1-2-468-2

Table A4.3. MC-4 RESERVE PARACHUTE ASSEMBLY w/ CYPRESS IN-PROCESS INSPECTION CHECKSHEET.

DATE		**RIGGER(S)**	
LCN#		**CANOPY SERIAL #**	**Aircrew Flight Equipment**
EMP #	**INITIALS**	**STEP**	
		1. CYPRES EAAD cutters properly installed (through elastic keepers and properly aligned with grommets) and serviceability of the CYPRES EAAD components. Check for proper layout and perform line continuity check. Ensure control lines run free thru proper grommets and are not twisted. Ensure that reserve canopy ripcord release and risers are correctly installed on the harness, and canopy flaking is complete. **REF: TO 14D1-2-468-2, WP 0013 00-2, Para. 1 - 00-15, Para. 9, and CYPRES MANUAL**	
		2. Ensure canopy S-folding and tail folding are properly completed. Ensure deployment brakes are set and tacked properly. Check that slider is pulled up to bottom of canopy, ensuring free movement along centered suspension lines. **REF: TO 14D1-2-468-2, WP 0013 00-16, Para.1 - 00-19, Para. 17**	
		3. Ensure canopy nose fold is completely exposed. **REF: TO 14D1-2-468-2, WP 0013 00-22, Para. 24 & 25**	
		4. Check for proper stowing of suspension lines and ensure locking stows are no longer than 1 ¾ inches. Approximately 8 inches of suspension lines remain between the bag and risers. **REF: TO 14D1-2-468-2, WP 0013 00-25, Para. 1 - 00-27, Para. 6**	
		5. Check that the bridle needle fold is properly completed. Fold should extend no more than 1 inch through loop. **REF: TO 14D1-2-468-2, WP 0013 00-27, Para. 1 thru 00-31, Para. 12**	
		6. CYPRES EAAD reserve closing loop properly routed (through cutters and cutter flap). **CYPRES MANUAL**	
		7. Ensure container side flaps are closed in proper sequence (bottom, right, left) **REF: TO 14D1-2-468-2, WP 0013 00-29, Para. 12 thru 00-30, Para. 15**	

		8. Ensure the reserve ripcord passes through the static line pull ring and guide ring correctly. Ensure container side flaps are closed in the proper sequence. (bottom, right, left, top). Ensure all packing aids are removed. **REF: TO 14D1-2-468-2, WP 0013 00-33, Para. 16 thru 00-35, Para. 21**
		9. Have AFTO Forms 391 and FERMS been properly annotated? **REF: T.O. 00-25-241, Pgs. 1-14 , and AFI 11-301, AFSOCSUP**
Current as of:		Reviewed by:
Note: ALL REFERENCES ARE FROM T.O. 14D1-2-468-2 & CYPRES MANUA		

Table A4.4. MC-6 MAIN PARACHUTE ASSEMBLY.

DATE	**RIGGER(S)**	
LCN#	**CANOPY SERIAL #**	**Aircrew Flight Equipment**

EMP #	**INITIALS**	**STEP**
		1. After Proper Layout Inversion removed from canopy, Canopy release assemblies are properly seated, Suspension line turns, tangles, and twists removed, Harness in proper layout and attached to riser assemblies, Control lines routed to the inside, 4-line check; suspension lines 1 (top left, inside), 28 (top right, inside), 14 (bottom left, inside), 15(bottom right, inside). **REF: 14D1-2-472-2, Pg. 0013-1 thru -12**
		2. After Lower Control Lines Are Stowed Upper lateral band dressed, Gores folded, Second tension applied, Lower lateral band and anti-inversion net dressed, Extended gores dressed, Air channel cleared of material, Upper control lines and middle control lines cleared of material and visible in air channel, Slack in lower control lines stowed on riser assemblies. **REF: 14D1-2-472-2, Pg. 0013-15 thru -16**
		3. After Breakcord Tie Right group folded 2 inches over air channel, Left group folded over right group with no rollback, Long fold proper width, Top gore folded at a 45 degree angle, Breakcord tie proper material, length, secured, and through both plies of the cotton buffer loop **REF: 14D1-2-472-2, Pg. 0013-35**
		4. After First Regular Stow Canopy and anti-version net stowed into deployment bag (maintaining group separation), First and second locking stows 2 inches, Deployment Bag flattened, First regular stow: 2 inches. **REF: 14D1-2-472-2, Pg. 0013-38 thru -41**

		5. After Routing Connector Link Ties No slack in suspension line stows, Stows aligned to the outer edge of the reinforcement, panel but not more than 1-inch beyond the, outer edge of the stow loop, No rolled stow loops, Stow hooks removed, Minimum of eight stows, Connector link ties routed and proper material. **REF: 14D1-2-472-2, Pg. 0013-42 thru -44**
		6. After Connector Link Ties Connector link ties properly routed and secure, Log record entry present (deployment bag number). **REF: 14D1-2-472-2, Pg. 0013-44 thru -45**
		7. After Pack Closing Exposed risers not twisted, Static line properly routed, Curved pin routed left to right, Pack tray closed in correct sequence (Left, Right, Lower, Upper) **REF: 14D1-2-472-2, Pg. 0013-1 thru -12**
		8. After Completion of Pack (15-Foot Configuration) Pull-up cord removed, Pack tray dressed, Static line stowed, Log record entries completed. **REF: 14D1-2-472-2, Pg. 0013-1 thru -12**
		9. After Completion of Pack (20-Foot Configuration) Static line stowed, entries in log record completed. **REF: 14D1-2-472-2, Pg. 0013-1 thru -12**
Current as of:		Reviewed by:
Note: ALL REFERENCES ARE FROM T.O. 14D1-2-472-2		

Table A4.5. MODIFIED IMPROVED RESERVE PARACHUTE SYSTEM (MIRPS) INPROCESS INSPECTION CHECKSHEET.

DATE	**RIGGER(S)**	
LCN#	**CANOPY SERIAL #**	**WORK UNIT CODE: PCF00**

EMP #	**INITIALS**	**STEP**
		1. Check proper layout and suspension lines continuity. **REF: T.O. 14D1-2-462-2, Pg.0013 00-4&5, Para. 1-4**
		2. After flat fold is completed, check for clear air channel. **REF: T.O. 14D1-2-462-2, Pg.0013 00-11, Para. 18-19**
		3. After long fold is completed, ensure parachute is 10” wide at skirt & 6” at fold breaks approximately 30” from apex. **REF: T.O. 14D1-2-462-2, Pg.0013 00-11 thru 13, Para. 1-4, NOTE**
		4. Check to ensure 11 to 12 stows have been completed & there is approximately 14-16” of un-stowed lines remaining. Stows will equal the width of the pack tray & measure approximately 1 ½ - 2”

		from end of rubber band. **REF: T.O. 14D1-2-462-2, Pg.0013 00-14&15, Para. 4-5**
		5. Check placement of suspension lines inside suspension line free bag deployment pouch. **REF: T.O. 14D1-2-462-2, Pg.0013 00-15&16, Para. 6-7**
		6. Ensure elastic portion of apex sock is fully below upper lateral band. Ensure curved pins on bridle are positioned right to left. Check that two pull-up cords have been removed and set aside. **REF: T.O. 14D1-2-462-2, Pg.0013 00-16 thru 19, Para. 1-12 & NOTE**
		7. Check proper folding of pilot chute bridal, placement of ejector spring, and placement of pilot chute on top of ejector spring. **REF: T.O. 14D1-2-462-2, Pg.0013 00-20 thru 24, Para. 1-9**
		8. Check removal of all packing aids & ejector spring compression rods. **REF: T.O. 14D1-2-462-2, Pg.0013 00-24 thru 29, Para. 10-10, WARNING**
		9. Ensure ripcord handle is fully seated in elastic ripcord grip pocket and pins are fully inserted in soft loops. **REF: T.O. 14D1-2-462-2, Pg.0013 00-28, Para. 6**
		10. Have AFTO Forms 391 and FERMS been properly annotated? **REF: T.O. 00-25-241, Pgs. 1-14 & AFI 11-301, AFSOCSUP.**
Current as of:		Reviewed by:
Note: ALL REFERENCES ARE FROM T.O. 14D1-2-462-2		

Table A4.6. ML-4 Kit IN-PROCESS INSPECTION CHECKSHEET.

DATE	**INSP BY:**	
LCN#		**Aircrew Flight Equipment**

EMP #	**INITIALS**	**STEP**
		1. Are all DOE's good until next inspection. **REF: TO 14S1-3-51, Pg 3-19, Para 3-3.2a**
		2. Ensure CO2 bottle at appropriate weight and properly annotated on cylinder **REF: TO 14S-1-102-11, Pg 8-6, Table 8-1 & Pg 8-7, Para 8.6.1**
		3. Ensure functional inspection was performed at proper interval. **REF: TO 14S-1-102-11, Pg 5-3, Para 5.4c**
		4. Check life raft contract number. If contract number is F41608-88-D-0191, ensure brass spacer is installed. **REF: TO 14S-1-102-11, Pg 4-2, Para 4.2.3**

		5. Ensure inner slide fastener is attached properly to cable loop. **REF: TO 14S1-3-51, Pg 3-19, Para 3-3.2k, Note**
		6. Ensure drop lanyard is properly attached to CO2 cylinder head. **REF: TO 14S1-3-51, Pg, 3-19, Para 3-3.2h**
		7. Ensure universal adapter is installed. **REF: TO 14S-1-102-11, Pg 7-2, Para 7.3e, NOTE**
		8. Ensure slide fastener actuation-lanyard is attached to cable-ball and installed in to the inflation assembly cam. **REF: TO 14S1-3-51, Pg 3-19, Para 3-3.2.k thru l**
		9. * Ensure cam is rotated clockwise 90 degrees so the notch opening on sleeve and spring assembly does not align to the cable ball hole of the cam. **REF: TO 14S-1-102-11, Pg 7-10, Para 7.4.1.f**
		10. Ensure Adapter clip assembly is installed. **REF: TO 14S1-3-51, Pg 3-19, Para 3-3.2.l, and 14S-1-102-11, Pg 7-10, Para 7.4.1h**
		11. Ensure coupling nut torque to a value of 50 to 60 in lb. When nut is being torque ensure proper tool is used to prevent inlet check valve from rotating. **REF: TO 14S-1-102-11, Pf 7-10.1, Para 7.4.1.i**
		12. Ensure slide fastener is tacked and kit safety tied. **REF: TO 14S1-3-51, Pg 3-22, Para 3-3.2 n thru o**
		13. Is FERMS updated and DD Form 1574 correct? **REF: TO 14S1-3-51, Pg 3-23, Para 3-3.2 s**

* If Applicable	
Life Raft Information	
Life Raft Local ID	
Serial Number	
Contract Number	
DOM	
Last Functional	
Date Inspected	
Date Due	
Inspected by	
Current as of:	Reviewed by:
Note: ALL REFERENCES ARE FROM T.O. 14S1-3-51 & 14S-1-102-11	

Attachment 5 (Added-AFSOC)

SAMPLE AFSOC AFE REQUIREMENTS DEVELOPMENT DOCUMENT

DATE

MEMORANDUM FOR (Route from Unit to WG, OG, HQ AFSOC/A3TL, A3T, A3
FROM: Unit
SUBJECT: Aircrew Flight Equipment Requirements Identification Document

1. This document is used for AFSOC units to identify equipment requirements for the HQ AFSOC/A3TL section to understand the needs of the aircrew and utilize to find industry solutions and seek approval for its fielding.
2. Units must concentrate on the capability gaps and improvements on aircrew operations and safety. Do not list manufactures or specific equipment items; this severely limits the ability for HQ AFSOC/A3TL to seek the most suitable solution. Units should be as specific as possible when developing this document. Aircrew and the unit AFE section should coordinate during the development of this document.
3. Once HQ AFSOC/A3TL receives this document and acquires solutions the submitting unit and HQ AFSOC/A3TL will work closely to decide on a final recommendation.
4. Requirements.
    a. Current Situation:
    b. Current Equipment capabilities gaps:
    c. Proposed modifications to Current Equipment (if applicable):
    d. Brief CONOP:
    e. Operational Environments Overview:
        (1) Aircrew Performance: (sizing constraints for personnel, donning/doffing)
        (2) Mobility Requirements: (size, space, weight)
        (3) Thermal Protection Requirements:
        (4) Ballistic Protection Requirements:
        (5) Altitude Requirements:
        (6) Systems Integration Requirements:
        (7) Egress Requirements:
        (8) Flotation Requirements:
    f. Supporting Documentation:
        (1) SIB/AIB Reference:
        (2) Safety Report Reference:
        (3) Lessons Learned Report Reference:
        (4) Sister-Service Reference:
    g. Impacting areas:
        (1) Training:
        (2) Technical Orders:
        (3) Flight Pubs:
        (4) Checklist:
        (5) Aircraft Maintenance Technical Orders:
    h. Other issues or areas of concern:

Signature block

Attachment 6 (Added-AFSOC)

PRE-DEPLOYMENT PREPARATION CHECKSHEET

Table A6.1. Pre-Deployment Preparation Checksheet.

Pre-Deployment Preparation	YES	NO	N/A
1.1. **Personnel Training**			
1.1.1. Are all deploying personnel qualified on both the 9MM and M-16 or M-4?			
1.1.2. Are personnel trained to drive on the flight line in the ground crew ensemble?			
1.1.3. Are personnel trained to process hazardous cargo?			
1.1.4. Do the personnel deploying possess the proper skill levels?			
1.1.5. Are personnel trained on ACCA preparation, set-up, operation, safety, work-rest cycles and evacuation procedures?			
1.1.6. Are personnel trained on programming CSEL/PRC-112 radios?			
1.1.7. Are personnel trained on issuing aircrew weapons?			
1.1.8. Are personnel trained on inspection and maintenance of Night Vision Goggles (NVGs)?			
1.1.9. Does personnel training meet all requirements in the METLs?			
1.1.10. Are personnel current in all essential ancillary and wartime skills identified in Career Field Education and Training Plan prior to deployment?			
1.2. **Supervision/Management**			
1.2.1. Are the items listed below on hand for deployment and employment operations:			
1.2.1.1. Crewmember data sheets (fitting and sizing information)			
1.2.1.2. AF Form 522			
1.2.1.3. Authorization to Bear Arms letter from the commander?			
1.2.1.4. Has supply been contacted with/for the following items?			
1.2.1.4.1. Equipment/weapons/ammunition).			
1.2.1.4.2. Identify equipment deploying with use code "A" to Electronic Maintenance System (EMS).			
1.2.1.4.3. Identify deployed custodians.			
1.2.1.4.4. Contact EMS for deployed CA/CRL. (Shop and Chem Accounts)			
1.2.1.4.5. Inventory deploying equipment.			
1.2.1.4.6. Deployed supply accounts and procedures			

Pre-Deployment Preparation	**YES**	**NO**	**N/A**
1.2.1.5. Have equipment inspections been reviewed for due dates and inspections accomplished as required?			
1.2.1.6. Do any AFE equipment LIMFAC/Shortfalls exist?			
1.2.1.7. Is any of the following specific AFE required/configured for the deployment?			
1.2.1.8. Cold weather equipment			
1.2.1.9. Hot weather equipment			
1.2.1.10. Anti-Exposure Suits			
1.2.1.11. NVGs with Mounts			
1.2.1.12. Aircrew Laser Eye Protection (Reference AFI 11-301, Vol 4)			
1.2.1.13. Aircrew Chemical Warfare Equipment			
1.3. **Personnel Readiness Issues**			
1.3.1. Do all personnel have the following items completed, on-hand and current:			
1.3.1.1. Powers of Attorney			
1.3.1.2. Wills			
1.3.1.3. Dog Tags			
1.3.1.4. Government Travel Card			
1.3.1.5. Mobility Bags			
1.3.1.6. Uniforms			
1.3.1.7. Medications			
1.3.1.8. Immunizations			
1.3.1.9. Line Badge			
1.3.1.10. Gas mask inserts/glasses (if required)			
1.4. **Equipment Pre-deployment requirements**			
1.4.1. Life Preservers installed (as required)			
1.4.2. Survival Kit/Vest configured for AOR requirements			
1.4.3. Piddle Packs/ relief devices			
1.4.4. Air Sickness Bags			
1.4.5. Do aircrew require any specific clothing for the deployment?			
1.4.6. Combat Radios and support equipment			
1.4.7. Ensure classified material is controlled			
1.5. **Other Considerations**			
1.5.1. Are AFE personnel be part of the ADVON/Enroute Support Team?			
1.5.2. Have all manning requirements been filled per UTC/MANFOR?			
1.5.3. Do items need to be removed from survival kit to accommodate items in the deployed location (sleeping bags, water, rations, climate and terrain conditions)?			
1.5.4. Has coordination been accomplished with other units deploying to the same location?			

Pre-Deployment Preparation	YES	NO	N/A
1.5.5. Has the Base Support Plan been reviewed for the deployed location? Work facilities, equipment storage, weapon security, munitions support, Supply, Transportation.			
1.5.6. Have the SPINS and Operation Order been reviewed for pre-deployment and deployment location requirements?			
1.5.6.1. Get from Intelligence/ SIPR access.			
1.5.6.2. GPS usage.			
1.5.6.3. CSAR Radio employment and use.			
1.5.6.4. Rescue Assets what and where.			
1.5.6.5. Aircrew Laser Eye Protection requirements.			
1.5.6.6. Threat assessment i.e. CBRN.			
1.5.7. Have beacons been configured IAW the SPINS for timed/auto mode?			
1.5.8. Have arrangements for the following been accomplished:			
1.5.8.1. Equipment from Precision Measurement Equipment Laboratory (PMEL).			
1.5.8.2. Forklift/vehicle for pallet/equipment movement.			
1.5.9. Have AFE items been sanitized of unit identification and names?			

Attachment 7 (Added-AFSOC)

DEPLOYMENT AND MOBILITY PACKAGE CHECKSHEET

Deployment and Mobility Package	Yes	No	N/A
1. Initial Actions.			
1.1. Are all personnel accounted for?			
1.2. Has everyone signed in and has strength reporting been completed?			
1.3. Are there any initial LIMFAC shortfalls that need to be identified to squadron leadership?			
1.3.1. If so, does the AF Form 4006, *Unit Deployment Shortfalls*, need to be coordinated with the appropriate agency?			
1.4. Do any logistical support issues need to be worked with the following agencies?			
1.4.1. Munitions.			
1.4.2. Egress.			
1.4.3. PMEL.			
1.4.4. Hazardous Material.			
1.4.5. Cargo Shipment.			
1.4.6. Plans and Scheduling.			
1.5. Is the deployment package dependent/ independent of other units?			
1.6. Is the ACCA equipment required for the deployment?			
1.7. Are all test equipment inspections current?			
1.8. Are all mobility parachutes, kits LPU's, etc. inspected?			
1.9. Are all packing list current?			
1.10. Are all load lists current?			
1.11. Has all hazardous cargo been marked properly and ready for shipment?			
1.12. Are Transportation Control Numbers for all deploying equipment documented and sent with the deploying AFE person?			
1.13. Has all hazardous cargo been marked properly and ready for shipment?			
1.14. Are MSDSs available for all deploying assets? (as required)			
2. Equipment Requirements.			
2.1. Are the following items available in the deployment package?			
2.1.1. Aircrew Data Sheets.			
2.1.2. Technical Orders.			
2.1.3. Spare flight gloves.			
2.1.4. Piddle Packs/ bladder relief devices.			
2.1.5. Ear Plugs.			
2.1.6. Spare LPUs.			
2.1.7. Spare Helmets.			

Deployment and Mobility Package	**Yes**	**No**	**N/A**
2.1.8. Spare Masks.			
2.1.9. Spare Harnesses.			
2.1.10. Red Ball Kit.			
2.1.11. Flight line Consolidated Tool Kit (CTK).			
2.1.12. D- Bags.			
2.1.13. Anti-Exposure Suits.			
2.1.14. Batteries (as required).			
2.1.15. Hydro thermograph.			
2.1.16. CTK.			
2.1.17. Office supplies.			
2.1.18. Hazmat kit.			
2.1.19. Velcro's.			
2.1.20. Laptop w/printer.			
2.1.21. Surge protector.			
2.1.22. Dry-erase board.			
2.2. PMEL Equipment.			
2.2.1. RCTS-003 Radio tester.			
2.2.2. ANV 20/20 Tester.			
2.2.3. ANV 126 Tester w/required adapters.			
2.2.4. Torque Wrenches.			
2.2.5. Torque Screwdrivers.			
2.2.6. NVG Tools.			
2.2.7. Pull Tester.			
2.2.8. Manside Tester/CAST/CAST+/SCOT Tester.			
2.2.9. Purge Kit w/bottle.			
2.3. Additional Equipment.			
2.3.1. Compact Disks to include: ACCEPL, AFLGSEPL, Federal Logistic, AFEPL.			
2.3.2. Copy of all shop letters and programs.			
2.4. Cargo.			
2.4.1. Are Hazardous cargo documents available?			
2.4.2. Are Load Lists available?			
2.4.3. Are Packing Lists available?			
2.4.4. Are hazardous cargo labels (UN Labels) on all required items?			
2.4.5. Are placards for pallets available and up to date?			
2.4.6. Do personnel have the proper safety equipment to pack/build pallets?			
2.5.7. Has coordination been accomplished with egress for support during all portions of the deployment?			
2.6.8. Is all equipment ready for the launch?			
2.6.8.1. Piddle packs/bladder relief devices and extra zip lock bags.			

Deployment and Mobility Package	Yes	No	N/A
2.6.8.2. Ear Plugs.			
2.6.8.3. LPUs installed (if required)			

Attachment 8 (Added-AFSOC)

EMPLOYMENT OPERATIONS CHECKSHEET

Employment Operations	Yes	No	N/A
1. AFE Shop/Facility.			
1.1. Has an AFE shop area been established?			
1.1.1. Has an area for equipment storage been established?			
1.1.1.1. Is all required test equipment available and in-place in the equipment area? (See shop set-up checklist)			
1.1.1.2. Are the following items available in the AFE facility?			
1.1.1.2.1. Phone line.			
1.1.1.2.2. Fax Line.			
1.1.1.2.3. NIPRNET (Non-Secure Internet Protocol Router Network) connection.			
1.1.1.2.4. SIPRNET (Secure Internet Protocol Router Network) connection, safe for classified material.			
1.1.1.2.5. Potable water. (If not, is bottled water available?)			
1.1.1.2.6. Electrical power. (Are power converters available if required?)			
1.1.1.2.7. Heating/Cooling.			
1.1.1.2.8. Latrines.			
1.1.1.2.9. Equipment inspection area.			
1.1.1.2.10. Is the area for inspections properly configured?			
1.1.1.2.10.1. Padded surface.			
1.1.1.2.10.2. Fire extinguishers.			
1.1.1.2.10.3. Hearing protection.			
1.1.1.2.10.4. Sand bucket for flares.			
1.1.1.2.10.5. Flare locker.			
1.1.1.2.10.6. Flammable locker.			
1.1.1.2.10.7. Hazardous material collection point.			
1.1.2. Has an area for post flight inspections been established?			
1.1.3. Has an area for NVG inspections and aircrew preflight been established? (See NVG area set-up checklist)			
1.1.4. Has an area for weapons issue been established? (See Weapons area set-up)			
1.1.5. Has the AFE area been established as a controlled area?			
1.1.5.1. Have required access notification signs been posted?			
1.1.5.2. Has all required coordination been accomplished with the base resource protection office for controlled area requirements?			
1.1.6. Has an AFE safety briefing been developed and personnel briefed?			
1.1.6.1. Are personnel practicing/enforcing general safety and explosive safety procedures?			

Employment Operations	**Yes**	**No**	**N/A**
1.1.6.2. Have "Apply No Water", Breathing Apparatus Required and Fire symbols been posted for the AFE shop and equipment area as required?			
1.1.7. Has an evacuation plan for the facility been established?			
1.1.7.1. Has a rally point been established and briefed to all personnel?			
1.1.7.2. Is a diagram posted with the evacuation route?			
1.1.7.3. Have bunkers been established for all personnel?			
1.1.7.4. Have procedures been established to account for all personnel before, during and after the facility evacuation?			
1.1.7.5. Are personnel familiar with explosive ordinance reconnaissance procedures?			
1.1.7.6. Are personnel familiar with procedures to black-out/tone-down the AFE facility?			
1.1.8. Are personnel familiar with the placement of M-8/M-9 for chemical monitoring? (if required)			
1.1.9. Has the AF Form 2047 Explosive Facility License and AF Form 68 Munitions Authorizations Record been coordinated with required agencies? (if applicable)			
1.1.10. If facility has special training required such as blowers/airlocks, etc. Are personnel familiar with the procedures to operate the equipment?			
1.1.11. Is the equipment properly stored? Either inside a building or covered with plastic?			
1.1.12. Are AFE personnel familiar with Force Protection Condition procedures in place to protect equipment and personnel?			
1.2.1. Has an alternate location been established for AFE operations?			
1.2.1.1. Are building numbers, phone numbers and fax numbers available for the alternate location?			
1.2.1.2. Are extra AFE equipment and mobility packages from additional units pre-positioned at the alternate location?			
1.2.1.3. Is an extra copy of important information such as fitting sheets, equipment cards etc….kept at the alternate location?			
2. Equipment.			
2.1. Is equipment adequately dispersed and protected?			
2.1.1. If equipment is stored outdoors, is the equipment/pallets covered and bunkered if possible?			
2.1.2. Are all personnel proficient in emergency re-order procedures for AFE equipment?			
2.1.2.1. Are procedures in place to inform AOR leadership of AFE equipment shortages and shortfalls?			

Employment Operations	**Yes**	**No**	**N/A**
2.1.3. Has all deployed equipment arrived in serviceable condition?			
2.1.3.1. Is equipment stored properly on racks or other devices?			
2.1.3.2. Have all aircraft arrived and are they configured as required?			
2.1.4. Is all AFE equipment combat configured prior to the first mission?			
2.1.5. Are anti-exposure suits available and individually fitted and worn when directed?			
2.1.6. Are life preservers worn when directed?			
2.1.7. Are personnel lowering devices (PLDs) available and installed when directed?			
2.1.8. Is Aircrew Chemical, Biological, Radiological, and Nuclear Equipment serviceable and individually issued/fitted?			
2.1.9. Have new chemical warfare filters been installed in the ACBRN equipment (if required)?			
2.1.10. Is test equipment set-up and serviceable?			
2.1.11. Are CTKs available to support all deployed equipment and controlled as required?			
3. Supply.			
3.1. Have accounts been established with the following agencies?			
3.1.1. Maintenance Group – for AFE fly dollar requirements			
3.1.2. Medical supply			
3.1.3. Base supply issue and receiving			
3.1.4. Are re-supply procedures in place?			
4. Flying Operations.			
4.1. Are AFE personnel aware of the daily flying window and are personnel available to support operations?			
4.2. Are AFE personnel kept abreast of changes to the flying operations?			
4.3. Is required information coordinated with intelligence forces in regards to Combat Radios?			
4.5. Are procedures in place for AFE to respond for RED BALLs and aircraft-installed equipment inspections?			
4.6. Have procedures been established to implement C-CW and/or C-BW CONOPS operations if required? (See C-CW and/or C-BW CONOPS Checklist, as required)			
5. Personnel.			
5.1. Do AFE personnel know the locations of the following agencies?			
5.1.1. Base Supply.			
5.1.3. Fire Department.			

Employment Operations	Yes	No	N/A
5.1.4. Contracting.			
5.1.5. CE Readiness.			
5.1.6. Hospital or Expeditionary Medical Support.			
5.1.7. Medical Supply.			
5.1.8. Transportation.			
5.1.9. Petroleum, Oils, and Lubricants (for vehicle fuel).			
5.1.10. Egress.			
5.1.11. Plans and Scheduling.			
5.1.12. Aircraft Maintenance Unit.			
5.1.13. Squadron Operations.			
5.1.14. EOC/Installation Control Center.			
5.1.15. Security Forces and Armory.			
6. Transportation.			
6.1. Has a vehicle been procured for AFE operations?			
6.1.1. Does the vehicle provide overhead protection for C-CW CONOPS requirements?			
6.2. Are personnel familiar with vehicle “tone-down” procedures?			
6.3. Are Self-Aid Buddy Care kits available in the vehicle?			
6.3.1. Is litter available for transporting injured personnel?			
6.4. Are alarm condition flags available in the vehicle?			
6.5. Is a radio available for the vehicle operator?			
6.6. Has a map of the base been procured to identify important locations?			
6.7. Has a forklift been coordinated to move equipment? (if required)			
7. Night Vision Goggles.			
7.1. Are procedures in place to issue and track NVGs?			
7.2. Is all required equipment on hand to support NVG operations?			
7.2.1. Specialized night vision tool kit.			
7.2.2. ANV-20/20 Tester.			
7.2.3. ANV-126 Tester and adapter plates.			
7.2.4. Purge kit and nitrogen bottle.			
7.2.5. NVG booth or room for testing.			
7.2.6. Lens paper, cleaning equipment.			
7.2.7. Chem lights.			
7.2.8. Finger light and batteries.			
7.2.9. NVGs.			
7.2.10. NVG brackets (JHMCS NVG mount as required).			
7.2.11. NVG kits for aircrews (if required).			
7.2.12. NVG batteries.			
7.2.13. PNVG: diopter package, bridge assembly (as required).			

Employment Operations	**Yes**	**No**	**N/A**
8. Weapons.			
8.1. Are the following items on hand to support weapons issue/turn-in operations?			
8.1.1. Clearing barrel, catch tray, inspection records, matting eye protection.			
8.1.2. Issue Area Set-up IAW AFI 31-229.			
8.1.3. Controlled area signs.			
8.1.4. Authority to bear firearms letter.			
8.1.5. Anti-robbery procedures.			
8.1.6. Deployed munitions coordination with AFK.			
8.1.7. Issue and turn-in procedures.			
9. Communication.			
9.1. GPSs.			
9.1.1. Are GPSs secured after they have been loaded?			
9.1.2. Have GPSs been initialized for the deployed location?			
9.1.3. Do the GPSs have the latest version of software loaded?			
9.1.4. Are GPSs tracked by serial number for accountability?			
9.2. CSAR survival radios.			
9.2.1. Is a laptop computer available for loading the radios?			
9.2.2. Are cables available to load the radios?			
9.2.3. Is the software available to load the radios?			
9.2.4. Are spare parts available for the radios?			
9.2.5. Are cover plates available for the radios?			
9.2.6. Is the required information tracked for Intel and AFE?			
10. Additional Equipment.			
10.1. ANVIS Scopes (as required).			
10.1.1. Are ANVIS Scopes installed in the vest/kit?			
10.1.2. Are ANVIS scope serial numbers tracked for accountability?			
10.2. Aircrew Laser Eye Protection (ALEP).			
10.2.1. Are ALEP devices serviceable and threat equivalent?			
10.2.2. Are issue/turn-in procedures established for ALEP?			
10.2.3. Are ALEP devices serial numbers tracked for accountability?			
11. Home Station, AOR and Higher Headquarters Communication.			
11.1. Has the AOR Superintendent been informed of following information?			
11.1.1. Deployed unit phone number/fax/STU III and tactical phone numbers?			
11.1.2. Deployed unit email (SIPRNET and NIPRNET) addresses?			

Employment Operations	**Yes**	**No**	**N/A**
11.1.3. Personnel and strength information? (this information may need to be transmitted via SIPRNET)			
11.1.4. Equipment shortages? (this information may need to be transmitted via SIPRNET)			
11.2. Has the AOR Superintendent placed the deployed unit on all distribution lists to receive messages and email traffic from the AOR and higher headquarters?			
11.3. Has the deployed unit's home station been informed of the following information?			
11.3.1. Deployed unit phone number/fax/STU III and tactical phone numbers?			
11.3.2. Deployed unit email (SIPRNET and NIPRNET) addresses?			
11.4. Has the home unit placed the deployed unit on the distribution list or coordinated other means to receive the latest messages, T.O. changes and other information effecting the deployed unit personnel and equipment?			
12. "BUG OUT" Relocation Procedures.			
12.1. Pre-determine key equipment items to be removed during bug-out operations. Emphasis placed on mission essential equipment i.e. NVG, weapons, helmets, JHMCS, ALEP (fitted, high demand, short supply items).			
12.2. Facilitate methods and means to expedite removal.			
12.3. Evacuate personnel and equipment with what can be safely carried in single exit.			