

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

**AIR FORCE INSTRUCTION 11-301,
VOLUME 1**



25 FEBRUARY 2009

**AIR COMBAT COMMAND
Supplement**

23 APRIL 2010

**Certified Current 12 May 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

Supersedes: AFI11-301V1, 19 July 2002

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

Pages: 125

(ACC)

OPR: HQ ACC/A3TO

Supersedes: AFI11-301V1_ACCSUP1,
23 July 2004

Certified by: HQ ACC/A3-2
(James G. Riemens-Van Laare)

Pages: 51

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/afirms/afirms/>.

(ACC) AFI 11-301V1, 25 Feb 2009, is supplemented as follows. This supplement implements AFPD 11-3, *Life Support*, and amplifies policies and procedures contained in AFI 11-301V1, *Aircrew Flight Equipment (AFE) Program*, AFI 36-2201V3, *Air Force Training Program On the Job Training Administration* and other USAF AFE directives. This supplement establishes and defines the aircrew flight equipment, technician and aircrew continuation training programs for assigned/attached ACC flying units, personnel assigned or attached to ACC for flying, and other aircrew members flying ACC aircraft. It clarifies responsibilities, standardizes equipment control procedures, defines general equipment maintenance/inspection requirements, establishes security procedures, and prescribes minimum equipment requirements for ACC Aircrew Flight Equipment sections and aircrew. Unless otherwise noted, this supplement is applicable to Air National Guard (ANG) units when published in the ANGIND2. In addition, this supplement applies to ACC-gained Air Force Reserve Command (AFRC) when published in the AFRCIND2. Air Mobility Command Visual Aid (AMCVA) 50-2, *Instructions for Use, Passenger Oxygen Kit*, may be used with Passenger Oxygen Kits pending development of a departmental or ACC visual aid to replace it. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/>. Contact supporting records managers as required. Send comments and suggested improvements to this supplement, through channels, on AF Form 847, *Recommendation for Change of Publication*, to HQ ACC/A3TO, Suite 101, 204 Dodd Blvd, Langley AFB VA 23665-2717, as directed by AFI 11-215, *USAF Flight Manuals Program*. **NOTE:** Due to the unique mission at Beale AFB CA, a copy of AFI 11-301V1_Beale AFB SUP must be forwarded to HQ ACC/A3TO, *Flight Operations and Training Branch*, for approval prior to issuance (see paragraph 2.10.1.8.1.1. {Added}). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force. The Privacy Act System Number F011 AF XO A, Aviation Resource Management Systems (ARMS), covers required information (SSN) collection from AFI 11-301V1.

SUMMARY OF CHANGES

This is a major revision and must be reviewed entirely. It includes initial guidance for the new Aircrew Flight Equipment (AFE) career field (AFSC 1P0X1), which includes and merges the former Aircrew Life Support (AFSC 1T1X1) and Survival Equipment (AFSC 2A7X4) career fields. It modifies MAJCOM and other agency responsibilities, and updates office symbols. Life Support Officers (LSO) are referred to as Flight Equipment Officers (FEO). Previous guidance relating to Mobility, CBRN, and contingency operations has been moved to AFI 11-301, Volume 3, *Aircrew Flight Equipment (AFE) Combat Operations*, (forthcoming).

Program Guidance Letter (PGL), Aircrew Life Support and Survival Equipment Career Field Merger, dated 12 March 2008 implemented the Chief of Staff of the Air Force direction to merge these two career fields, and created a new AFE (AFSC 1P0X1) career field with all functions, manpower, and personnel organizationally aligned to the Operations Support Squadron (OSS) under the Operations Group (OG) to include all military, civil service, and contractor equivalent. A copy of this PGL can be obtained from HQ USAF/A3O-AT (Operational Training Division).

(ACC) This document is substantially revised and must be reviewed entirely. 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	8
1.1. Mission.	8
1.2. Program Objectives:	8
1.3. Supplements and Waivers:	8
1.4. Communications:	9
Chapter 2—RESPONSIBILITIES	11
2.1. Shared Responsibilities.	11
2.2. HQ USAF/A3O (Director of Operations) through HQ USAF/A3O-AT (Operational Training Division):	11
2.3. Aircrew Performance Executive Council (APEC):	12
2.4. HQ USAF/SE (Chief of Safety).	13
2.5. SAF/AQP (Office of the Assistant Secretary of the Air Force for Acquisition, Directorate Global Power Program):	13
2.6. HQ USAF/SG (Surgeon General).	14
2.7. Air Force Materiel Command (AFMC).	14
2.8. Air Force Operational Test and Evaluation Center:	17
2.9. MAJCOM and ANG.	17
2.10. Operations Group Commander or ARC Equivalent:	20
2.11. Operations Group or Equivalent FEO (Flight Commander) or Equivalent/AFE Superintendent.	28
2.12. AFE Quality Assurance (QA).	34
2.13. Operations Support Squadron Commanders:	36
2.14. Flying Squadron Commanders:	36
2.15. AFE Section/Satellite NCOICs:	37

2.16.	Aircraft Commanders (AC).	39
2.17.	Aircrew Members:	40
2.18.	Support Agencies:	41
2.19.	(Added-ACC) HQ ACC Staff Agencies.	41
2.20.	(Added-ACC) Air Force Safety Center (AFSC).	42
Chapter 3—AFE PROGRAM MANAGEMENT		43
3.1.	Purpose.	43
3.2.	Budgeting:	43
3.3.	Supply Accounts:	43
3.4.	Air Force Cost Analysis Improvement Group/Cost Per Flying Hour (AFCAIG/CPFH) Program:	44
3.5.	Equipment Redistribution.	44
3.6.	Transfer of AFE:	44
3.7.	In-shop/section Quality Control (QC).	44
3.8.	Composite Tool Kit (CTK) Program.	47
3.9.	Technical Orders (TO), Publications, Operating Instructions (OI) and Product Quality Deficiency Reports (PQDR):	47
3.10.	Aircrew Flight Equipment Facilities:	48
3.11.	Industrial Hygiene.	49
3.12.	Resource Protection and Control:	49
3.13.	Safety:	49
3.14.	Hazardous Communications (HAZCOM) Program:	50
3.15.	Explosive Safety.	50
3.16.	Mishap Prevention.	50
3.17.	Operational Risk Management (ORM).	50
3.18.	USAF Aircrew Flight Equipment Awards Program:	50
3.19.	Automated Life Support Management Systems (ALSMS).	51
3.20.	Automated Life-sustaining Equipment Record and Tracking System (ALERTS).	51
3.21.	Integrated Maintenance Data System (IMDS)/G081.	51
Chapter 4—TECHNICIAN TRAINING		52
4.1.	Purpose.	52
4.2.	Responsibilities:	52
Table 4.1.	AFE PERSONNEL TRAINING REQUIREMENTS.	55

Chapter 5—AIRCREW FLIGHT EQUIPMENT CONTINUATION TRAINING (AFECT)	58
5.1. Purpose.	58
5.2. Responsibilities:	58
5.3. AFECT Event Descriptions.	58
5.4. Formal Training Requirements:	59
5.5. AFECT Requirements:	60
5.6. AFECT Safety.	61
5.7. Passenger and Incentive Flyer Training:	61
5.7. (ACC) Passenger and Incentive Flyer Training.	61
5.8. Training Documentation:	62
5.9. Training Aids and Equipment:	62
5.10. Lesson Plans Development Guidance:	63
Table 5.1. AFECT REQUIREMENTS.	64
5.11. (Added-ACC) Aircrew Flight Equipment Continuation Training Instructor (AFECTI) Certification and Recertification Procedures:	65
5.12. (Added-ACC) AFECTI Certification.	65
5.13. (Added-ACC) AFECTI.	65
Chapter 6—AUTOMATED LIFE-SUSTAINING EQUIPMENT RECORDS & TRACKING SYSTEM (ALERTS) AND AIRCREW PROTECTION WEBSITE (APWEB)	67
6.1. Overview.	67
6.2. Automated Document and Management Systems:	67
6.3. Responsibilities:	67
6.4. ALERTS General Areas:	69
6.5. ALERTS Operations Areas:	71
6.6. Adopted Forms	73
Chapter 7—(Added-ACC) ACC AND ACC-GAINED UNITS AIRCRAFT INSTALLED, GUARDIAN ANGEL AND PRE-POSITIONED AIRCREW FLIGHT EQUIPMENT REQUIREMENTS	74
7.1. (Added-ACC) Purpose.	74
7.2. (Added-ACC) Configuration Requirements.	74
7.3. (Added-ACC) AFE Section Responsibilities.	74
7.4. (Added-ACC) Organizational Maintenance Activities.	74
7.5. (Added-ACC) Passenger Support Equipment.	75
7.6. (Added-ACC) Uploading and Equipping Alert Aircraft.	75

	7.7.	(Added-ACC) Equipment Issue, Control and Accountability Procedures.	76
Table	7.1.	(Added-ACC) RC, TC, OC, WC-135 and E-4B Aircraft AFE Configurations (IAW T.	78
Table	7.2.	(Added-ACC) EC-130/HC-130 Aircraft AFE Configurations.	81
Table	7.3.	(Added-ACC) E-3 Aircraft AFE Configuration.	82
Table	7.4.	(Added-ACC) E-8 Aircraft AFE Configuration.	82
Table	7.5.	(Added-ACC) B-52 Aircraft AFE Configuration.	83
Table	7.6.	(Added-ACC) B-1 Aircraft AFE Configuration.	84
Table	7.7.	(Added-ACC) B-2 Aircraft AFE Configuration.	84
Table	7.8.	(Added-ACC) Fighter/Trainer Aircraft AFE Configuration.	84
Table	7.9.	(Added-ACC) MC-12 Aircraft AFE Configuration.	85
	7.8.	(Added-ACC) Survival Kits.	86
Table	7.10.	(Added-ACC) Survival Kit Minimum Components.	87
Table	7.11.	(Added-ACC) Survival Vest Minimum Components.	88
Table	7.12.	(Added-ACC) ML-4 (Guardian Angel Use Only) Survival Kit Minimum Components.	89
Table	7.12.1.	(Added-ACC) Real World Use.	89
Table	7.12.2.	(Added-ACC) Training Use.	89
Table	7.13.	(Added-ACC) Real-World Use.	89
Table	7.14.	(Added-ACC) Training Use.	89
Table	7.15.	(Added-ACC) T-9/AC-9 Life Raft Survival Kit Minimum Components.	90
	7.9.	(Added-ACC) Life Rafts and Life Preservers.	91
	7.10.	(Added-ACC) AFE Oxygen Equipment.	91
	7.11.	(Added-ACC) Oxygen Mask Connector/Quick Disconnect Inspections.	92
	7.12.	(Added-ACC) Parachutes and Lifelines.	93
	7.13.	(Added-ACC) Flash-blindness Protection Devices.	93
	7.14.	(Added-ACC) Protective Clothing Kit (PCK).	93
	7.15.	(Added-ACC) Emergency Oxygen Cylinders.	94
	7.16.	(Added-ACC) Aircrew Laser Eye Protection.	94
	7.17.	(Added-ACC) Maintenance Support.	94
Chapter 8—(Added-ACC) DEPLOYMENT AND CONTINGENCY OPERATIONS			95
	8.1.	(Added-ACC) Purpose.	95
	8.2.	(Added-ACC) Responsibilities.	95
	8.3.	(Added-ACC) Mobility Preparation.	96
	8.4.	(Added-ACC) Deployment.	98

	8.5.	(Added-ACC) Employment.	98
	8.6.	(Added-ACC) Counter-Nuclear, Biological, Chemical (C-NBC) Defense Operations.	98
Table	8.1.	(Added-ACC) AIRCREW CHEMICAL DEFENSE EQUIPMENT BASIS-OF-ISSUE (BOI).	99
	8.7.	(Added-ACC) Deployment Operations/Mobility Preparation.	100
	8.8.	(Added-ACC) Deployment of Inspection Records.	101
	8.9.	(Added-ACC) Aircrew Chemical Defense.	101
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION			103
Attachment 2—AIR FORCE STANDARD AFE AUTOMATED INFORMATION TECHNOLOGY (AIT) BARCODE MARKING			120
Attachment 3—(Added-ACC) ACC AFE QUALITY CONTROL (QC) PROGRAM			124

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.

1.2. 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, and DRUs (e.g., /A3T or higher) will forward the request by letter, e-mail or message to HQ USAF/A3O-AT explaining why a waiver is needed and describing the specific requirement that is creating the problem. Wings and FOAs will process waivers through

their respective MAJCOM or ANG authority for submission to HQ USAF/A3O-AT. HQ USAF/A3O-A is the waiver authority for this instruction. Wings (Operations Group Commander or higher) and FOAs (Operations Group Commander or equivalent) may request waivers to MAJCOM supplements by submitting their waiver request to the specific MAJCOM. Air Force Reserve Command (AFRC) units will forward waiver requests through NAF channels to HQ AFRC.

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. (ACC) Forward requests via e-mail through the Operations Group commander (or equivalent) to HQ ACC/A3T, *Flight Operations Division*, describing in detail why a waiver is required. Not applicable to AFRC/ANG units.

1.3.3. MAJCOMs will 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-ACC) ACC units will further supplement this supplement within 180 days of the publication date. Not applicable to AFRC units. As required for the ANG.

1.3.3.2. (Added-ACC) HQ ACC/A3TO is the office responsible for establishing policies and providing management oversight for the command AFE program as outlined in AFPD 11-3 and the basic AFI 11-301V1. The AFE program is a staff function of the Directorate of Aerospace Operations (HQ ACC/A3), Flight Operations Division (HQ ACC/A3T). The command AFE functional manager (CMSgt/AFSC 1P000) will be assigned to HQ ACC/A3T. The Directorate of Requirements (HQ ACC/A8) Systems Support Division (HQ ACC/A8S) and the ACC Inspector General Squadron (ACC IGS) will each have a SMSgt, AFSC 1P091, assigned.

1.4. Communications:

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

1.4.2. 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.

1.4.3. 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.

1.4.6.1.1. **(Added-ACC)** Organizational Non-secure Internet Protocol Router Network (NIPRNET) and Secure Internet Protocol Router Network (SIPRNET) accounts will be established for each unit subordinate to ACC. The AFE Superintendent (AFES) is responsible for account establishment.

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>.

1.4.7.1. **(Added-ACC)** The ACC CoP is accessed through the following link: <https://wwwd.my.af.mil/afknprod/ASPs/CoP/ClosedCoP.asp?Filter=AC-OP-00-57>. Membership is mandatory for all E-5s and above. Membership is encouraged for all others. AFES, NCOICs, and QA personnel will access site monthly or use RSS feed option to monitor updates and changes.

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 (Director 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 (Office 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.

2.9.2. 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.

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

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.

2.9.5.2. (**Added-ACC**) Establish command operational requirements and provide recommendations to the HQ ACC/A3 and HQ ACC/A8 for developing or modifying AFE consistent with operational requirements. AFRC units will route Combat Air Force (CAF) recommendations through NAF to HQ AFRC/A3TS for forwarding to HQ ACC/A3TO. ANG units will route CAF recommendations through HQ ANG NGB/A3OS for forwarding to HQ ACC/A3TO.

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.

2.9.9. 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.

2.9.10. 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.

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

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

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

2.9.18. 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.

2.9.19. 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.

2.9.20. 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*.

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

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

2.9.23. 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.

2.9.23.1. **(Added-ACC)** Host an annual ACC AFE working group conference. Minimum attendees will include the Flight Equipment Officer (FEO) and AFES from each ACC group. Intent of this working group is to establish ACC development and sustainment priorities for presentation to the Aircrew Protection Working Group.

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

2.9.25. 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.

2.9.25.1. **(Added-ACC)** HQ ACC/A3TOA will conduct staff assistance visits at least every 24-30 months unless requirements necessitate a shorter duration between visits. Increased duration between visits may be necessary to align with Aircrew Standards/Evaluation Visits. Not applicable to AFRC/ANG.

2.9.26. 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.

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

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

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

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

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

2.9.29. 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. (**Added-ACC**) Assist subordinate units with reviews of AFI 25-201, *Support Agreements Procedures* involving AFE functions if required. Approve subordinate unit changes to host tenant support agreement in conjunction with the associated MAJCOM.

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.

2.10.1.1. (ACC) FEOs will be rated officers who are qualified and current in the primary aircraft of assignment and are required to complete training requirements as defined in Table 4.1. of this supplement. Assignment stability is an important part of the aircrew FEO function. Primary duty FEOs should serve for at least 24 months. Not applicable to AFRC/ANG.

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.

2.10.1.2. (ACC) The FEO/AFES is the group commander's POC for AFE functional responsibilities, manpower/manning requirements, and assignment/reassignment of AFE personnel in the group and/or wing.

2.10.1.3. (Added-ACC) Funded, or unfunded AFE authorizations earned through AF Manpower Standard 31B1XX Pararescue Operations Support, will be assigned to the respective Guardian Angel (GA) unit manning documents (UMD). *EXCEPTION:* HQ AFRC/A3TS will provide GA AFE support guidance for AFRC units in its respective supplement.

2.10.1.4. (Added-ACC) GA AFE sections will establish supply/munitions accounts separate from the OSS. *EXCEPTION:* HQ AFRC/A3TS will provide GA AFE support guidance for AFRC units in its respective supplement.

2.10.1.5. (Added-ACC) GA AFE sections will be aligned under the GA squadron logistics flight. *EXCEPTION:* HQ AFRC/A3TS will provide GA AFE support guidance for AFRC units in its respective supplement.

2.10.1.6. (Added-ACC) AFE Curriculum Development Section (436 TS, Dyess AFB TX).

2.10.1.6.1. (Added-ACC) This function is responsible for conducting course 3J5ACC1P0X1 000, Program Manager's Course, and for validating course training criteria, exportable instructor guides and training material for related AFE training programs.

2.10.1.7. (Added-ACC) 53rd Wing (WG), Eglin AFB FL.

2.10.1.7.1. (Added-ACC) The senior ranking AFSC 1P0X1 assigned to the 53rd Test Evaluation Group (TEG) will perform duties as the AFES for the 53 TEG and is the focal point for all issues relating to the 53 TEG AFE sections. They will perform AFES responsibilities specified in this supplement for AFE sections assigned to the 53 TEG. The AFE NCOIC assigned to the 83rd Fighter Weapons Squadron will perform AFES responsibilities specified in this supplement for the AFE sections

assigned to the 53rd Weapons Evaluation Group. The 53 TEG AFES will be kept informed of correspondence between the 53 WEG AFES and higher headquarters.

2.10.1.8. **(Added-ACC)** 9th Reconnaissance Wing (Beale AFB, CA).

2.10.1.8.1. **(Added-ACC)** 9th Physiological Support Squadron (Beale AFB, CA).

2.10.1.8.1.1. **(Added-ACC)** Due to the unique mission and flight environment of U-2 operations, the 9th Physiological Support Squadron (9 PSPTS) provides support for these aircraft. ACCI 11-459, *High Altitude Reconnaissance Mission Support Program*, provides detailed support procedures and establishes AFE and enlisted specialty training requirements. A copy of AFI 11-301V1_BEALE AFB SUP must be forwarded to HQ ACC/A3TOA for approval prior to issuance.

2.10.1.8.2. **(Added-ACC)** 1st Reconnaissance Squadron (Beale AFB, CA).

2.10.1.8.2.1. **(Added-ACC)** Due to the unique mission requirements of the 9th Reconnaissance Wing (9 RW) at Beale AFB, CA, AFE personnel supporting the T-38 and U-2 low training flight mission of the 1st Reconnaissance Squadron (1 RS) are assigned to the operational squadron.

2.10.1.9. **(Added-ACC)** 57th Wing (Nellis AFB, NV).

2.10.1.9.1. **(Added-ACC)** 57 WG AFE personnel and operations are aligned to the USAFWS (WPSS), USAFADS, 57 OG (414 CTS and 549 CTS) and 57 ATG (ATSS). The FEO/AFES are aligned to 57 WG/CV. The FEO/AFES will manage Nellis Emergency Egress Trainers, Emergency Egress Training Certification (FEO only), Wing AFE Cross Utilization Training and Quality Assurance. One additional enlisted position (E-5/E-6) is aligned under the AFES. The AFES will act as wing functional area manager for all AFE issues to include coordinating AEF taskings for those units previously listed in this paragraph.

2.10.1.10. **(Added-ACC)** 820th Security Forces Group (SFG) (Moody AFB, GA).

2.10.1.10.1. **(Added-ACC)** Due to unique mission requirements, 820 SFG funded AFE authorizations are organizationally aligned to the 820 Combat Operations Squadron (COS) Operations Division.

2.10.2. Ensure a qualified senior NCO (1P071 or equivalent) is appointed to function as QA Inspector for all AFE activities. The AFE QA program will reside and be organizationally aligned to the OSS AFE Flight (OSL).

NOTE: Due to continued manning constraints, assignment/authorization manpower of AFE QA inspector personnel/position will reside/assigned in the OSS AFE Flight (OSL), (ANG units will determine alignment of these positions in their applicable supplement to this instruction). Furthermore, designated AFE (1P071 or equivalent) Quality Control inspectors may augment the AFE (1P071 or equivalent) QA inspector, as necessary, in the various AFE activities/sections.

2.10.2.1. Rotation of AFE QA Inspectors. The OSS/CC is responsible for developing/executing a plan to rotate AFE QA inspectors. As a minimum, personnel must have 6 months time in the unit before being selected as an AFE QA inspector and should be designated as an AFE QA inspector for a maximum of 36 months/minimum of 24

months. AFE QA inspectors at OCONUS short tours, ARC, civil service, and service provider employees do not have any time requirements.

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

2.10.2.2. **(Added-ACC)** The AFE QA program organizational alignment to the OSS AFE Flight (OSL) does not apply to ANG.

2.10.3. Ensure the AFE superintendent or government AFE QA inspector/representative (for contract organizations) is appointed to the wing Exercise Evaluation Team (EET) to evaluate and ensure compliance with AFE areas of responsibility.

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.

2.10.4.1. **(Added-ACC)** Ensure funding is available to maintain Emergency Procedures Trainers (EPT) and related training equipment to support the wing AFE training program. Contact Det 1 ACC/TRSS, Luke AFB, AZ for major overhaul, modification, or reconfiguration to EPT.

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.

2.10.6.1. **(Added-ACC)** GA AFE sections will establish Memorandums of Agreement for use of facilities external to those that are GA-owned to support AFE equipment maintenance operations as required. *EXCEPTION:* HQ AFRC/A3TS will provide GA AFE support guidance for AFRC units in its respective supplement.

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.

2.10.7.1. **(Added-ACC)** In coordination with the Group Resource Advisor, ensure AFE section establishes a Government Purchase Card (GPC) for flying hour use as well as chemical defense assets. Not applicable to GA AFE sections. GA AFE sections will establish a GPC for O&M use only. *EXCEPTION:* HQ AFRC/A3TS will provide GA AFE support guidance for AFRC units in its respective supplement.

2.10.7.2. **(Added-ACC)** Ensure units have adequate AFE to support unit contingencies.

2.10.7.3. **(Added-ACC)** Support sending, as a minimum, FEO and AFES to annual AFE conferences and symposiums.

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-ACC)** 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.

2.10.1.8.1.1. Added)(ACC) Due to the unique mission and flight environment of U-2 operations, the 9th Physiological Support Squadron (9 PSPTS) provides support for these aircraft. ACCI 11-459, *High Altitude Reconnaissance Mission Support Program*, provides detailed support procedures and establishes AFE and enlisted specialty training requirements. A copy of AFI 11-301V1_BEALE AFB SUP must be forwarded to HQ ACC/A3TOA for approval prior to issuance.

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-ACC)** Leather boots similar in style to some Danner® boots were found to meet minimum qualification requirements and are AFE approved for flight. In

addition, the Danner® Olympia and Ft. Lewis models are approved for flight noting the following risk: Danners® fail to meet commercial flammability requirements. When selecting boots for flight other than those previously listed, group commanders will consider the following factors: flame, fire and heat protection, traction on ice/wet surfaces, comfort and ankle stability during parachute landing falls. 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 Operations Group commander (or equivalent).

2.10.13.3. **(Added-ACC)** Specify by further supplementing this supplement with the type of seasonal clothing, temperature ranges and/or calendar months, and specific operational missions when seasonal flying clothing is worn. Deviations from AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*, are processed through normal command channels.

2.10.13.4. **(Added-ACC)** Ensure flying clothing is compatible with the mission, climate, and terrain features involved. When determining the proper clothing combination, the forecasted surface chill factors and air temperatures should be considered for the duration of the flight to include departure, en route, and training areas. AS 016 defines climatic zones in its preface and may be used as a source document for recommended winter wear.

2.10.13.5. **(Added-ACC)** If neoprene divers gloves are installed in survival kits or vests, ensure the size of glove accommodates all assigned aircrew. If individuals require a larger size outside the normal parameters, ensure the individual is provided the size required. Install these individually fitted gloves in the survival vest, or exposure suit/G-suit pockets when mission and weather requirements dictate the wear of these gloves.

2.10.13.6. **(Added-ACC)** Units deploying to participate in RED FLAG ALASKA exercises will review the specific requirements listed in the following websites:

<https://wwwd.my.af.mil/afknprod/ASPs/CoP/OpenCoP.asp?Filter=OO-OP-PC-80>

<http://www.eielson.af.mil/library/redflag-alaska.asp>

2.10.13.7. **(Added-ACC)** Units deploying to participate in GREEN FLAG exercises will review the specific requirements listed in the following website:

<https://wwwmil.nellis.af.mil/units/549cts/missionplan.htm>

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.

2.10.14.2. 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-ACC)** 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.

2.10.17. **(Added-ACC)** 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 and 91-series AFIs.

2.10.18. **(Added-ACC)** Flight Gloves. Safe-to-Fly certified commercial-off-the-shelf flight gloves and those listed in AS 016 and T.O. 14P3-1-112, *Maintenance Instructions Nomex® Flight Gear, Coveralls, Gloves, and Jackets* are the only gloves aircrews are authorized to wear during flight. Gloves will not have holes or be modified in any manner.

NOTE: See ACC AFE CoP for Safe-to-Fly certified commercial off-the-shelf flight gloves.

Access ACE AFE CoP using the following:

<https://wwwd.my.af.mil/afknprod/ASPs/CoP/ClosedCoP.asp?Filter=AC-OP-00-57>

2.10.18.1. **(Added-ACC)** All aircrew members are required to wear flight gloves during critical phases of flight and as deemed necessary by the aircraft commander. Refer to AFI 11-202V3_ACC SUP, *General Flight Rules*, for critical phases of flight definition. Because of the inherent protection afforded, crewmembers are encouraged to wear gloves at all times in the aircraft.

NOTE: Wear of flight gloves for E-4B aircrew will be at the discretion of the Operations Group commander (or equivalent).

2.10.19. **(Added-ACC)** Anti-Exposure Suits. Only authorized and approved anti-exposure suits will be worn by aircrew and passengers.

2.10.20. **(Added-ACC)** Non-Ejection Seat Aircraft. Quick-don anti-exposure suits will be readily available for aircrew during overwater flights when the water temperature is 60 degrees Fahrenheit (F)/15.5 Celsius (C) or less.

2.10.21. **(Added-ACC)** Ejection Seat/Vertical Lift Aircraft. Constant wear anti-exposure suits will be worn by crewmembers of ejection seat aircraft on any preplanned overwater flight when the water temperature is 60F/15.5C or less. If the water temperature ranges between 60F (15.5C) and 51F (10.5C), and the local air temperature is 70F (21.2C) or greater, the Operations Group commander (or equivalent) may waive the requirement to wear the anti-exposure suit after considering the following factors:

2.10.21.1. **(Added-ACC)** Climate zone and existing weather throughout range of flights.

- 2.10.21.2. **(Added-ACC)** Operational requirements.
- 2.10.21.3. **(Added-ACC)** Number and type of aircraft participating in sortie.
- 2.10.21.4. **(Added-ACC)** Time of flight over water.
- 2.10.21.5. **(Added-ACC)** Distance from land.
- 2.10.21.6. **(Added-ACC)** Mission altitude.
- 2.10.21.7. **(Added-ACC)** Risk based on type of sortie.
- 2.10.21.8. **(Added-ACC)** Degree of surveillance over the mission area.
- 2.10.21.9. **(Added-ACC)** Location, availability and capability of Search and Rescue (SAR) forces.
- 2.10.21.10. **(Added-ACC)** Winds, wave height, and their impact on SAR operations.
- 2.10.21.11. **(Added-ACC)** After considering the factors listed in paragraph 2.10.21. of this supplement and/or time to don the suit precludes meeting alert commitment take off times, the Operations Group commander (or equivalent) may waive the requirement to wear the anti-exposure suit.
- 2.10.21.12. **(Added-ACC)** For bomber aircraft, constant wear anti-exposure suits will be carried aboard all preplanned over water routes when the water temperature dictates as stated in paragraph 2.10.21 (Added). The Operations Group commander (or equivalent) will specifically address the requirements for wear of anti-exposure suits based on unique weapons system mission requirements in their supplement to this supplement. If the crew compartment permits, anti-exposure suits may be donned and doffed during flight as required by flight route.
- 2.10.22. **(Added-ACC)** Helicopter Emergency Egress Breathing Device. All vertical lift aircraft aircrew will wear a helicopter emergency egress breathing device during overwater flights when they are outside the auto rotation distance from land.
- 2.10.23. **(Added-ACC)** Life Preserver Units (LPU) will be worn by aircrew members and passengers of ejection seat, vertical lift and single engine aircraft on all overwater flights beyond aircraft glide distance/auto rotation to land. Designated life preservers will be readily available during all overwater flights on multi-place aircraft.
- 2.10.24. **(Added-ACC)** Personnel Lowering Device (PLD). Group/deployment commanders have the authority to determine the day-to-day use of the PLD. During the PLD usage decision-making process, commanders should consider the following: over flown terrain (i.e., mountainous, rough terrain, heavily wooded areas, etc.), flying time over such terrain, and the various uses of the PLD not related to lowering oneself from a tree. If PLDs are not worn on a daily basis, sufficient quantities will be stored properly in the unit's mobility package in serviceable condition.
- 2.10.25. **(Added-ACC)** Wear of the survival vest during local sorties and cross country missions will be at the discretion of group commanders (or equivalent) based on Operational Risk Management and procedures published in AFI 11-2MDS-Specific, Volume 3, Chapter 8, *Local Procedures*. Survival vest will be worn for all contingencies and combat exercises. Not applicable to AFRC units.

2.10.25.1. **(Added-ACC)** The location of pockets on survival vests will be standardized to the maximum extent possible. However, the configuration must be compatible with all AFE available for wear by and comfort of the aircrew member. Units must pay special attention to the location of survival vest pockets to ensure Aircrew Eye Respiratory Protective (AERP) equipment does not interfere with aircraft controls, as applicable.

2.10.25.2. **(Added-ACC)** Survival vests in storage for deployment commitments will be configured to the maximum extent possible.

2.10.25.3. **(Added-ACC)** See Table A7.11 (Added) in this supplement for survival vest minimum components. Units can add approved components at their discretion.

2.10.26. **(Added-ACC)** Distress Marker Light (Strobe Light). An ACR/MS-2000 or SDU-5/E will be installed in the survival vest, torso harness, or back style parachutes. Distress marker lights are not required on survival vests when installed on torso harnesses or back style parachutes.

2.10.27. **(Added-ACC)** MC-1 Survival or Hook Blade Knife. An MC-1 survival or hook blade knife will be positioned or carried where readily available during parachute descent.

2.10.28. **(Added-ACC)** Aircrew Laser Eye Protection (ALEP) and High Contrast Visors (HCV). ALEP devices and HCV are only authorized for use by aircrew members who have normal color vision validated by a flight surgeon. AFE sections will maintain a list of aircrew members authorized by the flight surgeon to wear ALEP devices and HCVs. HCVs are for daytime use only. Refer to AFI 11-301V4, *Aircrew Laser Eye Protection (ALEP)*, for additional information on ALEP.

2.10.29. **(Added-ACC)** Anti-G Equipment. Anti-G garments are required during all flights in aircraft equipped with anti-G systems when two or more "Gs" are anticipated.

2.10.29.1. **(Added-ACC)** CSU-Series Anti-G Garment. Aircrew will have an additional anti-G garment available for use with anti-exposure suits, as required. Not applicable to CSU-17/P anti-G vest.

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](#).

2.11.1.1. **(Added-ACC)** FEO and AFES budget for and attend annual AFE training review board and working group meetings.

2.11.1.2. **(Added-ACC)** As senior AFE representatives for the Rescue Group, the OSS FEO/AFES will serve as the focal point for Wing/MAJCOM communications.

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.

2.11.2.1. **(Added-ACC)** GA-assigned AFE personnel will be assigned to their respective GA squadrons for a minimum of 4-years. *EXCEPTION:* HQ AFRC/A3TS will provide GA AFE support guidance for AFRC units in its respective supplement.

Note: Paragraph 2.11.2.1 does not restrict or affect normal permanent change-of-station assignment requirements (i.e. overseas tour selection/return, etc.).

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-ACC)** Publish units T.O. options and ensure sufficient copies are available and maintained for each technician performing equipment maintenance.

2.11.3.2. **(Added-ACC)** Establish a familiarization program to ensure AFE personnel are knowledgeable of (as a minimum) T.O. changes, T.O. options, publications, messages and the HQ ACC AFE CoP.

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.

2.11.5.1. **(Added-ACC)** Task evaluations will be performance based and conducted during annual assessments. Document such evaluations in the annual assessment report. The AFES will determine the type of evaluation to be conducted, how many evaluations are required, and who will be evaluated. *EXCEPTION:* HQ AFRC/A3TS will determine task evaluation criteria for AFRC units in its respective supplement.

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.

2.11.7. 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 no-notice inspections, SAVs, UCIs, ORIs, 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.

2.11.8.1. **(Added-ACC)** 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 program

PMEL

CTKs

Administrative files to include technical orders, etc.

OJT program, to include task evaluations, etc.

Supply, to include control and accountability, documentation, supply product reviews, etc.

Inspection record files

Storage of equipment

Housekeeping

QCI Program

AFE Aircrew Training and Equipment

Safety Program

2.11.8.2. **(Added-ACC)** AFE QA no-notice inspections, SAVs, UCIs, ORIs, and unit self-assessment discrepancies will be reviewed monthly.

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

2.11.9.1. **(Added-ACC)** Question and answer sessions do not qualify as task certification. Task certifications will include a total review of all applicable guidance from associated technical data and AFIs.

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://www.d.mil/afknprod/ASPs/docman/DOCMain.asp?Tab=0&FolderID=OO-OT-MC-87-9&Filter=OO-OT-MC-87>.

2.11.11.1. **(Added-ACC)** Submit operational AFE requirements for evaluation and action via the group FEO/AFES through the local Group CC to HQ ACC/A3T. AFRC units will forward operational AFE requirements through respective NAF to HQ AFRC/A3TS for action. ANG will send to ANG/XOOS.

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-ACC)** 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. Review and approve local In-Process Inspection (IPI) tasks annually for applicability, and ensure IPI qualified personnel are annotated on the automated Special Certification Roster (SCR), 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.

2.11.14.1. **(Added-ACC)** In-process Inspection (IPI) qualified personnel will be on Special Certification letter signed by the Operations Group commander (or equivalent).

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-ACC)** 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.

2.11.18. **(Added-ACC)** Aircrew Protection Panel.

2.11.18.1. **(Added-ACC)** Host and document a semiannual aircrew protection panel meeting. The aircrew protection panel is chaired and managed by the operations group FEO or AFES. This panel is convened at least semiannually to review and take action on support associated with AFE configuration, inspection, modification/TCTO, or control procedures and Aircrew Flight Equipment Continuation Training (AFECT) issues. Not applicable to AFRC.

2.11.18.2. **(Added-ACC)** Core panel members will consist of (as a minimum) AFE NCOICs, primary AFECT instructor(s), egress, plans and scheduling, base supply, quality assurance, CE readiness, SERE, base safety, aircrew members, contract survival equipment personnel, and maintenance personnel. Other agencies such as intelligence, enlisted specialty training managers, medical logistics, aerospace physiology and flight medicine should be included as necessary to assist with training issues, equipment

inspection, modification requirements, or control procedures. If there are no issues pertaining to core panel members, they are not required to attend.

2.11.19. **(Added-ACC)** Ensure units develop a master configuration data list to assist in determining unit equipment requirements. Some variables to consider in formulating this list are number of aircraft assigned (single/dual seat/multi-place), number of survival kits (to include maintenance turnaround spares), number of aircrew supported (to include attached aircrew), 10 percent spare equipment, etc. Preferred document for master configuration data list is *The Allowance Standard Inquiry* (TINQ Screen) from Air Force Equipment Management System (AFEMS). NOTE: ANG units are not required to use TINQ screens; however, master configuration data lists are still applicable.

2.11.20. **(Added-ACC)** Ensure deficiency and hazard reports; AFTO Form 22, *Technical Manual (TM) Change Recommendation and Reply*; AF Form 457, *USAF Hazard Report*; and suggestions, as appropriate, are submitted for all AFE or system deficiencies. All AFTO Form 22s, AF Form 457s, and suggestions pertaining to AFE systems or equipment will be evaluated by the AFES prior to submittal to the next higher level. The host base safety office will review and process reports as required by AFI 91-204, *Safety Investigations and Reports*. Ensure the applicable MAJCOM AFE function is furnished an information copy of any report not specifically addressed to their office.

2.11.21. **(Added-ACC)** Report time change component requirements IAW T.O. 00-20-9 and higher headquarters directives.

2.11.22. **(Added-ACC)** Establish, manage, and supervise centralized AFECT according to this supplement (as supplemented). The group FEO and/or AFES will randomly attend training sessions to review and critique the following areas:

2.11.22.1. **(Added-ACC)** Event presentation and instructor knowledge.

2.11.22.2. **(Added-ACC)** Condition and use of training aids.

2.11.22.3. **(Added-ACC)** Aircrew involvement/hands-on demonstrated proficiency.

2.11.22.4. **(Added-ACC)** Instructor and student safety requirements and conditions.

2.11.23. **(Added-ACC)** Ensure current AFE training and equipment is available for fire department personnel. AFE is only responsible for training Fire Department lead trainer and providing updates on newly fielded equipment for the purpose of aircrew rescue and extraction IAW AFI 32-2001, *Fire Emergency Services Program*.

2.11.24. **(Added-ACC)** Ensure, when requested, local rescue agencies are provided training on the functional use and operation of AFE that may be encountered during local rescue operations. Local agencies should be apprised of any changes in equipment type or operation.

2.11.25. **(Added-ACC)** Ensure all assigned AFE personnel (to include senior NCOs who perform equipment maintenance) maintain an accurate OJT record. If required, the AFES will ensure egress and Red X certifications are properly documented in appropriate maintenance data management system or an AF Form 1098, *Special Task Certification and Recurring Training*. Not applicable to ANG unless in retraining status.

2.11.26. **(Added-ACC)** Determine the desired number of AFE personnel for attendance of formal survival/instructor courses IAW Table 4.1. Formal AETC courses will be requested

through HQ ACC/A3TOA. AFRC units will forward requests through the NAF to HQ AFRC/A3TS.

2.11.27. **(Added-ACC)** Monitor *Conventional Munitions Restricted or Suspended* (CMRS) website to ensure serviceability of AFE munitions. Publish and distribute current restricted munitions listing at least quarterly based on CMRS and/or notification from base munitions. *Conventional Munitions Restricted or Suspended* (CMRS) website: <https://www.my.af.mil/ammoprod/wm/>

2.11.28. **(Added-ACC)** Ensure compliance with all safety standards to include, but not limited to, AFOSH training, documentation, and increased precautions for storage of lithium batteries (AFMAN23-110V1, Part 1, *Basic AF Supply Procedures*, Chapter 4, Section 4C, Storage and Handling of Lithium Batteries).

2.11.29. **(Added-ACC)** As a minimum to control flow procedures, ensure the AFE section is designated and properly marked as a limited access area. Upgrade flow control procedures as necessary to ensure equipment security.

2.11.30. **(Added-ACC)** Coordinate bi-annual Budget Execution Reviews submissions with Group Resource Advisor no later than January and June each year. AFRC units should follow AFRC guidance.

2.11.31. **(Added-ACC)** Monitor the following web sites monthly to ensure serviceability of aircrew chemical warfare assets:

Joint Acquisition Chemical Biological Radiological Nuclear (CBRN) Knowledge System (JACKS) Website: <https://jacks.jpeocbd.osd.mil/>

Aircrew CBRN Defense website:

<https://wwwd.my.af.mil/afknprod/ASPs/docman/DOCMain.asp?Tab=0&FolderID=OO-OP-AF-61-8&Filter=OO-OP-AF-61>

2.11.32. **(Added-ACC)** 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 (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.

2.11.33. **(Added-ACC)** Ensure sufficient numbers of Red X qualified personnel are available to support home station and deployed operations, as applicable.

2.11.34. **(Added-ACC)** Ensure all applicable instructor guides are updated to reflect this supplement to include all ACC and unit supplements.

2.11.35. **(Added-ACC)** Ensure all eligible assigned AFE personnel have an AF entry control card (restricted area flight line badge).

2.11.36. **(Added-ACC)** Ensure personnel remain current in aircraft egress/cockpit familiarization training. This ensures technicians are available to respond to AFE serviceability concerns on Egress systems as required. **NOTE:** Not applicable to ANG,

however, ANG AFES will designate and ensure sufficient personnel maintain egress/cockpit familiarization training to respond to AFE serviceability concerns on Egress systems as required.

2.11.37. **(Added-ACC)** Ensure all component software is current (i.e. PRC-112 radios, loaders, and the RCTS-003B) by checking the ACC AFE CoP or appropriate technical guidance.

2.12. AFE Quality Assurance (QA).

2.12.1. At minimum, one senior NCO (must hold AFSC 1P071 or equivalent) will be appointed to provide QA oversight for the AFE program. The AFE QA program will reside and be organizationally aligned to the OSS AFE Flight (OSL). The AFE QA inspector will perform Quality Assurance Evaluator (QAE) duties and responsibilities at related contractor operated locations as applicable IAW AFI 63-124, *Performance-Based Services Acquisition*. MAJCOMs and ANG units may supplement this instruction to further outline roles, responsibilities, training and other program requirements as appropriate.

2.12.1.1. Ensure AFE QA program is effectively managed in accordance with this instruction, and all applicable regulations, technical data and instructions. ALERTS, ALSMS, and QCM-4 (series thereof) are automated QA databases approved for AFE.

NOTE: Due to continued manning constraints, assignment and authorization manpower position(s) of all AFE QA inspector personnel will reside/assigned and organizationally aligned to the OSS AFE Flight (OSL). Additionally, units may appoint a minimum grade TSgt (must hold AFSC 1P071 or equivalent) if manning does not support a senior NCO, (or equivalent).

2.12.1.2. **(Added-ACC)** AFE QA inspector personnel will be aligned under the FEO. Not applicable to AFRC/ANG.

2.12.1.3. **(Added-ACC)** Ensure QA program provides 100% task coverage.

2.12.1.4. **(Added-ACC)** QA responsibilities for GA AFE sections will reside within the Rescue Group (RQG) OSS QA function. *EXCEPTION:* HQ AFRC/A3TS will provide GA AFE support guidance for AFRC units in its respective supplement.

2.12.2. The AFE QA inspector will perform no-notice QA inspections within each AFE duty section. Results of no-notice inspections will be documented on locally developed form, and maintained for two years. AFE superintendent will be immediately notified of any major discrepancies.

2.12.3. When trends are noted, recommend corrective action and assign an OPR/Office of Collateral Responsibility (OCR); report trends and status to the OG/CC periodically until closed. AFE QA will publish and define the trend program in the unit supplement to this instruction and maintain trend data for at least one year. Provide monthly trend analysis to the OSS/CC and Group FEO (Flight Commander)/AFE superintendent.

2.12.3.1. **(Added-ACC)** Report trends and status to the OG/CC quarterly until closed.

2.12.4. Evaluate and ensure compliance within AFE areas of responsibility as an active member of the wing Exercise Evaluation Team (EET).

2.12.4.1. **(Added-ACC)** The AFES provides the areas of evaluation/compliance for EET scenarios/input.

2.12.5. Coordinate on all requests for locally designed tools or equipment.

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 HHQs and unit commanders of program delays or supply problems as they occur, and upon completion of the TCTO.

2.12.6.1. **(Added-ACC)** Perform initial review of TCTO and determine applicability.

2.12.6.2. **(Added-ACC)** Advise FEO/AFES of program delays or supply problems as they occur.

2.12.6.3. **(Added-ACC)** Attend TCTO planning meetings.

2.12.6.4. **(Added-ACC)** Provide technical support to performing work centers.

2.12.6.5. **(Added-ACC)** Report all deficiencies in technical instructions and kit-proofing to the appropriate TCTO manager IAW T.O.s 00-5-1 and 00-5-15, *Air Force Time Compliance Technical Order Process*.

2.12.6.6. **(Added-ACC)** Maintain a record of applicable TCTOs for 2 years from date rescinded.

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.

2.12.7.1. **(Added-ACC)** Provide guidance, evaluate, process, submit, and track all proposed changes to AFTO Form 22s, Deficiency Reports, Innovative Development through Employee Awareness program, and suggestions affecting AFE in cooperation with the AFES.

2.12.7.2. **(Added-ACC)** RQG OSS AFE flight will have primary TODO/TODA functional responsibility for GA AFE T.O. accounts. GA AFE sections will assign internal T.O. program managers to work with RQG OSS AFE TODO/TODA. *EXCEPTION:* HQ AFRC/A3TS will provide GA AFE support guidance for AFRC units in its respective supplement.

2.12.8. Maintain applicable AFE IPI listing(s) and accomplish annual review with AFE superintendent.

2.12.9. Monitor status of deficiencies identified during AFE QA no-notice inspections, SAVs, UCIs, ORIs, and unit self-assessments until corrective actions have been completed, in coordination with the AFE superintendent. Corrective actions will be documented as prescribed by governing instructions or as required to reflect current status and actions taken.

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

2.12.11. Develop procedures for control and management of replacement, warranted, expendable and consumable hand tools, HAZMATs, and other items contained in Composite Tool Kits (CTK).

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.

2.13.8.1. **(Added-ACC)** GA 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 GA Program Objective Memorandum (POM) process.

2.13.9. Implement policies and procedures as HHQs directs.

2.13.10. **(Added-ACC)** GA squadron commanders will assume all responsibilities outlined in AFI 11-301V1, paragraph 2.13. of this for those AFE personnel assigned to their UMDs.

2.13.11. **(Added-ACC)** Squadron commanders will exempt from additional duties, all 5-level upgrade trainees for 9 months (start from date officially placed in upgrade training) and newly assigned personnel (through PCA/PCS) for the first 120 days of assignment. NOTE: ANG 5-level upgrade trainees will be exempt for 12 months (start from date officially placed in upgrade training) and newly assigned personnel (through PCA/PCS) for the first 240 days of assignment.

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.

2.15. 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.

2.15.3. 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. Owing 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-ACC)** AFE technicians will perform operational/intermediate level maintenance and are responsible for issuing, fitting, inspection, maintenance and storage of assigned aircrew NVDs or those mentioned in the above exception.

2.15.12.2. **(Added-ACC)** NVDs will be issued to aircrew members using an appropriate tracking system. Minimum items to be tracked: name of aviator, local control # of NVD, date signed out/in and acuity achieved during preflight. AFRC units will also track NVD battery power or hours used.

2.15.12.3. **(Added-ACC)** Units will place an inspection due date label on one of the NVD monocular housings or pivot and adjustment shelf.

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. Compile a list of tasks requiring IPIs. The list must include Work Unit Code (WUC), 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 QA on trends or problem areas that continually warrant extra supervisory attention. Forward list to AFE FEO/Superintendent for approval.

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-ACC)** Section NCOICs or designated representatives will initially certify all shop personnel on all core tasks. Question and answer sessions do not qualify as task

certification. Task certifications will include a total review of all applicable guidance from associated technical orders.

2.15.20. **(Added-ACC)** If hand held lasers are issued from the AFE section, consult AFI 11-301V4, *Aircrew Laser Eye Protection (ALEP)*, found on the ACC AFE CoP. NCOICs will ensure the applicable Laser (Danger) signs are posted. Ensure assigned personnel are familiar with the extreme dangers of these devices, IAW AFOSH STD.

2.15.21. **(Added-ACC)** AFE sections that support GA requirements will assume cargo rigging responsibilities as required in the event that AFSC 2T2 and/or normal aerial delivery functional support is not available. *EXCEPTION:* HQ AFRC/A3TS will provide GA AFE support guidance for AFRC units in its respective supplement.

2.15.22. **(Added-ACC)** AFE sections that support GA requirements will maintain equipment listed on the MAJCOM-approved GA AFE Equipment Listing (refer to ACC AFE CoP for listing).

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.

2.17.1.1. (ACC) Ensure AFE equipment is made available to AFE personnel for required inspection and maintenance.

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.

2.17.6.1. (Added-ACC) Aircrew will hand carry helmet/mask unless packed in a hard protective case while traveling on any commercial flight.

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-ACC) Ensure all issued AFE fits properly. Promptly notify AFE personnel of fluctuations in weight or any other circumstances that would affect fit of equipment. This is to validate equipment fits IAW T.O. guidance, i.e., weight gain/loss, aging/use/stretching of material equipment is constructed of, bulkiness or lack of hair, not all inclusive.

2.17.10. **(Added-ACC)** Will not carry any food items, bug sprays, batteries, petroleum based products or any other items that may cause contamination to oxygen equipment in their helmet bags. These items will be removed and discarded when discovered.

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*.

2.18.2.2. 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/>.

2.18.2.3. 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-ACC) HQ ACC Staff Agencies. Within HQ ACC, other staff agencies involved with the AFE program are:

2.19.1. **(Added-ACC)** HQ ACC/A8S, Systems Support Division.

2.19.1.1. **(Added-ACC)** Defines requirements and plans and guides acquisition programs to fulfill equipment, training, and bed down needs of CAF. HQ ACC/A8S represents the CAF throughout development and testing of combat training ranges, aircrew training devices, avionics subsystems, and life support systems.

2.19.1.2. **(Added-ACC)** Submits POMs for new development to include research and development, production funds, and aircraft modifications in support of published requirements for the CAF. Represents the MAJCOM at USAF, AFMC, and other AFE conferences on the development of new equipment, where appropriate.

2.19.2. **(Added-ACC)** ACC IGS, Inspector General Squadron.

2.19.2.1. **(Added-ACC)** Conducts Operational Readiness Inspections and Unit Compliance Inspections of subordinate units to determine management effectiveness, compliance with directives, and mission performance capability. Consult AFI 90-201_ACCSUP 1, *Inspector General Activities*; and ACCDIR 90-2501, *Compliance and Standardization Requirements List (C&SRL)--Aircrew Flight Equipment (AFE) Functional Area*; for additional information.

2.19.3. **(Added-ACC)** HQ ACC/A4MS, Aerospace Support Branch.

2.19.3.1. **(Added-ACC)** Provides egress and electro-environmental expertise to the HQ ACC staff. Manages all egress and electro-environmental issues forwarded to HQ ACC. Exception: Electro-environmental issues that pertain to F-22 and F-35 aircraft.

2.20. (Added-ACC) Air Force Safety Center (AFSC).

2.20.1. **(Added-ACC)** Provides AFE experience data through the Life Sciences Division of the Directorate of Aerospace Safety. Information derived from USAF aircraft mishaps is collected, evaluated, stored, and distributed as required to AFE programs. AFSC may also recommend specific programs to correct AFE system deficiencies. All requests for information from HQ AFSC will be processed through safety channels to HQ ACC/SE who will request the information from HQ AFSC to ensure release of information requested complies with the requirements of AFI 91-204. This can be accomplished by telecom or e-mail.

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-ACC)** Each AFE activity will prepare and submit a detailed annual budget, financial plan and unfunded requirements to their appropriate commanders and resource advisors during mid-year and end-of-year calls.

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.

3.3.4.1. **(Added-ACC)** Monitor supplies from date ordered to date received through use of automated supply products, i.e., DO4, D18, M30, M36, R31, and R14 products. Maintain an accurate listing of all back ordered items.

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-ACC)** Ensure AFEMS The Organizational Configuration (TORC) screen authorizations are accurate and reviewed semi-annually. Maintain TORC screen printouts for a minimum of 1 year in TAB B of Custodian Account/Custody Receipt Listing (CA/CRL) for each account.

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.

3.3.7. 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.

3.3.7.1. **(Added-ACC)** Units will utilize ALERTS for time change forecasting. **EXCEPTION:** Use of ALERTS in the ANG is optional, unless specifically directed by technical order.

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.

3.3.9.1. **(Added-ACC)** If items have not been received within 180 days from order date, supply difficulty and mission impact letters will be submitted to base level supply activity. Supply difficulty and mission impact letters are not required for CA/CRL items.

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.

3.5. 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, *Equipment Inventory, Status, and Utilization Reporting*, 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*.

3.7. In-shop/section Quality Control (QC). AFE QC programs are designed to provide feedback to technicians, trainers, supervisors, and managers to eliminate defects and deviations from established guidance.

3.7.1. Quality Inspector (QI) Requirements. AFE QIs are 1P071 (or equivalent) technicians, trained and certified in the QI process. Highly experienced 5-level technicians may be

appointed as an exception when approved by the AFE FEO/Superintendent. AFE QIs will augment the AFE QA Inspector.

3.7.1.1. **(Added-ACC)** Training and certification of QI personnel will include orientations with the necessary support agencies listed in this supplement. AFE QIs are 1P071 (or equivalent) technicians, trained, and certified in the QCI process and appointed by the FEO (or equivalent). Highly experienced 5-level technicians may be appointed as an exception when adequate 7-skill level manpower is not available. Only individuals who have demonstrated high proficiency and are qualified/certified on the task or equipment item being evaluated will be considered for QCI duties. *EXCEPTION:* ANG AFES may appoint QI personnel.

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, and 100 percent of all survival kits, repacked parachute assemblies, and any items received from other supporting agencies. QCIs should be performed prior to the next flight. Additionally, 100% of all 3-skill level work will receive a QCI until the individual is task certified.

3.7.2.1. **(ACC)** The AFES will define critical steps/develop local checklists to be utilized during QCIs. *EXCEPTION:* ANG FM will define critical steps and develop baseline checklists for each equipment item requiring IPI / CPI. Guidance will be posted on ANG AFE CoP.

3.7.2.1.1. **(Added-ACC)** Refer to Attachment 3 of this supplement for additional QCI guidance.

3.7.3. Develop and ensure IPIs are performed by current and qualified 1P071 (or equivalent) personnel. IPIs will be annually reviewed, updated and documented on locally developed form coordinated with AFE superintendent and AFE QA inspector. The form will remain on file until the next repack, repair, or aircraft transfer. As a minimum, IPIs will be performed during inspection and repack of parachutes and survival kits.

3.7.3.1. **(Added-ACC)** IPI/rigger checks are the same concept.

3.7.3.2. **(Added-ACC)** In addition to equipment listed in paragraph 3.7.3., ACC units will perform IPIs on all personnel/recovery/drogue/cargo deceleration devices, night vision devices, and all types of life preservers/life rafts.

3.7.3.3. **(Added-ACC)** Required IPIs in addition to those listed in applicable technical guidance are posted on the ACC AFE CoP.

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 be present during 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.

3.7.4.1. **(Added-ACC)** 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 individuals who have demonstrated high proficiency and are qualified/certified on the task or equipment item being evaluated will be considered for IPI duties.

3.7.5. The original technician (inspector) will correct all discrepancies prior to the piece of equipment being placed back in service.

3.7.6. Monitor QC documentation (e.g., AF IMT 2420, *Quality Control Inspection Summary*, or equivalent) to identify positive and negative trends. Provide QC documentation to the AFE QA function monthly or earlier if a negative trend is identified.

3.7.6.1. **(Added-ACC)** QC documents will be maintained for a minimum of 60 days or one complete periodic inspection/repack cycle (whichever is longer).

3.7.7. AFE personnel certified to clear “Red-X” discrepancies will be annotated on the automated SCR, 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.

3.7.8. **(Added-ACC)** Personnel Task Evaluations (PTEs) for life-sustaining equipment installed by AFE technicians on ejection seat equipped and non-ejection seat aircraft. **NOTE:** HQ AFRC/A3TS will provide PTE guidance for AFRC units in its respective supplement.

3.7.8.1. **(Added-ACC)** PTE. A process that determines personnel qualification through observation, evaluation of task performance, and feedback. It includes observation of task performance, on-the-spot instruction to correct deficiencies and a written evaluation.

3.7.8.2. **(Added-ACC)** AFES will develop a one-page checklist denoting the minimum items listed in paragraph 3.7.8.4. (Added) and use to ensure coverage/compliance with these areas.

3.7.8.3. **(Added-ACC)** The AFES will train NCOICs on the use of this checklist during the NCOIC's initial training and qualification procedures of technicians.

3.7.8.4. **(Added-ACC)** As applicable, minimum areas to be evaluated include checking for currency of cockpit familiarization/egress training, completion of maintenance forms documentation training, completion of CTK inventories prior to departing the shop, vehicle preparation and configuration, removal of jewelry, review of aircraft forms, completion of ground and cockpit safe for maintenance checks, accomplishment of applicable equipment pre-installation inspection(s), use of safety devices, familiarity with job guide checklists, effective use of voice command and response, and verification procedures, FOD checks, aircraft forms documentation, and accomplishment of CTK inventories after job completion.

3.7.8.5. **(Added-ACC)** The pre-installation inspection (if required), installation/removal procedures, and a complete 30-day inspection of aircraft/ejection seat integrated parachute assemblies and survival kits satisfy the requirement for an integrated AFE

PTE. A complete 30-day inspection of a non-integrated parachute, i.e., carried to/from the AFE section, satisfies the requirement for a non-integrated parachute inspection. A complete review of applicable parachute documents for accuracy is part of the 30-day parachute inspection.

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).

3.8.2. 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.

3.9.1.1. (ACC) Refer to *T.O. 00-5-1* for use of manufacturers' manuals in support of appropriately approved COTS/NDI equipment for ACC use. The ACC AFE CoP is the single source for approved COTS manuals.

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.

3.9.1.2. (ACC) 1 (Added) The ACC T.O. options list is posted on the ACC AFE CoP.

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.

3.9.1.3.1.1. (Added-ACC) The latest version of AFTO Form 22, Deficiency Reports and AF Form 1000, *Idea Application* must be used prior to submission to MAJCOM.

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 IMT 22. As the functional experts, AFE superintendents and AFE QA inspectors are responsible for reviewing and processing wing-initiated AFTO IMT 22 and DRs affecting AFE. The AFE superintendent and AFE QA inspector will evaluate all AF IMT 1000 or IDEAs pertaining to AFE.

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.

3.10. 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, repairable, and unserviceable items. Provisions will be made to protect shelf stock components from dust, impurities, and direct sunlight.

3.10.2.1. **(Added-ACC)** All equipment/shop stock items/supplies stored in cabinets, drawers, containers or other areas will be marked with appropriate serviceability tags.

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.

3.11. 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.

3.12. 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.

3.13.6. **(Added-ACC)** Lockout/Tagout (LOTO) Program. Refer to ACC AFE CoP for LOTO guidance. **NOTE:** HQ AFRC/A3TS will provide LOTO program guidance for AFRC units in its respective supplement.

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.

3.18.2. 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.

3.18.3. 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.

3.18.3.1. **(Added-ACC)** Individual/unit award submissions must be received by HQ ACC/A3TOA NLT 15 January of each calendar year. **NOTE:** HQ AFRC/A3TS will provide award submission guidance for AFRC units in its respective supplement.

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>.

3.19. 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.

3.19.1. (**Added-ACC**) To prevent data loss in case of a computer malfunction, units will maintain back-up files or hard copies of the Aircrew Life Support Management System (ALSMS) data files at least weekly. Not applicable to AFRC units.

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.

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.

4.1.1.1. 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.

4.1.2. **(Added-ACC)** Third party certification will be accomplished on the following items: personnel/recovery/drogue/cargo/drag deceleration devices, torso harnesses, survival kits/vests, night vision devices, Joint Helmet Mounted Cueing System (JHMCS), AERP mask/blower/intercom, and life preservers/rafts. Not applicable to AFRC units.

4.1.3. **(Added-ACC)** All AFE technicians will receive task evaluations on all personnel/recovery parachutes, ACES II drogue chutes (refer to exceptions listed in this paragraph), torso harnesses, JHMCS, AERP mask/blower/intercom, life preservers/rafts, survival radios, night vision devices, survival kits/vests, and aircrew contamination control area tasks that are outlined in respective work center Master Task Listings at least every 24 months to maintain qualification on those specific equipment items. Task evaluations must be performed by a current/qualified technician IAW paragraph 4.2.3 of this supplement. Document 24-month task evaluations on AF Form 1098 or equivalent. **EXCEPTION:** B-1, B-2, B-52, and F-22 drogue chute task evaluations will be every 6 months. Not applicable to AFRC units.

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.)

4.2.2. 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.

4.2.2.8.1. **(Added-ACC)** ALERTS will be used for OJT records management. **EXCEPTION:** Use of ALERTS in the ANG is optional, unless specifically directed by technical order.

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-ACC)** Drogue chutes utilized on B-1, B-2, B-52 and F-22 aircraft are the only infrequently maintained AFE systems in ACC. Not applicable to AFRC units.

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.

4.2.3.4.1. **(Added-ACC)** Task evaluations include observation of task performance and on-the-spot instruction to correct deficiencies. Question and answer sessions do not qualify as task evaluations.

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).

4.2.4.1.1. **(Added-ACC)** Refer to AFI 11-410, *Personnel Parachute Operations*, for qualification/certification requirements for parachutes used for premeditated parachute operations.

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.

4.2.5.4. **(Added-ACC)** Must become proficient on use/content of applicable technical data and governing instructions.

4.2.6. **(Added-ACC)** Red X Certification Process. As a minimum, the AFES, NCOICs, and all 7-level personnel will be Red X certified for ejection seat equipped MDSs that require AFE to install and remove equipment and as required for non- ejection seat equipped aircraft. Not applicable to AFRC units.

4.2.6.1. **(Added-ACC)** Individuals certified to sign off Red X inspections on aircraft forms must be trained by a qualified 7-level and certified by the AFES. All requirements of paragraphs 3.7.6 and 3.7.7. must be fulfilled prior to certification. See AFI 21-101_CAF SUP for ejection seat parachute and survival kit removal and installation certification procedures. Review and be familiar with T.O. 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies and Procedures*. Not applicable to AFRC units.

4.2.6.2. **(Added-ACC)** AFES will ensure proper routing/process of the CAF Form 64, *Request for Special Certification*, and monitor quarterly. Not applicable to AFRC units.

4.2.6.2.1. **(Added-ACC)** NCOIC will sign as the section chief, the AFES or AFEO will sign as the flight chief, the squadron commander or director of operations will sign as OPS OFFICER/MX SUPT, and finally the Operations Group commander (or equivalent) will sign as the group commander.

4.2.6.2.2. **(Added-ACC)** The maintenance group commander can authorize selected 5-skill level personnel, in the rank of SrA or higher, for tasks normally requiring 7-skill level requirement to facilitate the production effort. Waived 5-skill level personnel should be closely monitored and kept to a minimum required to accomplish the maintenance mission. File copies of approved waivers must be maintained by the NCOIC and AFES. Contact supporting records manager to ensure required records' retention and disposition. The maintenance group commander is the waiver granting authority for selected 5-level personnel.

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),	D	D	D	D	D	D	

COURSE TITLE	1P031	1P051	1P071	1P091	AFECTI	T1P0X1	FEO
J7AZT1P051 0J1A (Note 3)							
Maintenance of Combat Survivor Evader Locator (CSEL) radio, J7AZT1P051 0C1A (Note 3)	D	D	D	D	D	D	
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, L5AQAIXXXX 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.

5.3. AFECT Event Descriptions. Lead Commands, IAW AFD 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.

5.3.2.1. **(Added-ACC)** EPTs will be functional and mirror operational equipment to the maximum extent possible (including oxygen panel, JHMCS connector, AERPS). Contact Det 1 ACC/TRSS, Luke AFB, AZ for assistance with servicing EPT.

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.

5.3.6.1. **(Added-ACC)** Brief aircrew on responsibilities of AFE IAW this supplement.

5.3.7. With the exception of ARC, AFMC, and AFSPC units, which do not have SERE (1TOX1) 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.

5.4.4. 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.

5.5.2.1. **(Added-ACC)** Failure to accomplish AFECT at the required intervals IAW AFI 11-2MDS-series, V1, as amended by ACC/Ready Aircrew Program tasking memo, will result in grounding or non-combat mission ready status. Not applicable to AFRC units.

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.

5.5.5.1. **(Added-ACC)** If not covered by specific MDS guidance, flight surgeons will receive egress once every 90 days on primary assigned aircraft. The FEO may waive this requirement up to 180 days for those flight surgeons who demonstrate proficiency in the aircraft on a case-by-case basis. AFRC/ANG units require Operations Group commander (or equivalent) approval for this waiver.

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).

5.5.12. **(Added-ACC)** Aircrew on inactive flying status, to include indoctrination fliers, will receive, as a minimum, emergency egress, EPT (formerly PDT), and AFE training no earlier than 72 hours prior to flight. Those flying over water beyond gliding distance to land will also receive water survival academics and hands on training with life preservers/life rafts. 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.

5.6. 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. (ACC)Passenger and Incentive Flyer Training. NOTE: For the purpose of this supplement, passenger and incentive flyer guidance applies to orientation, distinguished visitor, familiarization, incentive, and spouse orientation flights addressed in AFI 11-401.

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. **(ACC)** Aircrew scheduled to fly on aircraft other than their primary airframe are only required to perform hands-on training on unique aircraft differences. **EXAMPLE:** If an F-16 pilot is scheduled for a sortie on a B-1, F-15, etc. they must perform hands-on egress training.

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.

5.7.2.1. **(Added-ACC)** These individuals, to include members in casual status awaiting pilot training, aerospace physiologist, flying maintenance personnel, intelligence personnel, and developmental/test engineers may be placed on a 90-day currency after meeting the following requirements: Members must first complete egress class as applicable to the MDS a minimum of three times during a 90-day period. Member must complete all required AFECT. After the above two conditions are met, the FEO will evaluate/validate the members proficiency and forward a memorandum to the Operations Group commander (or equivalent) recommending the member be placed on a 90-day currency for the MDS specific egress training and AFECT. The Operations Group commander (or equivalent) is approval authority for the 90-day currency. Not applicable to AFRC units.

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.

5.7.4. **(Added-ACC)** Refer to AFI 11-401 for taxi ride guidance.

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.

5.8.3. 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-ACC)** Each unit will develop an EPT local inspection checklist approved by the FEO. *EXCEPTION:* Checklist may be approved by AFES in ANG units.

5.9.4.2. **(Added-ACC)** All EPTs will be inspected prior to use and semi-annually. These inspections will be documented on AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*, or equivalent (i.e., ALERTS, AFTO Form 244, *Industrial/Support Equipment Record*).

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-ACC)** PRC-112 series survival radios, AN/PRQ-7 Combat Survivor/Evader Locator (CSEL) and PNVGs may be used for training as long as the training does not damage or destroy the integrity of the equipment. For those AFRC units that do not have dedicated AERP training assets, operational assets may be used. If an operational asset was utilized for training, inspect at intervals IAW governing technical orders.

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 to 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 unpersonalized 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-ACC)** Annual reviews will be documented on lesson plan cover page and in ALERTS. *EXCEPTION:* ANG units may use an equivalent program to ALERTS for annual review documentation.

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.

Table 5.1. AFECT REQUIREMENTS.

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)

ARMS EVENT IDENTIFIER	COURSE TITLE	EVENT FREQUENCY
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)

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, and LL03.
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.

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

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

5.11.2. **(Added-ACC)** 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.

5.11.3. **(Added-ACC)** As a minimum, qualification training will include attendance at applicable courses specified as mandatory in AFI 11-301, 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.

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

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

5.13. (Added-ACC) AFECTI. Enlisted and civilian instructor certifications will be documented on AF Form 1098 or equivalent electronic tracking system IAW AFI 36-2201V3 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.

5.13.1. **(Added-ACC)** Document all instructor evaluations (enlisted, officer, civilian) on AETC Form 281, *Instructor Evaluation Checklist*, or locally developed equivalent. Not applicable to AFRC units.

Chapter 6

AUTOMATED LIFE-SUSTAINING EQUIPMENT RECORDS & TRACKING SYSTEM (ALERTS) AND AIRCREW PROTECTION WEBSITE (APWEB)

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.

6.2.1.1. **(Added-ACC)** ALERTS is the designated data management system for use by ACC. **EXCEPTION:** Use of ALERTS in the ANG is optional, unless specifically directed by technical order. Not applicable to AFRC units.

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.

6.5.13.1. **(Added-ACC)** ACC units will use the electronic ALERTS AF Form 623, *Individual Training Record Folder*. **EXCEPTION:** Use of ALERTS in the ANG is optional, unless specifically directed by technical order. Not applicable to AFRC units.

6.6. Adopted Forms

AFTO IMT 22, *Technical Order Improvement Report and Reply*

AF IMT 55, *Employee Safety and Health Record*

AFTO Form 244, *Industrial/Support Equipment Record*

AFTO Form 255, *Notice Certification Void when Seal is Broken*

AETC Form 281, *Instructor Evaluation Checklist*

AFTO Form 338CG, *Survival Kit Record*

AFTO Form 338CG, *Survival Kit Record*

AFTO Form 392, *Parachute Repack Inspection and Component Record*

AF Form 457, *USAF Hazard Report*

AF Form 623, *Individual Training Record*

AF Form 629, *Small Arms Hand Receipt*

AF IMT 1000, *Idea Application*

AF Form 1098, *Special Task Certification and Recurring Training*

DD Form 1149, *Requisition and Invoice/Shipping Document*

AF IMT 1297, *Temporary Issue Receipt*

AF IMT 1522, *ARMS Additional Training Accomplishment Input*

DD Form 1574, *Serviceable Tag-Material*

AF IMT 2420, *Quality Control Inspection Summary*

AFTO Form 46, *Prepositioned Life Support Equipment*

AFTO Form/IMT 781A, *Maintenance Discrepancy and Work Document*

Chapter 7

ACC AND ACC-GAINED UNITS AIRCRAFT INSTALLED, GUARDIAN ANGEL AND PRE-POSITIONED AIRCREW FLIGHT EQUIPMENT REQUIREMENTS

7.1. (Added-ACC) Purpose. This chapter lists minimum equipment requirements and management procedures for all ACC-assigned and ACC-gained weapon systems. The requirements contained in this chapter will be used in conjunction with Tables A7.1. through A7.13. (minimum equipment requirements for A-10, F-4, F-16, F-15, T-38, B-1B, B-2, B-52, EC/HC-130, E-4, E-3, E-8, OC/RC/TC/WC-135, MC-12, and HH-60 aircraft).

7.2. (Added-ACC) Configuration Requirements. When mission requirements dictate, Operations Group commanders (or equivalent) are authorized to add only T.O. authorized or MAJCOM approved survival components or increase aircraft equipment configurations provided the changes are in compliance with AFI 11-301V1. This supplement, applicable T.O.s, and allowance standards serve as the basis of authorization to obtain equipment required to meet mission needs.

7.3. (Added-ACC) AFE Section Responsibilities.

7.3.1. **(Added-ACC)** List all AFE placed aboard ACC aircraft on AFTO Form 46, *Pre-positioned Life Support Equipment*, as required. Maintain a file of complete AFTO Forms 46 by tail number for all assigned aircraft. File copies of AFTO forms will be purged each quarter. Not applicable to AFRC units.

7.3.2. **(Added-ACC)** Shortages noted by the aircraft commander or designated representative and recorded on AFTO Form 46 or 781A, are investigated by the AFE section. The investigating activity should request assistance in locating shortages from the station where the loss was discovered.

7.3.3. **(Added-ACC)** When equipment shortages are discovered which have not been documented on the AFTO Form 46 or 781A, the AFE section should investigate and take action IAW AFMAN 23-220, *Reports of Survey for Air Force Property*. For audit purposes, document all investigative actions taken.

7.3.4. **(Added-ACC)** When AFE owned by other units is discovered during the inventory, notify the owning unit's AFE section, citing type aircraft, tail number, and type and quantity of equipment found. Do not retain AFE; forward it to the owning unit by Issue Priority Designator 02 (IPD-02). Copies of shipping documents will be forwarded to owning organizations.

7.3.5. **(Added-ACC)** Requisition and ensure towelettes (70 percent isopropyl alcohol) are placed aboard ACC aircraft for the purpose of swabbing out pre-positioned oxygen masks. Not applicable to AFRC units.

7.4. (Added-ACC) Organizational Maintenance Activities. The organization maintenance activity will accomplish the following actions:

7.4.1. **(Added-ACC)** Install, remove and maintain all oxygen mask presentation units (demonstration kits).

7.4.2. **(Added-ACC)** Remove/install escape slides.

7.4.3. **(Added-ACC)** Aircraft maintenance personnel will accomplish any task, which requires a raft to be attached to or removed from the aircraft in wing wells, cargo compartment cradles, silos, or raft launching devices.

7.5. (Added-ACC) Passenger Support Equipment.

7.5.1. **(Added-ACC)** The A-A-50652 adult/child (quick-don) LPU is the primary life preserver for passengers and will be pre-positioned at each occupied seat on all over-water flights. The LPU- 2/P, 10/P can be used by passengers 18 months or older when the adult/child LPU is not available.

7.5.2. **(Added-ACC)** The LPU-6/P infant cot is required for infants 18 months old and under.

7.5.3. **(Added-ACC)** Commercially contracted equipment will be maintained IAW the conditions of the contract. All other equipment will be maintained IAW the requirements of this supplement and the appropriate technical data.

7.5.4. **(Added-ACC)** Passenger-carrying aircraft will be equipped with demonstration equipment consisting of one adult/child life preserver and one Passenger Oxygen Kit (POK). To distinguish this equipment from operational equipment, units will locally manufacture a yellow POK bag IAW T.O. 15X5-2-4-1. The demonstration adult/child life preserver will have a 12-inch yellow streamer attached to the carrying case. The POK bag and preserver carrying case also will be stenciled "For Demonstration Only" in 1/2-inch black lettering. This equipment will be stored on the aircraft in a red bag (locally manufactured) large enough to hold both the POK and the preserver. The storage bag also will be stenciled "For Demonstration Only" and will be located on the aircraft behind the aft portion of the galley on the upper seat support bar. **NOTE:** (Added) Do not install POKs below or on the emergency depressurization valve.

7.5.5. **(Added-ACC)** Until Emergency Passenger Oxygen Systems (EPOS) are available for use, POKs may be used as suitable substitutes. EPOS assemblies will not be stored or used in the crew compartment. EPOS and POKs will not be comingled on the same aircraft.

7.6. (Added-ACC) Uploading and Equipping Alert Aircraft.

7.6.1. **(Added-ACC)** Rations and water are placed aboard alert aircraft as a source of subsistence for aircrews during Emergency War Order (EWO) commitments. Responsibility for aircraft installed sustenance rations and water is a shared responsibility among wing services, AFE, and the wing war readiness review board IAW AFI 25-101, *War Reserve Material (WRM) Program Guidance and Procedures*; HHQ directives, and unit Memorandum of Understanding (MOU).

7.6.2. **(Added-ACC)** In addition to alert commitments, AFE may also be tasked to load rations, water, and flash-blindness devices to support generated force sortie aircraft during EWO operations and when required by specific OPLANS. Units should establish procedures to upload and download these items and ensure availability of an aircraft storage location. This capability will be demonstrated during all major IG inspections to the extent necessary to demonstrate an operational capability.

7.6.3. **(Added-ACC)** OPLAN 8010 Actions.

7.6.3.1. **(Added-ACC)** Units supporting OPLAN 8010 will maintain all capabilities required by the plan. If aircraft configuration requires rations and water, a minimum of three Meals Ready-to-Eat per crewmember per day and two five-gallon jugs of water will be prepositioned.

7.6.3.2. **(Added-ACC)** Requirements for sustenance items are shared responsibilities among AFE (delivery, uploading, and downloading), operational squadron (quantify based on mission requirements), and Services (storage). Representatives from these organizations will establish an MOU. The MOU will specify and define responsibilities for forecasting, funding, requisitioning, storing, and issuing rations in support of OPLAN 8010. Responsibilities for sustenance rations and water are contained in AFI 25-101.

7.6.4. **(Added-ACC)** Water bulk stored for aircraft configuration during increased stages of alert will be inspected annually.

7.7. (Added-ACC) Equipment Issue, Control and Accountability Procedures.

7.7.1. **(Added-ACC)** FEOs, AFESs and supervisors must ensure equipment accountability is maintained per AFMAN 23-110V2, Part 13, *Standard Base Supply Customer's Procedures*, and be familiar with the applicable allowance standards. To enhance mission effectiveness and reduce excessive handling and damage, AFE will be pre-positioned on the aircraft to the maximum extent possible.

7.7.2. **(Added-ACC)** Unless otherwise directed by applicable job guides, AFE personnel are responsible for the removal and installation of aircraft-installed and pre-positioned AFE. AFE will develop procedures to coordinate flight line taskings with flying squadron maintenance scheduling. This coordination is required to ensure AFE taskings are included in the weekly and monthly maintenance plans and programmed generations. AFE will use the Integrated Maintenance Data System to document completion of related flight line tasks.

7.7.3. **(Added-ACC)** All aircraft pre-positioned AFE will be annotated on the AFTO Form 46, *Pre-positioned Life Support Equipment*. AFES/NCOICs must ensure all applicable entries are accurately reflected (exception: unit of assignment and telephone number). The AFTO Form 46 will be prepared in duplicate. Maintain the original copy of the form in the AFE section for record purposes and maintain the duplicate copy with the aircraft forms or attached to the AFE storage container.

7.7.4. **(Added-ACC)** AFE personnel are required to complete the AFTO Form 46 and sign the issuing agency block when uploading, configuring, or inventorying pre-positioned AFE.

7.7.5. **(Added-ACC)** Perform equipment acceptance checks when new or returning aircraft arrive on base with installed survival kits and personnel parachutes IAW T.O. 00-20-1.

7.7.6. **(Added-ACC)** Post-flight Inspection.

7.7.6.1. **(Added-ACC)** Following the final mission of the day or upon return to home station, TDY commitments, etc., AFE personnel are responsible for the performance of Mission Termination Inventories (MTI) ensuring equipment accountability and serviceability on each aircraft. In the event that equipment discrepancies are discovered, initiate appropriate actions to correct the deficiency prior to the next flight. If AFE is suspected of misuse, abuse or shortages exist, the FEO or AFES has responsibility for notifying the applicable flying squadron commander for corrective actions. Copies of

MTIs are maintained by the appropriate AFE section by aircraft tail number until the next MTI is accomplished. (Not applicable for ANG and AFRC units). The pre-flight inspection will suffice in the event aircraft/aircrew are off-station with no qualified AFE support to accomplish MTIs.

7.7.7. **(Added-ACC)** When aircraft deploy in excess of 29 days, prepare the AFTO Form 46 in triplicate. The original copy of the form is retained by the owning AFE section. The second copy is placed with the aircraft forms or attached to the AFE storage container. Place the third copy in an envelope to accompany the aircraft forms to the TDY location for use by the deployed AFE section.

7.7.8. **(Added-ACC)** If unique circumstances arise that require the removal of AFE from an aircraft at en route stations, the individual removing the equipment will annotate the remarks section of the AFTO Form 46 with their name, date equipment was removed, reason for removal, and all equipment disposition and destination information.

7.7.9. **(Added-ACC)** During aircraft transfers or movement of AFE, communication between gaining and losing units is highly encouraged. In the event AFE issues arise that cannot be resolved at the unit level, HQ ACC/A3TOA serves as the focal point for aircraft transfers, TDYs, depot inputs, or retrievals. AFRC units will coordinate equipment issues through NAF and HQ AFRC/A3TS.

7.7.9.1. **(Added-ACC)** When AFE is shipped by LOGAIR, Priority 01, as a minimum, will be used.

7.7.9.2. **(Added-ACC)** Equipment shipped for aircraft depot retrievals will have sufficient days remaining at the time of shipment to ensure no impact to flight returning home.

7.7.9.3. **(Added-ACC)** When aircraft are permanently transferred, inspection records of installed AFE will be mailed to the gaining unit AFE section. Minimum equipment requirements outlined in Table A7.1. through Table A7.10. of this supplement will be transferred to the gaining unit.

7.7.10. **(Added-ACC)** Due to the lack of AFE expertise at some aircraft Programmed Depot Maintenance (PDM) locations, maintenance and equipment accountability can be provided only by the organization owning the aircraft. In order to ensure the highest standard for ACC AFE, the following steps will be followed:

7.7.10.1. **(Added-ACC)** Upon PDM arrival, AFE will be shipped back to the owning unit where CA/CRL accountability will remain throughout the PDM duration.

7.7.10.2. **(Added-ACC)** In the event an aircraft transfer occurs while in PDM, both equipment custodians (losing and gaining) must maintain close communication among themselves and their unit equipment management section (EMS) to ensure the following actions are timely and completed accurately:

7.7.10.2.1. **(Added-ACC)** Sixty days prior to aircraft scheduled release from PDM, the organization losing the aircraft will take appropriate supply actions to ship equipment to the gaining base and transfer accountability.

7.7.10.2.2. **(Added-ACC)** The gaining base will ship equipment, using DD Form 1149, *Requisition and Invoice/Shipping Document*, to PDM for installation on

aircraft. Custodians must retain copies of all paperwork transactions in the event equipment is lost or misplaced.

7.7.10.2.3. **(Added-ACC)** Upon receipt of the transfer documents, the gaining base supply EMS must coordinate with the AFE custodian to ensure the equipment has been received and to take appropriate actions to transfer CA/CRL accountability. Base supply will take no action to process equipment transfers until the AFE custodian verifies receipt of the equipment.

7.7.11. **(Added-ACC)** When aircraft are down for Un-programmed Depot Maintenance, the owning organization will ensure equipment has a minimum of 45 days remaining on repack cycles prior to aircraft departure. Normally, aircraft are expected to return to the originating organization, but in the event aircraft are not returned to the originator, equipment custodians will initiate appropriate supply action to ensure equipment accountability. Transfer, receipt, and accountability procedures are set forth in AFMAN 23-110V2, Part 2, Chapter 15, *Asset Reporting, Redistribution, and Disposal*; and AFI 23-111, *Management of Government Property in Possession of the Air Force*.

7.7.12. **(Added-ACC)** AFE used in any aircraft ejection will not be reused. *Exception:* This equipment may be reused for training purposes only and must not be subjected to training scenarios where system failure could cause injury to personnel.

7.7.12.1. **(Added-ACC)** AFE subjected to a Class A incident not involving an ejection may be reused after thorough inspection verifies serviceability.

7.7.13. **(Added-ACC)** Pilots are authorized the “Aggressor Star” decal on aircrew helmets only while assigned to the 57th Aggressor Training Group (Nellis AFB).

Table 7.1. (Added-ACC) RC, TC, OC, WC-135 and E-4B Aircraft AFE Configurations (IAW T.O. IC-135(WC)-1, IC-135(RC)-1, IC-135(O)B-1 and 1E-4B(II)-1)

Equipment Items	RC-135S Cobra Ball	RC-135U Combat Sent	RC-135V/W Rivet Joint	TC-135S Cobra Ball Trainer	OC-135B Open Skies	PDM Configuration
Restraint Harness	2	2	2	2	2	2
Exposure Suits CWU-16/P	30	36	36	36	36	0
Life Raft, F-2B w/ Inner/Outer Survival Kit	3 (Note 7)	3 (Note 7)	2	2	2	0
Life Preservers, LPU 2/P or 10/P	36	36	36	36	36	0

Smoke Masks	3	3	2	2	2	2
EEBD/PBE (Note 1)	3	3	2	2	2	2
Quick Don Smoke Mask w/anti Smoke Goggles	36	36	36	6	6	6
Passenger Oxygen Masks	0	0	0	0	21	0
EPOS (Note 3)	20	20	20	40 (Note 7)	30	0
Flash Blindness Goggles, EEU Series w/Eye Patch (Note 2)	0	0	4	0	0	0
Aircrew Laser Eye Protection (ALEPS) (Note 2)	6	6	6	6	6	0
Flash Blindness Goggles, MIL-G-635 w/Eye Patch (Note 2)	0	0	3	0	0	0
Oxygen Mask, MBU-12/P	0	0	0	0	15	0
Equipment Items	TC-135W Rivet Joint Trainer	WC-135C Constant Phoenix	WC-135W Constant Phoenix	E-4B	PDM Configuration	
Parachutes BA-18 or Restraint Harness	2	2	2	0	2	

Exposure Suits CWU-16/P	36	30	30	0	0
Life Preservers, LPU 2/P or 10/P	36	36	36	0	0
Life Preservers, Adult Child	0	0	0	121	0
Life Raft, F-2B w/Inner Kit	2	2	2	2 (Note 4)	0
Outer Kit	2	2	2	7	0
Smoke Masks	2	2	2	6	2
EEBD/PBE (Note 1)	2	2	2	7	2
Quick Don Smoke Mask w/anti Smoke Goggles	6	6	6	0 (Note 6)	6
EPOS (Note 3)	60 (Note 7)	30	30	0	0
Flash Blindness Goggles, MIL-G-635 w/Eye Patch (Note 2)	0	0	0	4	0
Oxygen Mask, MBU-12/P	0	0	0	154 (Note 6)	0
Aircrew Laser Eye Protection	6	6	6	8	0
Meals-Ready-To-Eat (MREs/case) (Note 5)	0	0	0	57	0

NOTES: (Added)

1. EEBD/PBEs will be placed in close proximity of each firefighting station. Some aircraft configurations may require one located at the navigators station.
2. Installed on aircraft only when deploying.
3. POKs may be used until EPOS are available (refer to paragraph 7.5.6.)

4. F-2B rafts may be removed and replaced by slide rafts as approved by the E-4B aircraft SPO.
5. MREs will be installed at the discretion of the aircraft commander for ALERT posture (refer to paragraph 7.6. for E-4B and paragraph 7.6.3. for RC-135V/W)
6. MBU-12/P mask will be installed on all oxygen regulating systems (142 positions) with 12 spares pre-positioned. Quick-don assemblies prepositioned in the flight deck are contractually controlled by Boeing.
7. Emergency Passenger Oxygen System and Life Raft (F-2B) quantities shown are IAW T.O. 1C-135(RC)-1, which reflects the aircrafts' maximum passenger capability. TC-135S and TC-135W can be authorized to be configured with 20 EPOS/2 Life Rafts for local sortie production when not structurally configured to transport passengers. AFE sections will be required to maintain the full complement of EPOS/F-2B Life Raft capability, IAW T.O. 1C-135(RC)-1, in the event of passenger transport contingency.

Table 7.2. (Added-ACC) EC-130/HC-130 Aircraft AFE Configurations.

Equipment Items	EC-130
Parachutes, BA-18, BA-22	15
Harness, Restraint, PCU-17/P	2
Survival Kit, ML-4 (Note 4)	15
Sea Rescue Kit, MA-1	0
Life Raft, 20-Man	2
Life Preservers, Commercial, Adult/Child, A-A-50652 (Note 1, 3)	0
Life Preservers, LPU-2/P or 10/P	15
Life Preservers, LPU-6/P, Infant Cot	0
Anti-Exposure Suits, CWU-16/P	15
Oxygen Mask, Scott 358 w/Goggles	4
EEBD/PBE	3
EPOS	0
Survival Vest	15
Smoke Mask w/Goggles (Note 2)	2

NOTES: (Added)

1. A total of 60 adult life preservers are required (any combination of LPU-2/10/P, or commercial, Adult/Child). LPU-2/10Ps are the only life preservers authorized for use by the primary crew when parachutes are required.
2. Scott 358-1506 oxygen masks with smoke goggles may be substituted for smoke masks.
3. LPU-5/P, Adult life preservers may be used as replacements for the Adult/Child, LPU-2 and

10/P until exhausted.

4. EC-130 Only: ML-4s are only required for contingency, cross country and over water flights.

5. HC-130 aircraft will be configured IAW AFI 11-2HC-130V3, Addenda A, *Rescue HC/MC-130P Configuration/Mission Planning Guide*.

Table 7.3. (Added-ACC) E-3 Aircraft AFE Configuration.

Equipment Items	E-3
Harness, Restraint, PCU-17/P	1
Life Raft, 20-Man	2
Accessory Container, F-2B, 20-man	2
Life Preservers, LPU-2/P or 10/P	40
Anti-Exposure Suits, CWU-16/P	40
Oxygen Mask, Scott 358 w/Goggles	5
EPOS	18
Fire Fighters Smoke Mask	6
Oxygen Mask, AWACS	See Note 1
Oxygen Mask, MBU-10/P Series	22
Oxygen Mask, Passenger (Note 1 and 2)	23 or 27

NOTE: (Added)

1. Passenger oxygen mask may be any combination of 249-358, 249-350 or AWACS Oxygen Mask.

2. If J-compartment seats are installed, four additional passenger oxygen masks are required.

Table 7.4. (Added-ACC) E-8 Aircraft AFE Configuration.

Equipment Items	Routine	Contingency	PDM Input (See Note 1)	P-Sortie (See Note 2)	Training Aircraft (See Note 3)
Harness, Restraint, PCU-17/P	1	1	0	1	1
Life Raft, 25-Man	2	2	0	2	1
Accessory Container	2	2	0	2	1
Life Preservers, LPU-10/P	38	38	0	38	19

Anti-Exposure Suits, CWU-16/P	38	38	0	38	19
Oxygen Mask (Blue), Scott 358 w/Goggles	25	25	0	25	06
Oxygen Mask (Yellow), Scott 249-355 w/Goggles	36	36	0	36	33
Training CW-70	1	1	0	1	0
Training Fire Fighter's Mask	2	2	0	2	0
Fire Fighters Smoke Mask	7	7	0	7	4

NOTES:

1. All AFE is removed. Northrup Grumman (civilian crew) will supply their own AFE.
2. P-sortie occupies the front five seats only (pilot, co-pilot, engineer, observer and navigator).
3. Used for pilot training only.

Table 7.5. (Added-ACC) B-52 Aircraft AFE Configuration.

Equipment Items (Note 1)	AL	RT	PT	PDM	CT
Parachutes BA-21A	6	6	6	4	6
Parachutes BA-18/22 (Note 1)	4	4	4	0	4
Survival Kits, CNU-129/P	6	6	6	3	6
Survival Kits, ML-4 (Note 1)	0	As Required	4	0	4
Life Preservers, LPU-9/P, 38/P (Note 1, 2)	6	As Required	10	As Required	11
Flash Blindness Goggles, EEU Series w/ Eye Patch	2	As Required	2	0	0
Flash Blindness Goggles, MIL-G- 635 w/Eye Patch (Note 3)	Note 3	0	Note 3	0	0
Eye Patch	4	0	4	0	0

NOTES: (Added)

1. Commanders may specify when additional equipment is required to meet mission needs. Units may preposition additional ML-4 kits, life preservers, and BA-18/22 parachutes to prevent aircrew from having to sign out additional equipment for each flight.
2. LPU-9/P, 38/P may be individually fit and carried to aircraft by aircrew.
3. Install only as a replacement for the EEU Series flash-blindness goggles.
4. Mission Abbreviations: (AL) Alert, (RT) Routine Training, (PT) Permanent Transfer, (PDM)

Programmed Depot Maintenance, (CT) Contingency Transfer.

Table 7.6. (Added-ACC) B-1 Aircraft AFE Configuration.

Equipment Items	RT	PT	CT
Parachute, ACES II (Note 1)	4	4	4
Survival Kits, ACES II (Note 1)	4	4	4
Parachutes BA-22	1	1	1
Survival Kits, ML-4	1	1	1
Life Preservers, LPU-9P, 38/P (Note 2)	1	0	1

NOTES: (Added)

1. The ACES II Parachute and Survival Kit are an integral part of the ACES II ejection system. If any part of the system is not in serviceable condition, a Red X entry will be made in the aircraft 781A.
2. The LPU-9/P, 38/P life preserver will be attached to the BA series parachute and propositioned.
3. Mission Abbreviations: (RT) Routine Training, (PT) Permanent Transfer, (CT) Contingency Transfer

Table 7.7. (Added-ACC) B-2 Aircraft AFE Configuration.

Equipment Items	AL	RT	PT	CT
Parachute, ACES II	2	2	2	2
Survival Kits, ACES II	2	2	2	2
CRU-60, Oxygen Connector	2	2	2	2
Flash Blindness Goggles, EEU Series w/Eye Patch	2	0	2	As Required

NOTE: (Added) Mission Abbreviations: (AL) Alert, (RT) Routine Training, (PT) Permanent Transfer, (CT) Contingency Transfer.

Table 7.8. (Added-ACC) Fighter/Trainer Aircraft AFE Configuration.

Equipment Items	A-10	F-4	F-15	F-16	F-22	T-38
Parachute, ACES II (Note 1)	1	0	1 (Note 1)	1 (Note 1)	1	0
Parachutes BA-22 (Note 3)	0	0	0	0	0	2 (Note 2)
Parachute, F-4, Martin Baker	0	2	0	0	0	0

Survival Kits, ACES II (Note 1)	1	0	1 (Note 1)	1 (Note 1)	1	0
Survival Kits, CNU-129	0	0	0	0	0	2 (Note 4)
Kit, Parachute spacer	0	0	0	0	0	2 (Note 2, 4)
Survival Kits, CNU-111, QF-4,	0	2	0	0	0	0
CRU-94, ITB, (Note 1)	0	0	1 (Note 1,3)	1 (Note 1,3)	1 (Note 5)	0
CRU-60, Oxygen Connector	1 (Note 3)	2	0	0	0	2 (Note 2)
CRU-120/A, ITB w/Regulator	0	0	0	1 (Note 1)	0	0
CRU-122, ITB w/Regulator	0	0	0	0	1	0

NOTES: (Added)

1. Two-seat aircraft will have two each parachutes, survival kits, and ITBs or CRUs installed.
2. Items may be installed or hand carried to aircraft by pilot.
3. The CQU-7/P Blower or CRU-80/P filter pack will be used in place of the CRU-60, CRU-94, CRU-120, and CRU-122 for flight in a chemical environment.
4. CNU-129/P Survival kits are the primary kits for use on T-38 aircraft; however, PSKs may be substituted with parachute spacer kits or survival vests.
5. CRU-94/P will be used until replaced by CRU-122.

Table 7.9. (Added-ACC) MC-12 Aircraft AFE Configuration.

Equipment Items	Training	Contingency
Compass, Lensatic/Magnetic	1 ea.	0
Flare, Signal, MK-13 MOD "O"/MK-124 MOD "O"	1 ea.	4 ea.
Mirror, 2 inches by 3 inches	1 ea.	0
Signal Kit, Personnel Distress, Type A/P25S-5A or B	1 ea.	4 ea.
First Aid Kit (E&E Kit Medical Module)	1 ea.	0
First Aid Kit (E&E Kit Medical and Survival Module)	0	4 ea.
Combat Survivor Evader Locator (CSEL) (two spare batteries)	1 ea.	4 ea.
Distress Marker Light (Strobe Light)	1 ea.	0

Camel Bak Pack (Liberty Hawg model)	0	4 ea.
AFTTP (1)3-2.26 (FM 21-76-1), Survival, evasion and recovery	0	4 ea.
Aluminum Blanket	0	4 ea.
Sponge	0	4 ea.
Ointment, sunburn, preventive (Sunscreen)	0	4 ea.
Water, drinking, flexible package (FPDW)	0	16 pkg.
Boonie Hat	0	4 ea.
Candle	0	4 ea.
Knife	0	4 ea.
Maglite w/Batteries	0	4 ea.
Matches (container)	0	4 ea.
Poncho	0	4 ea.
Rations	0	4 ea.
550 Cord (20 ft.)	0	4 ea.
AA Batteries (8 spares)	0	4 ea.

7.8. (Added-ACC) Survival Kits.

7.8.1. **(Added-ACC)** The use of ALSMS/ALERTS computer generated forms are required for each survival kit to list inspections, installation date of flares, lot numbers, annual disassembly and inspections and any component shortages that may exist. When survival kits are deployed TDY in excess of 120 days, the appropriate computer generated form will be forwarded to the AFE section at the TDY location.

7.8.2. **(Added-ACC)** Critical parts inspections on the CNU-series survival kits will be documented in ALSMS/ALERTS on AFTO Form 338CG.

7.8.3. **(Added-ACC)** Survival Kits will be inspected IAW the applicable 14S-series Technical Orders and will contain the applicable minimal items listed in Table A7.10. of this supplement. Operations Group commanders (or equivalent) may authorize, and will supplement, this supplement with a minimal requirements list of Air Force approved optional items provided weight limits are not violated and containers are not over packed. Local Survival Escape, Resistance, and Evasion (SERE) Specialists and AFE personnel should recommend optional items, which relate directly to local climatic conditions, terrain flown over, or mission requirements. Survival kit components will be standardized within the operational group.

7.8.3.1. **(Added-ACC)** Future deletions of local requirements may only be made at the discretion of the Operations Group commander (or equivalent). Local SERE Specialists and AFE personnel should recommend items, which do not relate directly to local climatic conditions, terrain flown over, or mission requirements for deletion.

7.8.4. **(Added-ACC)** Survival Kits will be configured with the minimum survival components required by this supplement prior to inter- or intra-command transfer of aircraft.

7.8.5. **(Added-ACC)** The following mandatory survival kit components will be secured to the rucksack/auxiliary container as specified in T.O. 14S1-3-51: survival radio, signal flare MK-13/MK-124, mirror, distress marker light (strobe light), A/P25S-5A or B signal distress foliage penetrator, whistle, and sea dye marker.

7.8.6. **(Added-ACC)** Units maintaining CNU-129/P survival kits for B-52 aircraft will ensure survival kits are clearly marked with crew position abbreviation (P, CP, EW, G, N, or RN) and local control number.

7.8.7. **(Added-ACC)** T-38 Aircraft equipped units have the option of using either the CNU-129/P survival kit or a parachute spacer kit (PSK) at the discretion of the Operations Group commander (or equivalent).

7.8.7.1. **(Added-ACC)** The CNU-129/P survival kit will be used on all off station training, cross-country and over-water flights.

7.8.7.2. **(Added-ACC)** PSKs will be manufactured locally using fabrication instructions published in T.O. 14S1-3-51. When used, PSKs will be attached to the parachute harness by engaging both ejector snaps and attaching them to the accessory “D” rings of the parachute, and the PSK will remain attached to both sides during parachute descent and/or emergency ground egress except for tree landings.

7.8.8. **(Added-ACC)** Operations Group commanders (or equivalent) will specify in their supplement to this supplement the type and configuration of survival kits and vest used. Survival kit and vest components will be standardized within the group.

7.8.9. **(Added-ACC)** Carbon Monoxide (CO) Detector Kits.

7.8.9.1. **(ACC)** Inspect IAW T.O. 11H5-15-1. Each CO detector kit will be marked with a local control number. The manufacture date of tubes and kit inspection date will be documented on an attached DD Form 1574, *Serviceable Tag-Material*.

Table 7.10. (Added-ACC) Survival Kit Minimum Components.

Noun	ACES II, CNU-129, ML-4, CNU- 111/P
Raft, one-man, LRU-16/P	1 ea.
Flare, Signal, MK-13 MOD “O”/MK-124 MOD “O”	1 ea.
Signal Kit, Personnel Distress, Type A/P25S-5A or B	1 ea.
Packet, sea dye marker	1 ea.
Raft repair plugs	2 ea.
First Aid Kit (E&E Kit Medical & Survival Module) (Note 1)	1 ea.
AFTTP (1)3-2.26 (FM 21-76-1), Survival, evasion and	1 ea.

recovery	
Flashlight w/batteries	1 ea.
Spare flashlight battery set	2 sets
Knife, 5 in. (fixed blade)	1 ea.
Mittens, wool (MIL-M-6270) (NSN 8415-00-265-6748) or equivalent as authorized by T.O. 14S1-3-51	1 pr.
Glove inserts, cold weather (NSN 8415-01-466-3179)	1 pr.
Hood, winter (NSN 8415-00-543-7130) or equivalent as authorized by T.O. 14S1-3-51	1 ea.
Radio, earphone and carrying case, plus spare batteries as noted. PRC-90-2 (one spare battery) PRC-112 Series (two spare batteries) AN-PRQ/7 Combat Survivor Evader Locator (CSEL) (two spare batteries)	1 ea.
Water, drinking, flexible package (FPDW)	16 pkg.
AN/URT-44 Personnel Locator Beacon	1 ea.

NOTE: ANG units will replace first aid kits with the E&E Kit Medical & Survival Module on an attrition basis.

Table 7.11. (Added-ACC) Survival Vest Minimum Components.

Noun	Quantity
Camouflage Stick or Pack	1 ea.
Compass, Magnetic	1 ea.
Flare, Signal, MK-13 MOD "O"/MK-124 MOD "O"	1 ea.
First Aid Kit (E&E Kit Medical and Survival Module) (Note 4)	1 ea.
Insect Repellent	1 ea.
Distress Marker Light (Strobe Light) (Note 1)	1 ea.
Tourniquet	1 ea.
Weapon (Note 2) a. Pistol, semiautomatic, 9MM: M9. b. Holster (9MM) part No. 9646539 may be installed.	1 ea.
Radio, earphone and carrying case, plus spare batteries as noted.	1 ea.

PRC-90-2 (one spare battery)	
PRC-112 Series (two spare batteries)	
AN-PRQ/7 Combat Survivor Evader Locator (CSEL) (two spare batteries)	
Water, drinking, flexible package (FPDW)	4 pkg.
Transmitter, Phoenix Jr., IR	3 ea.
Battery, 9 Volt	3 ea.
GPS device	See Note 3

NOTE:

1. Not required if installed on torso harness or back style parachute.
2. Weapon will be required as SPINS/mission dictates.
3. Use of GPS devices is a unit option. Authorized GPSs and procedures for maintaining them can be found on ACC AFE CoP.
4. ANG units will replace first aid kits with the E&E Kit Medical and Survival Module on an attrition basis.

Table 7.12. (Added-ACC) ML-4 (Guardian Angel Use Only) Survival Kit Minimum Components.

Table 7.12.1. (Added-ACC) Real-World Use.

Noun	Quantity
One-man Liferaft (LRU-16/P or equivalent)	1 ea.
Raft repair Plugs	2 ea.
Mirror, glass, 2 inches by 3 inches	1 ea.
Signal Panel or Sea Dye Marker	1 ea.

Table 7.12.2. (Added-ACC) Training Use. Guardian Angel ML-4 survival kits marked for “*Training Use Only*” will have the following MANDATORY components:

Noun	Quantity
One-man Liferaft (LRU-16/P or equivalent)	1 ea.
Raft repair plugs	2 ea.

Table 7.13. (Added-ACC) T-9/AC-9 Life Raft Survival Kit Minimum Components.

Noun	T-9	AC-9
Flare, Signal, MK-13 MOD "O"/MK-124 MOD "O"	4 ea.	2 ea.
Distress Marker Light (Strobe Light)	1 ea.	1 ea.
Compass, magnetic	1 ea.	1 ea.
Mirror, glass, 2 inches by 3 inches	1 ea.	1 ea.
First Aid Kit, Individual/Tropical or E&E Kit Medical and Survival Module	3 ea.	3 ea.
Bag, water storage, 1 quart	3 ea.	3 ea.
Sponge, olive drab	2 ea.	2 ea.
Water, drinking, flexible package (FPDW)	14 pkg.	14 pkg.
Repair kit, life raft, w/pliers	1 ea.	1 ea.
Repair kit (mfr. p/n - 64736-101)	0	1 ea.
AFTTP (1)3-2.26 (FM 21-76-1), Survival, evasion and recovery	1 ea.	1 ea.
Packet, sea dye marker	4 ea.	1 ea.
Kit, fishing	1 ea.	1 ea.
Ointment, sunburn, preventive (Sunscreen)	7 ea.	7 ea.
Cord, nylon, type I, 30-ft length	2 ea.	2 ea.
Blanket, combat casualty	3 ea.	3 ea.
Lipstick, anti chap	5 ea.	5 ea.
Whistle	1 ea.	1 ea.
Camouflage Stick or Pack	1 ea.	0
Desalinator, manual reverse osmosis	1 ea.	0
Tourniquet	1 ea.	1 ea.
Insect Repellent	4 ea.	0
Canopy	1 ea.	Part of raft
Mast, canopy	1 ea.	0
Rods, canopy	5 ea.	0
Bucket, bailing	1 ea.	1 ea.

Radio, earphone and carrying case, plus spare batteries as noted. PRC-90-2 (one spare battery) PRC-112 Series (two spare batteries) AN-PRQ/7 Combat Survivor Evader Locator (CSEL) (two spare batteries)	1 ea.	1 ea.
---	-------	-------

7.9. (Added-ACC) Life Rafts and Life Preservers.

7.9.1. **(Added-ACC)** Inspection, maintenance, repair, and component replacement of life rafts and life preservers will be accomplished IAW 14S-series T.O.

7.9.2. **(Added-ACC)** Multi-place life raft accessory containers will be inspected, maintained, and packed IAW 14S-series T.O. Components will be installed as listed IAW 14S-series T.O.

7.9.3. **(Added-ACC)** Life Rafts will be carried on all over-water flights and will be of the type and number specified in T.O. 14S3-1-3 and Tables A7.1 through A7.9 of this supplement.

7.9.4. **(Added-ACC)** T-9 life rafts are authorized for use until no longer serviceable and will be replaced with the AC-9 life raft.

7.10. (Added-ACC) AFE Oxygen Equipment.

7.10.1. **(Added-ACC)** The following guidelines are intended to minimize the risk of contacting or transmitting infectious disease: Use nitrile gloves (or equivalent) during post flight/periodic inspection and cleaning of oxygen masks. Gloves will be removed and replaced with new gloves after each postflight/periodic inspection. Wash hands thoroughly with soap and water after removing gloves, and immediately after contact with blood or other potentially infectious material.

7.10.2. **(Added-ACC)** The next inspection due date will be placed on the oxygen mask in a wing standardized position. Aircraft with prepositioned Quick Don and Passenger Oxygen Masks will have the due date annotated on the AFTO Form 46.

7.10.3. **(Added-ACC)** Aircraft installed anti-smoke mask goggles (P/N 322-70) will be attached to the quick-don mask with the exception of E-3. Consult the MAJCOM technical order options list for additional guidance.

7.10.4. **(Added-ACC)** Oxygen mask installed on Contract Supported aircraft are the responsibility of the owning maintenance function. This maintenance function is responsible for the day-to-day care, cleaning, storage, and pickup and delivery to the AFE section when masks require periodic inspection or modification. The inspection due date will be annotated on the mask.

7.10.5. **(Added-ACC)** POK assemblies consist of MD-2 cylinder, yellow passenger oxygen mask (PN: 289-601AF8), AMCV 50-2, and carrying bag. Substitute equipment is not

authorized. **NOTE:** (Added) AMCVA 50-2 may be used pending development of a departmental or ACC visual aid to replace it.

7.10.5.1. **(Added-ACC)** POKs will be inspected prior to issue and cleaned/inspected every 30 days when pre-positioned on aircraft. All other operational POKs will be cleaned and inspected at intervals not to exceed 180 days.

7.10.5.2. **(Added-ACC)** To minimize loss of the instruction pamphlet, attach Visual Aid (AMCVA 50-2) with a cord and place in the carrying bag pocket. The oxygen kit bag will be locally manufactured IAW T.O. 15X5-2-4-1. Minor deviations or modifications to improve POK bag are authorized.

7.10.5.3. **(Added-ACC)** POKs will be stored and issued in footlockers or equivalent storage containers. A DD Form 1574 will be attached to the outside of the container. All other records will be maintained in ALSMS/ALERTS.

7.10.5.4. **(Added-ACC)** When maintenance is performed, personnel must ensure the yellow mask and hose assembly are inspected and packed as specified in T.O. 15X5-2-4-1. The mask will not be placed in an interlocking plastic bag or other covering and will not be wrapped or tied in any way.

7.10.5.5. **(Added-ACC)** Footlockers/containers will be painted oxygen cylinder green and stenciled with one-inch legible letters on the top, front, and rear with the following instructions: **WARNING: THIS CONTAINER IS TO BE USED FOR PASSENGER OXYGEN KITS ONLY. NO OTHER ITEMS WILL BE PLACED IN THIS CONTAINER.**

7.10.6. **(Added-ACC)** AFE personnel are not required to maintain helmets for those RC-135S, TC-135S, WC-135W, OC-135B, and RC-135U aircrew who utilize pre-positioned oxygen equipment and do not require use of a helmet in flight.

7.10.7. **(Added-ACC)** Emergency egress breathing devices (EEBDs) will be pre-positioned aboard the aircraft as specified in appropriate tables. EEBDs may be positioned on board the aircraft in a helmet bag or equivalent locally manufactured storage method clearly marked with 1-inch stencil "Emergency Escape Breathing Device" until aircraft have permanent mounting plates installed at fixed locations.

7.11. (Added-ACC) Oxygen Mask Connector/Quick Disconnect Inspections.

7.11.1. **(Added-ACC)** A-10, R/QF-4, F-15, F-16, and B-1B, and B-2 aircraft oxygen connectors are inspected in conjunction with the periodic/routine parachute inspection. A record of this inspection will be maintained in ALSMS/ALERTS.

7.11.2. **(Added-ACC)** Oxygen connectors will be stored and inspected with the parachute or oxygen mask for aircraft where the parachutes are stored in AFE sections and carried to aircraft by the aircrew prior to each flight.

7.11.3. **(Added-ACC)** For aircraft with pre-positioned parachutes (non-integrated), the oxygen connector is retained on the aircrew member's oxygen mask delivery tube. The connector will be inspected in conjunction with the oxygen mask. Separate AFTO Forms 334CG are not required when the connector remains installed on the oxygen mask hose.

7.11.4. **(Added-ACC)** AFE sections will inspect and maintain oxygen mask connectors attached to testers used for preflight. The inspections will be recorded in ALSMS/ALERTS on AFTO Form 334CG.

7.11.5. **(Added-ACC)** Units opting to use the CRU-60/P in lieu of the CRU-94/P are required to store the CRU-94 in the following manner: All CRU-94/Ps will be vacuum packed and tagged using a DD Form 1574. G-vest port plugs will be installed (if available). Vacuum packed CRU-94/Ps will be stored IAW T.O. 15X-1-1.

7.12. (Added-ACC) Parachutes and Lifelines.

7.12.1. **(Added-ACC)** Personnel parachutes will be installed on board aircraft IAW T.O. 14D1-1-1, the appropriate 11-2MDS V3 series instruction, and this AFI. The BA-series parachute on the B-1 is used for bailout purposes only.

7.12.2. **(Added-ACC)** AFE technician preflight inspections are not required to be accomplished on personnel parachutes pre-positioned aboard aircraft or those issued to individuals on a permanent basis if parachutes are stored in a controlled environment, however, preflight by the aircrew member is required.

7.13. (Added-ACC) Flash-blindness Protection Devices.

7.13.1. **(Added-ACC)** Preposition goggles on alert configured aircraft as directed by specific OPODs or HHQ taskings. Quantities of flash-blindness devices will be as specified in the appropriate aircraft equipment table.

7.13.2. **(Added-ACC)** MIL-G-635 flash-blindness goggles will be placed on a 1/4-inch thick piece of sponge rubber in the bottom of the box. Put the goggle face down in the box. One eye patch will be put in the flash-blindness kit. Eye patches used by crewmembers that are not provided a flash-blindness kit will be inspected at the same time as flash-blindness kits. These eye patches will be packed in a small box closed with tape, with a 1-inch pull tab for quick opening. Seal the flash-blindness goggle kit box with thread, ticket 8/4, and a lead seal to ensure rapid access to the goggle; do not knot the ends of the 8/4 thread. For those kits controlled as sets (flash-blindness goggles and eye patches), one DD Form 1574 will suffice. Kits controlled as separate items will have DD Form 1574 attached to each item. Inspections of EEU-series PLZT goggles will be documented in ALSMS/ALERTS. AF Form 1574 will be attached to the outside of each storage/carrying case. Document all inspections performed and inspection due dates on the reverse side of DD Form 1574.

7.13.3. **(Added-ACC)** Each PLZT goggle storage container will be modified by cutting an outline (3/4-inch deep) of a monocular eye shield into the upper right portion of the lid protective cushioning material. Eye shields will be stored face down in the foam cut-out with the elastic string stowed to leave a slight loop. Seal goggle storage containers with AFTO Form 255, *Notice Certification Void When Seal is Broken*.

7.13.4. **(Added-ACC)** In the event additional monocular eye shields are required units may place them on the aircraft in a suitable container.

7.14. (Added-ACC) Protective Clothing Kit (PCK).

7.14.1. **(Added-ACC)** Position PCKs on aircraft as specified in applicable configuration directives. PCKs contain protective clothing for use by aircrews during emergencies aboard aircraft carrying dangerous cargo, as outlined in AFMAN 24-204, *Preparing Hazardous*

Materials for Military Air Shipments. Aircraft installed smoke masks may be used to meet AFMAN 24-204 requirements. For the movement of Class A poisons, biological, or other etiologic agents, the shipper will provide the protective equipment required for crew members. Refer to Attachment 9 of AFI 11-301V2, *Maintenance and Configuration Requirements for Mobility Air Forces (MAF) Aircrew and Aircraft-Installed Aircrew Life Support Equipment (ALSE)*, for minimum PCK components.

7.14.2. **(Added-ACC)** Pack and seal PCKs in a locally manufactured metal, hardened plastic, or fiberglass container not to exceed 12 by 18 by 24 inches. Stencil each container with a local control number and weight using letters at least 1-inch high. In addition, stencil each container with letters at least 1-inch high as follows: ***KIT--PROTECTIVE CLOTHING EMERGENCY USE FOR IN-FLIGHT HANDLING OF DANGEROUS CARGO ACIDS, TOXIC MATERIALS, CLASS B AND C POISONS***

7.14.3. **(Added-ACC)** Visually inspect the contents of PCKs every 12 months. Record these inspections in ALSMS/ALERTS on AFTO Form 338CG and affix a DD Form 1574 to show the next inspection due date.

7.15. (Added-ACC) Emergency Oxygen Cylinders.

7.15.1. **(Added-ACC)** AFE is responsible for the inspection and maintenance of emergency bailout oxygen cylinders needed to support POKs and back style parachutes used on multi-place aircraft.

7.16. (Added-ACC) Aircrew Laser Eye Protection.

7.16.1. **(Added-ACC)** AFE is responsible for the inspection, maintenance and storage of Aircrew Laser Eye Protection.

7.17. (Added-ACC) Maintenance Support.

7.17.1. **(Added-ACC)** AFE sections requiring maintenance support for repair of survival items such as radios, life rafts, or emergency oxygen cylinders will accomplish the applicable forms and forward items to the appropriate maintenance activity for repair or overhaul. AFE Section NCOICs will coordinate with maintenance activities to ensure inspection/maintenance capability. All equipment returned to the AFE section from maintenance support activities will be given a quality acceptance inspection.

Chapter 8 (Added-ACC)

DEPLOYMENT AND CONTINGENCY OPERATIONS

8.1. (Added-ACC) 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.

8.1.1. **(Added-ACC)** This chapter establishes guidelines for AFE personnel and equipment required to support contingency operations.

8.2. (Added-ACC) Responsibilities.

8.2.1. **(Added-ACC)** Group and Squadron Commanders.

8.2.1.1. **(Added-ACC)** Ensure compliance with this chapter and keep AFE personnel informed of the group's existing and forthcoming contingencies/commitments.

8.2.1.2. **(Added-ACC)** Ensure unit's annual financial plan includes a budget for maintaining AFE to meet all probable peacetime and wartime missions.

8.2.2. **(Added-ACC)** FEO/AFES.

8.2.2.1. **(Added-ACC)** Ensure standardized unit deployment/mobility local directives are developed to recall, deploy, employ, and redeploy AFE personnel, equipment, and supplies. These directives will include all necessary information required to setup, employ, resupply, and staff the Aircrew Contamination Control Area (ACCA) used by each unit.

8.2.2.2. **(Added-ACC)** Identify equipment shortages resulting in mission impairment as required by the Status of Resources and Training System reporting process IAW AFI 10-201, *Status of Resources and Training System*.

8.2.2.3. **(Added-ACC)** Ensure copies of MSDSs are available for each type of hazardous material being shipped to deployed locations.

8.2.2.4. **(Added-ACC)** Ensure items listed in LOGDET and Contingency Operations/Mobility Planning and Execution System listings are on hand and serviceable. Units must also review and comply with theater specific reporting instructions for specialized AFE requirements. Section NCOICs, through the FEO, OSS commander, and Operations Group commander will notify their MAJCOM of shortfalls in their mobility packages as directed by the MAJCOM.

8.2.2.5. **(Added-ACC)** Ensure unit staffing, training, and equipment are maintained and capable of supporting tasked UTCs IAW AFI 10-401, *Air Force Operations Planning and Execution*. Develop and ensure theater specific AFE training is conducted prior to and during deployments, as required. Responsibilities include but are not limited to the following functions:

8.2.2.5.1. **(Added-ACC)** Develop and provide standardized deployment and ACDE/AERP equipment packages for unit commitments, to include bare-base and self-sustaining operations, as described in the unit DOC statements.

8.2.2.5.2. **(Added-ACC)** Establish and implement AFE programs based on DOC statements, OPLANs, tasked UTCs, and mission changes.

8.2.2.5.3. **(Added-ACC)** Ensure manpower type (MNT) codes (first two positions) are properly coded on unit manpower document (UMD) (i.e., XX, required peacetime and wartime - in-place; XW, required peacetime - in place/wartime - deploys inter-theater) to identify staffing requirements to support current UTCs (i.e., XW is used to identify the number of staffing positions unit is tasked to deploy). For required only (unfunded) offset positions, RA=XX and RR=XW.

8.2.2.5.4. **(Added-ACC)** Ensure military essentiality status codes are coded "A" for active duty and "J" for ARC forces IAW AFI 38-204, *Programming USAF Manpower*. All AFE positions are mission essential and coded for mobility, to support unit tasked UTCs ("XXZ99") and back-fill deployed AFE technicians on a rotational basis.

8.2.2.5.5. **(Added-ACC)** Ensure an adequate amount of AFE technicians are initially qualified to process hazardous cargo and subsequent refresher training is accomplished as required.

8.2.2.5.5.1. **(Added-ACC)** Ensure an adequate amount of AFE technicians are trained to prepare cargo and build pallets for deployment and redeployment operations and are fork lift qualified to expedite movement of mobility gear during contingencies IAW AFI 10-403, *Deployment Planning and Execution*.

8.2.2.6. **(Added-ACC)** Coordinate with appropriate wing agencies to ensure AFE requirements are sustained during deployment or contingency operations (i.e., base supply, hospital, medical supply, MASO, disaster preparedness, etc.).

8.2.2.7. **(Added-ACC)** Identify items for bare-base operations and maintenance to include: ACCA shelter operations, tents, portable equipment racks, shuffle boxes, laptop computers, portable radios, etc. Quantities of these items will be determined based on mission requirements. Laptop computers are required to load CSEL and ALERTS. Approved portable handheld radios are required for communication between AFE and Emergency Operations Center (EOC). NOTE: Laptop computers that contain PRC-112 /CSEL software with loaded frequencies/waypoints will be handled as classified material.

8.2.2.8. **(Added-ACC)** Ensure items listed in LOGDET and packing list are on-hand and inspected.

8.2.3. **(Added-ACC)** Pilot and Non-pilot Units.

8.2.3.1. **(Added-ACC)** Pilot Units, with assistance from non-pilot units, are responsible for developing and maintaining the standard LOGDET for each UTC assigned to it. The unit must comply with responsibilities IAW AFI 10-401. The goal is a uniform package for all units using the UTC. Coordinate change requests through respective MAJCOM AFE manager.

8.2.3.2. **(Added-ACC)** Non-pilot units will review assigned UTC equipment listings on a biennial basis. Provide the pilot unit with suggested changes.

8.3. **(Added-ACC)** Mobility Preparation.

8.3.1. **(Added-ACC)** 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 and ANG personnel (per unit) will be trained and qualified to prepare hazardous materials.

8.3.2. **(Added-ACC)** If applicable, ensure personnel are qualified in unit assigned aircrew weapons to include issue, operations, cleaning, and security requirements.

8.3.3. **(Added-ACC)** All personnel will be current in essential ancillary training and wartime skills identified in CFETP 1POX1 prior to deployment.

8.3.4. **(Added-ACC)** Air Expeditionary Wings (AEW) and AEF units must coordinate with each other, as well as the MAJCOM, to ensure appropriate and adequate equipment/supplies are deployed.

8.3.5. **(Added-ACC)** Units experiencing a shortage of AFE may work with units with similar MDS aircraft to satisfy requirements. Coordinate all equipment requirements through the MAJCOM to ensure other units' deployment capabilities are not hampered.

8.3.6. **(Added-ACC)** 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. Bins will be stored in a climate controlled environment to minimize damage to contents.

8.3.7. **(Added-ACC)** Ensure sufficient quantities of equipment, parts, supplies, forms, inspection records, T.O.s and computers are packed to support UTC LOGDET requirements and extended combat operations.

8.3.8. **(Added-ACC)** In addition to all maintenance equipment and supplies, portable or deployable equipment racks, workbenches, and storage bins will be included in the mobility package.

8.3.9. **(Added-ACC)** Ensure equipment stored in the mobility bins or boxes is inventoried and inspected for serviceability at least annually. 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.

8.3.10. **(Added-ACC)** Ensure Test Measurement and Diagnostic Equipment (TMDE) 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.

8.3.11. **(Added-ACC)** The primary duty weapon for AFE technicians is the M9 (9mm) pistol.

8.3.11.1. **(Added-ACC)** Units will maintain weapons IAW AFMAN 23-110 and ensure appropriate quantities of M9s are available IAW Allowance Source Code 538E.

8.3.11.2. **(Added-ACC)** AFE technicians are classified as Arming Group B IAW AFI 31-207, *Arming and Use of Force by Air Force Personnel*. Commanders will ensure they have established annual unit level weapons proficiency/mechanical training, as allowed by AFI 36-2226, *Combat Arms Program*, paragraph 5.4.3. As a minimum, this training

will include Use of Force, weapons handling procedures, operations, cleaning, and security requirements, as applicable, for M9 and M16A2 rifle IAW AFD 16-8, *Arming of Aircrew, Mobility, and Oversea Personnel*. The use of weapons simulators/virtual training systems is highly recommended.

8.4. (Added-ACC) Deployment.

8.4.1. **(Added-ACC)** Ensure deploying AFE and accompanying inspection forms are sanitized of data pertaining to unit of assignment or activity.

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

8.4.2.1. **(Added-ACC)** Issue weapons IAW applicable Air Force instructions. Not applicable to GA AFE sections.

8.4.2.2. **(Added-ACC)** Ensure aircrew sanitizes their flight equipment.

8.4.2.3. **(Added-ACC)** Personnel locator beacons and survival radios will be configured based on established theater requirements or as directed by the EOC.

8.4.2.4. **(Added-ACC)** Configure aircraft AFE for appropriate contingency operations.

8.5. (Added-ACC) Employment.

8.5.1. **(Added-ACC)** As applicable, upon arrival at deployed location, AFE supervision will establish contact with the EOC and CE readiness management personnel to coordinate plans for 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.

8.5.2. **(Added-ACC)** Each AFE section should establish an organizational NIPRNET and SIPRNET account to ensure effective communications. If an organizational SIPRNET account is not available, efforts should be taken to gain access to the SIPRNET to conduct deployed operations.

8.5.3. **(Added-ACC)** Follow theater, MAJCOM, and unit specific guidance for employed area operations and redeployment.

8.5.4. **(Added-ACC)** Units should report all shortfalls through deployed leadership to minimize impact on theater capability.

8.6. (Added-ACC) Counter-Nuclear, Biological, Chemical (C-NBC) Defense Operations.

8.6.1. **(Added-ACC)** Ensure the full basis of issue (BOI) for aircrew C-NBC operations (refer to Table 8.1. of this supplement) 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.

8.6.2. **(Added-ACC)** Units may assemble sufficient CRU-80/P filter packs (with M13A2 filters installed) to accommodate rapid processing of initial cadre deploying aircrew. Inspect built-up filter packs as required by governing T.O.s, JACKS

(<https://jacks.jpeocbd.osd.mil/>), and Army Service Bulletin (SB) 3-30-2. Disassemble the remaining filter packs and place parts in resealable bags ready for immediate installation of filter elements. Procedures will be established and personnel/tools will be made available for mass filter element installation.

8.6.3. **(Added-ACC)** Vacuum packing the completed CRU-80/P assembly to extend the filter element service-life to 2 years IAW T.O. 14P3-1-131 is highly encouraged.

8.6.4. **(Added-ACC)** Unit AFE personnel will maintain individual aircrew sizing information in ALERTS or equivalent, be responsible for requisitioning, fitting, and maintaining ACDE/AERP equipment, and be readily available for donning and doffing operations

8.6.5. **(Added-ACC)** 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 supplement.

Table 8.1. (Added-ACC) AIRCREW CHEMICAL DEFENSE EQUIPMENT BASIS-OF-ISSUE (BOI).

Nomenclature	D-Bag Quantities	D-1 "Mini" Bag Quantities	Total Quantities
MBU-19/P, Mask/Filter Manifold	0	1	1
CQU-7/P, Blower and Hose Assembly	0	1	1
Pigtail Adapter	0	1	1
Inline Filter Assembly	1	1	2
Filter, Oxygen Emergency Assembly	1	1	2
Blower Batteries, Lithium	2	2	4
Aircrew Coverall, CWU-66/P (Notes 1 and 4)	1	1	2
Strap Fastener, Blower Battery Cover	2	2	4
Filter Canister, C2A1	2	2	4
Protective Gloves 7 Mil Butyl	1 pr	1 pr	2pr
Glove Inserts	1 pr	1 pr	2 pr
Cotton Undergarments (optional)	1	1	2
Disposable Footwear Cover,	2 pr	2 pr	4 pr

Overboot			
Suspension Straps	0	3	3
Aircrew Cape, Disposable	2	2	4
MXU-835/P, Intercom Unit	0	1	1
Battery, 9-volt	0	1	1
MBU-13/P, CBO Mask (Note 2)	0	1	1
HGU-41/P, Protective Hood (Note 2)	1	1	2
CRU-80/P, Filter Pack (Note 2)	0	1	1
M13A2, Filter Set (Note 2)	1	1	2
Decon Kit, M295 (Notes 4, 5, 6)	0	1	1

NOTES: (Added)

1. Cotton undergarments are optional with the CWU-66/P.
2. These items are authorized when the AERP system (mask and blower) is not available or assigned aircraft are not modified.
3. Use of flight suit is suitable for training purposes.
4. Use of simulated M295 is required for training purposes.
5. One M295 kit consists of 5 ea. M295 mitts.
6. M295 kits will be bulk stored in original shipping package. Packages will only be opened and distributed when directed to do so by command authority (i.e. installation commander, MAJCOM directives, SPINS, etc.)

8.7. (Added-ACC) Deployment Operations/Mobility Preparation.

8.7.1. **(Added-ACC)** Configure aircraft-installed and aircrew-issued AFE, survival vests, and parachutes for contingency operations. All aircrew will have their individual AFE combat configured prior to the first employment mission.

8.7.2. **(Added-ACC)** Mobility bins and boxes will be available for storage and deployment of AFE.

8.7.3. **(Added-ACC)** 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 90 days without resupply. Sufficient test equipment must be available to meet deployment commitments and have current calibrations documented. In addition, units may establish WRM for swing stock IAW AFI 25-101. **NOTE:** ANG units will comply with minimum resupply time requirements of AFI 10-401.

8.7.4. **(Added-ACC)** Include portable or deployable equipment racks, work benches, storage bins, computers, etc., in the contingency package (LOGDET). Facility considerations (stand-up shop) will include all AFE storage and maintenance requirements.

8.7.5. **(Added-ACC)** Complete a detailed packing list and diagram for each mobility bin or box. Ensure packing list is “user” friendly so all AFE personnel may find equipment and supplies stored in bin or box.

8.7.6. **(Added-ACC)** Prepackage equipment and supplies designated for contingency commitments to the maximum extent at all times. Secure and store assets/equipment IAW AFI 25-101. Do not use these assets as a source of supply for daily peacetime operations at home-station.

8.7.7. **(Added-ACC)** Establish weapons and ammunition issue, receipt, accountability, and control procedures IAW AFI 31-207 and AFMAN 31-229, *USAF Weapons Handling Manual*, as appropriate. Record information on AF Form 629, *Small Arms Hand Receipt*, AF Form 1297, *Temporary Issue Receipt* or a master control roster. Any deviations to weapons issue procedures must be approved IAW AFI 31-207. Protect weapons under field conditions IAW AFI 31-101, *Integrated Defense*.

8.8. (Added-ACC) Deployment of Inspection Records.

8.8.1. **(Added-ACC)** Establish procedures to ensure AFE records accompany the deployed AFE personnel.

8.9. (Added-ACC) Aircrew Chemical Defense.

8.9.1. **(Added-ACC)** Establish procedures to ensure deploying aircrew hand-carry at least one complete ACDE/AERP ensemble (D-1 “mini” bag).

8.9.1.1. **(Added-ACC)** Carefully package ACDE/AERP equipment components to prevent damage.

8.9.2. **(Added-ACC)** Ensure deployable equipment and trained technicians are available for AFE and ACCA operations. Upon arrival at deployed location, AFE will establish contact with EOC and emergency management personnel to coordinate plans for ACCA construction and operation during increased stages of alert. ACCA operations should be collocated with ground-crew CCA stations whenever possible. However, separate the aircrew and ground-crew CCA functions by a minimum distance of 50 feet.

8.9.3. **(Added-ACC)** Should staffing requirements and mission needs dictate, deployable augmentee 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).

8.9.4. **(Added-ACC)** Aircrew ACDE/AERP ensemble sizes. AFE units must deploy with crew members’ individual ACDE/AERP ensemble size information to give AFE personnel the capability to requisition sized items as necessary for deployed aircrew. Units may develop local procedures to provide crew members their individual size information to have on their person while deployed.

DANIEL J. DARNELL, Lt Gen, USAF
DCS, Operations, Plans and Requirements

(ACC)

WILLIAM M. FRASER III, General, USAF
Commander

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.

AIR FORCE PUBLICATIONS

AFMAN 10-100, *Airman's Manual*, 01 Jun 2004

(Added-ACC) ACCI 11-459, High Altitude Reconnaissance Mission Support Program, 26 August 2004

(Added-ACC) ACC DIR 90-2501, Compliance and Standardization Requirements List (C&SRL)--Aircrew Flight Equipment (AFE) Functional Area, 1 September 2007

(Added-ACC) AFI 90-201 ACC SUP 1, *Inspector General Activities*, 19 August 2005

(Added-ACC) AFMAN 31-229, USAF Weapons Handling Manual, 12 May 2004

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

AFI 10-403, *Deployment Planning and Execution*, 13 Jan 2008

AFI 10-601, *Capabilities-Based Requirements Development*, 31 Jul 2006

AFI 10-701, *Operations Security (OPSEC)*, 18 Oct 2007

AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*, 24 Jan 2007

AFI 10-2601, *Counter-Chemical, Biological, Radiological and Nuclear Operations* (forthcoming)

AFMAN 10-2602, *Nuclear, Biological, Chemical, and Conventional (NBCC) Defense Operations and Standards*, 29 May 2003

AFMAN 10-2605, *Education, Training and Exercise Competencies for Counter-Chemical, Biological, Radiological and Nuclear Operations*, 30 Jun 2008

(Added-ACC) AFI 11-202V3_ACC SUP, *General Flight Rules*, 27 Feb 2007

AFI 11-2AE, Volume 3, *Aeromedical Evacuation (AE) Operations Procedures*, 18 May 2005

(Added-ACC) AFI 11-2HC-130V3, Addenda A, *Rescue HC/MC-130P Configuration/Mission Planning Guide*, 15 Apr 2008

AFI 11-2MDS-Series, Volume 1, *Aircrew Training*, (see applicable MDS volume 1)

AFI 11-202, Volume 1, *Aircrew Training*, 17 May 2007

AFI 11-202, Volume 3, *General Flight Rules*, 05 Apr 2006

AFI 11-215, *USAF Flight Manuals Program (FMP)*, 06 Apr 2005

(Added-ACC) AFI 11-401, *Aviation Management*, 7 March 2007

(Added-ACC) AFI 23-201, *Fuels Management*, 1 Dec 2009

(Added-ACC) AFI 31-101, *Integrated Defense (GM)*, 8 October 2009

AFPD 11-3, *Life Support*, 09 Apr 1993

AFI 11-301, Volume 1, *Aircrew Flight Equipment (AFE) Program*, (2009 revision)

AFI 11-301, Volume 2, *Maintenance and Configuration Requirements for Mobility Air Forces (MAF) Aircrew and Aircraft-Installed Aircrew Life Support Equipment (ALSE)*, 01 May 2006

AFI 11-301, Volume 3, *Aircrew Flight Equipment (AFE) Combat Operations* (forthcoming)

AFI 11-301, Volume 4, *Aircrew Laser Eye Protection (ALEP)*, 21 Feb 2008

AFI 11-401, *Aviation Management*, 07 Mar 2007

AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*, 25 Sep 2007

AFI 11-403, *Aerospace Physiological Training Program*, 20 Feb 2001

AFI 11-410, *Personnel Parachute Operations*, 04 Aug 2008

AFI 13-208, *Personnel Recovery Coordination Cell Operating Procedures*, 10 Mar 2007

AFI 14-105, *Unit Intelligence Mission and Responsibilities*, 03 Jun 2002

AFPD 16-8, *Arming of Aircrew, Mobility, and Oversea Personnel*, 18 May 1993

AFI 16-1301, *Survival, Evasion, Resistance, and Escape (SERE) Program*, 06 Sep 2006

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 29 Jun 2006

AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting*, 14 Dec 2005

AFI 21-201, *Conventional Munitions Maintenance Management*, 23 Nov 2007

AFPD 21-3, *Technical Orders*, 10 Jul 2006

AFI 21-303, *Technical Orders*, 08 Oct 2006

AFMAN 23-110, Volume 1, Part 1, *Basic AF Supply Procedures*, 01 Jul 2008

AFMAN 23-110, Volume 2, Part 2, *USAF Standard Base Supply System*, 01 Jul 2008

AFMAN 23-110, Volume 2, Part 13, *Standard Base Supply Customer's Procedures*, 01 Jul 2008

AFMAN 23-110, Volume 4, Part 1, *Air Force Equipment System Policy and Procedures*, 01 Jul 2008

AFI 23-111, *Management of Government Property in Possession of the Air Force*, 25 Jul 2005

AFMAN 23-220, *Reports of Survey for Air Force Property*, 01 Jul 1996

AFMAN 24-204(I), *Preparing Hazardous Materials for Military Air Shipments*, 15 Apr 2007

AFI 24-301, *Vehicle Operations*, 01 Nov 2001

AFI 25-101, *War Reserve Materiel (WRM) Program Guidance and Procedures*, 02 May 2005

AFI 25-201, *Support Agreements Procedures*, 01 May 2005

AFI 31-101, *Air Force Installation Security Program*, 01 Mar 2003

AFI 31-207, *Arming and Use of Force by Air Force Personnel*, 01 Sep 1999

AFMAN 31-229, *USAF Weapons Handling Manual*, 12 May 2004

AFI 32-1024, *Standard Facility Requirements*, 31 May 1994

AFH 32-1084, *Facility Requirements*, 01 Sep 1996

AFI 32-2001, *The Fire Protection Operations and Fire Prevention Program*, 01 Apr 1999

AFPD 32-40, *Disaster Preparedness*, 01 May 1997

AFMAN 32-4005, *Personnel Protection and Attack Actions*, 30 Oct 2001

AFI 32-7086, *Hazardous Materials Management*, 01 Nov 2004

AFI 33-322, *Records Management Program*, 07 Oct 2003

AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections*, 01 Jun 2000

AFH 33-337, *The Tongue and Quill*, 01 Aug 2004

AFI 33-360, *Publications and Forms Management*, 18 May 2006

AFMAN 33-363, *Management of Records*, 1 Mar 2008

AFI 33-364, *Records Disposition--Procedures and Responsibilities*, 22 Dec 2006

AFI 36-2101, *Classifying Military Personnel (Officers and Enlisted)*, 07 Mar 2006

AFI 36-2201, Volume 2, *Air Force Training Program Training Management*, 13 Jan 2004

AFI 36-2201, Volume 3, *Air Force Training Program On the Job Training Administration*, 04 Feb 2005

AFI 36-2201, Volume 5, *Air Force Training Program Career Field Education and Training*, 08 Jun 2004

AFI 36-2217, *Munitions Requirements for Aircrew Training*, 01 Nov 2000

AFI 36-2226, *Combat Arms Program*, 26 Feb 2003

AFMAN 36-2236, *Guidebook for Air Force Instructors*, 12 Nov 2003

AFPAM 36-2241, *Professional Development Guide*, 01 Jul 2007

AFI 36-2406, *Officer and Enlisted Evaluation Systems*, 15 Apr 2005

AFI 36-2618, *The Enlisted Force Structure*, 01 Dec 2004

AFI 36-2803, *The Air Force Awards and Decorations Program*, 15 Jun 2001

AFI 36-2807, *Headquarters United States Air Force Deputy Chief of Staff Operations, Plans and Requirements Annual Awards Program*, 18 Jul 2007

AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*, 02 Aug 2006

AFI 38-101, *Air Force Organization*, 04 Apr 2006

AFI 38-201, *Determining Manpower Requirements*, 30 Dec 2003

AFI 38-204, *Programming USAF Manpower*, 01 Aug 1999

AFI 38-401, *The Air Force Innovative Development Through Employee Awareness (IDEA) Program*, 21 Nov 2007

AFJI 44-117, *Ophthalmic Services*, 01 Jan 1986

AFI 48-101, *Aerospace Medical Operations*, 19 Aug 2005

AFI 48-116, *Food Safety Program*, 17 Mar 2004

AFI 48-123, *Medical Examinations and Standards*, 05 Jun 2006

AFI 48-145, *Occupational and Environmental Health Program*, 05 Mar 2008

AFI 63-124, *Performance-Based Services Acquisition*, 01 Aug 2005

AFI 63-1201, *Life Cycle Systems Engineering*, 23 Jul 2007

AFI 65-601, Volume 1, *Budget Guidance and Procedures*, 03 Mar 2005

AFI 90-201, *Inspector General Activities*, 22 Nov 2004

AFI 90-821, *Hazardous Communications*, 30 Mar 2005

AFI 90-901, *Operational Risk Management*, 01 Apr 2000

AFPAM 90-902, *Operational Risk Management (ORM) Guidelines and Tools*, 14 Dec 2000

AFMAN 91-201, *Explosives Safety Standards*, 18 Oct 2001

AFI 91-202, *The US Air Force Mishap Prevention Program*, 01 Aug 1998

AFI 91-204, *Safety Investigations and Reports*, 14 Feb 2006

AFI 91-205, *Non-nuclear Munitions Safety Board*, 01 Jul 1998

AFPAM 91-211, *USAF Guide to Aviation Safety Investigation*, 23 Jul 2001

AFMAN 91-223, *Aviation Safety Investigations and Reports*, 06 Jul 2004

AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Prevention, and Health (AFOSH) Program*, 01 Jul 1996

AFI 91-302, *Air Force Occupational Environmental Safety, Fire Protection, and Health (AFOSH) Standards*, 18 Apr 1994

AFMS 13C1, *Current Operations Flight*, 06 Feb 1996

AFMS 21B1, *Survival Equipment*, (Part 1, 23B1.1.), 16 Sep 1996

CMS 31C1, *Aircrew Life Support*, 02 May 2007

AFR 64-4, Volume 1, *Survival Training* (projected to be AFMAN 36-2216), 15 Jul 1985

AFP 64-15, *Survival and Emergency Uses of the Parachute*, 01 Jun 1983

AFTTP(I) 3-2.26, *Aircrew Survival Pamphlet*, 20 Mar 2007

AFECD, *Air Force Enlisted Classification Directory*, (Part 1), 31 Jan 2008

CFETP 1P0X1, *AFSC 1P0X1, Aircrew Flight Equipment Career Field Education and Training Plan*, 31 Jan 2008

DOD AND JOINT PUBLICATIONS

DODD 5000.01, *The Defense Acquisition System*, 12 May 2003

DOD 5100.76-M, *Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives*, 12 Aug 2000

JP 3-50, *Personnel Recovery*, 05 Jan 2007

AFOOSH STANDARDS

AFOOSH STD 48-8, *Controlling Exposures to Hazardous Materials*, 01 Sep 1997

AFOOSH STD 48-20, *Occupational and Hearing Conservation Noise Program*, 30 Jun 2006

AFOOSH STD 48-137, *Respiratory Protection Program*, 10 Feb 2005

AFOOSH STD 48-139, *Laser Radiation Protection Program*, 10 Dec 1999

AFOOSH STD 91-66, *General Industrial Operations*, 01 Oct 1997

AFOOSH STD 91-67, *Liquid Nitrogen and Oxygen Safety*, 01 Oct 1997

AFOOSH STD 91-68, *Chemical Safety*, 01 Oct 1997

AFOOSH STD 91-100, *Aircraft Flight Line - Ground Operations and Activities*, 01 May 1998

AFOOSH STD 91-501, *Air Force Consolidated Occupational Safety Standard*, 07 Jul 2004

ALLOWANCE STANDARDS

AS 016, *Special Purpose Clothing and Personal Equipment*, (see applicable series)

AS 450, *Aircrew Life Support – Aircrew Flight Equipment*, 08 Nov 2007

AS 660, *Equipment Allowances for Non-Weapon Systems Communications Requirements*, 12 Jun 2007

AS 538, *Security Police Equipment, Organizational Small Arms Equipment, Military Dogs, Associated Equipment and Civil Disturbance Equipment*, 21 Feb 2007

AS 831, *Parachutes, Fabrics and Survival Equipment*, 21 Feb 2007

TECHNICAL ORDERS

00-5-1, *AF Technical Order System*, 01 Oct 2007

00-5-3, *Air Force Technical Order Life Cycle Management*, 01 Mar 2007

00-5-15, *Air Force Time Compliance Technical Order System*, 27 Mar 2001

00-20-1, *Aerospace Equipment Maintenance General Policies and Procedures*, 30 Apr 2003

- 00-20-9, *Forecasting Replacement Requirements for Selected Calendar and Hourly Time-Change Items*, 15 Mar 2008
- 00-25-06-2-1, *Intermediate Maintenance 412A Survival/Life Support System Equipment Work Unit Code Manual*, 30 Jun 1998
- 00-25-213, *Transportation, Storage, Testing, Shelf Life, and Quantity Unit Pack Requisitioning of Dry Batteries*, 15 Feb 2003
- 00-25-241, *Parachutes Logs and Records*, 01 Feb 1997
- 00-35A-39, *Instructions for Procurement, Issue, Use, and Maintenance of Medical Kits*, 01 Mar 2008
- 00-35D-54, *USAF Materiel Deficiency Reporting and Investigating System*, 01 May 2007
- 00-105E-9, *Aircraft Emergency Rescue Information (Fire Protection)*, 01 May 2007
- 1-1-641, *Minimum Equipment Requirements for Overwater, Arctic, and Desert-Tropic Flights*, 15 Oct 1972
- 11A-1-1, *Conventional Munitions Restricted or Suspended*, 02 Nov 2004
- 11A-1-10, *General Instructions Munitions Serviceability Procedures*, 15 Nov 2007
- 11A-1-46, *Fire Fighting Guidance, Transportation, and Storage Management Data*, 15 Nov 2004
- 11A10-26-7, *Storage and Maintenance Procedures Pyrotechnic Signals*, 26 Jun 2002
- 11A10-30-7, *Storage and Maintenance Procedures Pyrotechnic Fuses and Fire Starters*, 13 Apr 2006
- 11C15-1-3, *Chemical Warfare Decontamination, Detection and Disposal of Decontamination Agents*, 28 Feb 2004
- 11D1-1-111, *Operation and Maintenance Instructions Decontamination Kit, Personal, M258A1*, 08 Oct 1999
- 11D1-1-131, *Operator's Manual Decontamination Kit, Skin: M291*, 02 Oct 1989
- 11P-1-7, *Storage and Maintenance Procedures Cartridges for Aircrew Escape Systems*, 01 Feb 2003
- 12S10-2AVS6-12, *General Support Maintenance Manual, Aviator's Night Vision Imaging System AN/AVS-6 (V) 1 and AN/AVS-6 (V) 2*, 01 Jun 1986
- 12S10-2AVS6-21, *Operational Support and Intermediate Maintenance Manual for Aviator's Night Vision Imaging System AN/AVS-6 (V) 1*, 15 Jun 1998
- 12S10-2AVS9-2, *Maintenance Manual, Intermediate with Illustrated Parts Breakdown, Image Intensifier Set, Night Vision, Type AN/AVS-9 (V)*, 01 Aug 2005
- 13A1-1-1, *Repair, Cleaning, Inspection, and Testing of Aircraft Safety Belts, Shoulder Harness, and Miscellaneous Personnel Restraint Equipment*, 01 Aug 1971

14-1-1, *U.S. Air Force Aircrew Life Support Equipment and Ensemble Configurations*, 28 Mar 2003

14-1-4, *Identification Marking of Clothing and Personal Type Flying Equipment*, 30 Mar 1972

14D1-1-1, *Styles of Parachutes To Be Used In Various Type Aircraft*, 30 Sep 1983

14D1-1-2, *Cleaning of Parachute Assemblies*, 01 May 1996

14D1-2, *TCTO Series*

14D1-2-1, *Personnel Parachutes*, 01 Aug 1973

14D1-3-316, *Drogue Parachute Assembly*, 15 Jan 2007

14D2-8, *TCTO Series*

14D2-8-1, *Use, Operation Inspection, Arming and Disarming Instructions With Illustrated Parts Break-down Automatic Parachute Ripcord Release P/N 6010100 – Series*, 01 Mar 1981

14D3-10-1, *Inspection, Repair, and Packing Instructions – Ejection Seat Aircrew Recovery Parachute, PN J114509-515, -517, -523, -525, -529, -531, -535, -539, -541, -543, 831719-401 – (McDonnell)*, 01 Jan 1982

14D3-11, *TCTO Series*

14D3-11-1, *Operation, Inspection, Maintenance, and Packing Instructions for Emergency Personnel Recovery Parachute (Chest, Back, Seat Style, and Torso Harness)*, 16 Jan 1989

14P3-1, *TCTO Series*

14P3-1-112, *Maintenance Instructions Nomex ® Flight Gear, Coveralls, Gloves, Jackets*, 15 Oct 1972

14P3-1-121, *Custom Fitting Procedures for Flying Helmet Assemblies, HGU-55/P*, 15 Mar 1989

14P3-1-131, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Aircrew Chemical-Defense Ensemble*, 30 Sep 1997

14P3-1-141, *Operation and Maintenance Instructions Groundcrew Chem-Defense Ensemble*, 30 Apr 2004

14P3-1-151, *Operation and Maintenance Instructions With Parts Breakdown Aircrew Eye/Respiratory Protection (AERP) Equipment*, 01 Jun 1993

14P3-1-161, *Combined Advanced Technology Enhanced Design “G” Ensemble (COMBAT EDGE Equipment)*, 31 Oct 1991

14P3-4, *TCTO Series*

14P3-4-151, *Operation and Maintenance Instructions With Illustrated Parts Breakdown HGU-55/P Flyer’s Helmet*, 15 May 2006

14P3-5-61, *Operation, Service, and Maintenance Instructions Quick-Donning Anti-Exposure Flying Coverall Type CWU-16/P*, 31 Oct 1998

14P3-5-81, *Use, Inspection, Fitting and maintenance Instructions, Anti Exposure Assembly Type CWU-21/P or CWU-21A/P*, 01 May 1969

14P3-5-91, *Operation and Maintenance Instructions with Illustrated Parts Breakdown, CWU-74/P Flyers Anti Exposure Coverall*, 12 Aug 1987

14P3-6-121, *Use, Operation, and Maintenance. Anti-G Cutaway Garment Type CSU-13B/P*, 31 Oct 1998

14P3-9, *TCTO Series*

14P3-9-12, *Service Instructions Fixed Filter Nuclear Flash Blindness Protective Helmet Visors and Goggle Lenses*, 01 May 1964

14P3-9-21, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Goggles, Flyers, Flash Blindness Type EEU-2/P and EEU-2A/P*, 30 Apr 1981

14P3-12-1, *Use, Fitting, Installation and Repair. Inflatable Lumbar Support Pad Type MXU-22/P*, 15 Feb 1971

14P4-1-151, *Chemical-Biological Canisters and Filter Element Procedures*, 24 Jun 2004

14P4-15-1, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Chemical-Biological Mask Type MCU-2A/P*, 12 May 2003

14S-1, *TCTO Series*

14S-1-102-11, *Organizational Maintenance Instruction with Parts Breakdown, One-Man Life Rafts & Preservers LPU-9/P, LRU-16/P and LRU-17/P, (P/N 025-850100-1, 9094354-10, 025-8501-00-3, MIL-L83491A, RA1002)*, 05 Aug 2004

14S-1-102-21, *Organizational Maintenance Instruction with Parts Breakdown, Multi-Place Life Raft & Preservers, LPU-6/P, LPU-10/P, LPU-3/P, MB-1, A-A-50652 Life Preservers, MA-1, MA-2 Sea Rescue Kits, and LRU-1/P, P-2B, 20-Man VPLR, and 25 Man Life Raft Assembly*, 31 Jan 2005

14S-1-102-31, *Maintenance Instruction With Illustrated Parts Breakdown, USAF Flotation Equipment Low Profile Flotation Collar LPU-38/P*, 01 Nov 2003

14S1-3, *TCTO Series*

14S1-3-51, *Base Assembly, Use and Maintenance of Survival Kits*, 30 Nov 1998

14S3-1, *TCTO Series*

14S3-1-3, *Type and Number of Individual Survival Kit Containers and Life Rafts to Be Used In Various Type Aircraft*, 30 Jan 2003

14S3-7, *TCTO Series*

14S3-7-3-2, *Intermediate Maintenance Instructions With Illustrated Parts Breakdown Life Raft Assembly, Part Number 60485-101 (C-17, 46 Person Life Raft)*, 01 Jul 2007

14S3-8-2-1, *Aviation Crew Systems Inflatable Survival Equipment (LRU-14A/A Life Raft)*, 01 Oct 1995

14S5-27-1, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Helicopter Emergency Egress Device (HEED), SRU-36/P*, 31 Oct 1998

14S6-3, *TCTO Series*

14S6-3-1, *Operation and Maintenance With Parts List Forest Penetrator, Rescue Seat Assembly*, 30 Aug 1995

14S10-2-2, *Operation and Service Distress Marker Light, Part No. SDU-5/E*, 01 Sep 2006

15X-1-1, *Maintenance Instructions, Oxygen Equipment*, 01 Feb 2004

15X1-4-2-4, *Illustrated Parts Breakdown Types MD-1, MD-2, CRU-10/P and H-2 Emergency Bail-Out Oxygen Cylinders*, 15 Aug 2003

15X1-4-2-12, *Operation and Field Maintenance Instructions Emergency Bail-Out Oxygen Cylinder Assemblies*, 30 Jun 2004

15X5-2-4-1, *Operation and Maintenance Instructions Mask, Passenger Type and Emergency Passenger Oxygen System (EPOS), 289-601AF Kit*, 15 Jul 06

15X5-3-6-1, *Operation, Fitting, Inspection and Maintenance Instructions With Illustrated Parts Break-down MBU-12/P Pressure-Demand Oxygen Mask*, 01 Apr 1981

15X5-4-1-101, *Operation, Maintenance and Inspection Instructions Oxygen Mask to Regulator Connector Assemblies*, 08 May 2006

15X5-4-5-3, *Overhaul Instructions With Illustrated Parts Breakdown Mask Assembly Oxygen Breathing*

Part No. 249-350 and 249-355, 01 Jul 1989

15X5-4-10-1, *Operational and Maintenance Instructions With Illustrated Parts Breakdown for Mask Assembly, Folding, Quick-Don Part No. 358-1506V or 358-1506V-1*, 01 Aug 1986

15X5-5-3-1, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Fire Fighters and Oxygen Smoke Mask Assemblies*, 30 Dec 1998

31R2-1-251, *Transmission of False Distress Signals on Emergency Frequencies*, 11 Sep 2005

31R2-2PR, *TCTO Series*

31R2-2PR-101, *Operation, Organizational, and Field Maintenance Instructions Radio Set AN/PRC-90 and Radio Test Set AN/PRM-32*, 15 Feb 2006

31R2-2PRC90-1, *Operation and Maintenance Instructions Radio Set AN/PRC90-1 and Radio Set AN/PRC90-2*, 29 Jan 2004

31R2-2PRC90-2, *Intermediate Maintenance Instructions Radio Set AN/PRC90-1 and Radio Set AN/PRC90-2*, 30 Sep 1998

31R2-2PRC112-1-1, *Operation and Intermediate Maintenance Instructions, Radio Set AN/PRC-112*, 01 Aug 2006

31R2-2PRQ7-1, *Radio Set AN/PRQ-7*, 15 May 2006

31R2-4-1678-8-1, *Combat Survivor/Evader Locator (CSEL) System Joint Search and Rescue Center Application Segment Software*, 20 Apr 2004

31R2-4-1679-1, *Operation and Maintenance Organizational, Combat Survivor/Evader Locator (CSEL) Planning Equipment (CPE)*, 01 Jun 2008

31R4-2URT33, *TCTO Series*

31R4-2URT33-11, *Operation and Maintenance Instructions With Parts Breakdown Radio Beacon Set AN/URT-33B.1 and AN/URT-33C/M*, 28 Feb 2006

33A1-12-1109-1, *Operation Instructions Maintenance Instructions Illustrated Parts Breakdown Test Set, Battery BT-2B*, 15 Mar 1977

33A1-12-1420-1, *Operation Manual, Communications Service Monitor TS-4317*, 01 Jan 2003

33D2-10-10, *TCTO Series*

33D2-10-10-51, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Oxygen Mask, Headset, Microphone, and EEU-2P Goggles Tester*, 01 Jun 1983

33D2-10-63-1, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Oxygen Leak-age Regulator Tester, Model MH-2*, 15 May 2002

33D7-71-42-1, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Radio Test Set Model ACR/TS-24 (B)*, 01 Apr 1983

40W4-15-1, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Manual Reverse Osmosis Desalinators MROD-35-LA-1*, 01 Sep 1993

40W4-16-1, *Operation and Maintenance Instructions With Illustrated Parts Breakdown Manual Reverse Osmosis Desalinators MROD-06-LL-1*, 01 Sep 1993

42C-1-12, *Quality Control of Chemicals*, 04 May 2007

Abbreviations and Acronyms

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

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-ACC) AFECTI—Aircrew Flight Equipment Continuation Training Instructor
(Added-ACC) AFEMS—Air Force Equipment Management System
(Added-ACC) AFES—Aircrew Flight Equipment Superintendent
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
AIT—Automated Information Technology
(Added-ACC) ALEP—Aircrew Laser Eye Protection
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
ARC—Air Reserve Component
ARMS—Aviation Resource Management System
AS—Allowance Standard
BFT—Basic Fighter Training
BOI—Basis Of Issue

C—Celsius

(Added-ACC) CA/CRL—Custodian Account/Custody Receipt Listing

(Added-ACC) CAF—Combat Air Force

(Added-ACC) CBRN—Chemical Biological Radiological and Nuclear

CFETP—Career Field Education and Training Plan

(Added-ACC) CMRS—Conventional Munitions Restricted or Suspended

(Added-ACC) CoP—Community of Practice

(Added-ACC) CSEL—Combat Survivor Evader Locator

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

DCS—Deputy Chief of Staff

(Added-ACC) DOC—Designed Operational Capability

DRU—Direct Reporting Unit

DSN—Defense Switched Network

(Added-ACC) EEBD—Emergency Egress Breathing Device

EEIC—Element of Expense/Investment Code

(Added-ACC) EOC—Emergency Operations Center

(Added-ACC) EPOS—Emergency Passenger Oxygen System

EPT—Egress Procedures Trainer

(Added-ACC) EWO—Emergency War Order

F—Fahrenheit

FAA—Federal Aviation Administration

FEO—Flight Equipment Officer (Rated)

FM—Functional Manager

FOA—Field Operating Agency

FOD—Foreign Object Damage

FTU—Formal Training Unit (Flying)

(Added-ACC) GA—Guardian Angel

(Added-ACC) GPC—Government Purchase Card

HABD—Helicopter Aircrew Breathing Device
(Added-ACC) **HCV**—High Contrast Visor
HEED—Helicopter Emergency Egress Device
HHQ—Higher Headquarters
IAW—In Accordance With
ID—Identification
IPB—Illustrated Parts Breakdown
(Added-ACC) **IPI**—In-Process Inspection
JACKS—Joint Acquisition Chemical Biological Radiological Nuclear Knowledge System
JCIDS—Joint Capabilities Integration Development System
(Added-ACC) **JHMCS**—Joint Helmet Mounted Cueing System
LOGDET—Logistics Detail
(Added-ACC) **LOTO**—Lockout Tagout
(Added-ACC) **LPU**—Life Preserver Unit
MAJCOM—Major Command
MDS—Mission Design Series
MFM—MAJCOM Functional Manager
(Added-ACC) **MOU**—Memorandum of Understanding
(Added-ACC) **MTI**—Mission Termination Inventory
N/A—Not Applicable
NAF—Numbered Air Force
(Added-ACC) **C-NBC**—Counter-Nuclear, Biological, Chemical
NCO—Noncommissioned Officer
NCOIC—Noncommissioned Officer In Charge
(Added-ACC) **NIPRNET**—Non-secure Internet Protocol Router Network
NSN—National Stock Number
NVD—Night Vision Devices
NVG—Night Vision Goggles
(Added-ACC) **O&M**—Operating and Maintenance
OI—Operating Instruction
OJT—On-The-Job Training
OPLAN—Operations Plan

OPR—Office of Primary Responsibility
OSS—Operations Support Squadron
OSS&E—Operational Safety, Suitability, & Effectiveness
OT&E—Operational Test and Evaluation
PAI—Primary Aircraft Inventory
(Added-ACC) PCK—Protective Clothing Kit
PCS—Permanent Change of Station
(Added-ACC) PDM—Programmed Depot Maintenance
(Added-ACC) PLD—Personnel Lowering Device
POC—Point of Contact
(Added-ACC) POK—Passenger Oxygen Kit
(Added-ACC) POM—Program Objective Memorandum
PQDR—Product Quality Deficiency Report
(Added-ACC) PSK—Parachute Spacer Kit
(Added-ACC) PTE—Personnel Task Evaluation
QA—Quality Assurance
(ACC) QA—Quality Assurance
(Added-ACC) QCI—Quality Control Inspection
QI—Quality Inspector
(Added-ACC) RQG—Rescue Group
(Added-ACC) SAR—Search and Rescue
(Added-ACC) SERE—Survival, Evasion, Resistance, and Escape
(Added-ACC) SIPRNET—Secure Internet Protocol Router Network
SOW—Statement Of Work
(Added-ACC) SPINS—Special Instructions
TBA—Training Business Area
TCTO—Time Compliance Technical Order
TDY—Temporary Duty
TMDE—Test, Measurement, and Diagnostic Equipment
TO—Technical Order
(Added-ACC) TODA—Technical Order Distribution Account
(Added-ACC) TODO—Technical Order Distribution Office

(Added-ACC) TORC—The Organization Configuration

TPFDD—Time-Phased Force Deployment Data

UMD—Unit Manpower Document

UMPR—Unit Manning Personnel Roster

UTC—Unit Type Code

WST—Water Survival Training

WUC—Work Unit Code

TERMS

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.

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.

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.

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.

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.

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.

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 **figures 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.

D> ^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_OT

Figure 3. Sample UID Serialized Data Plate/Label.

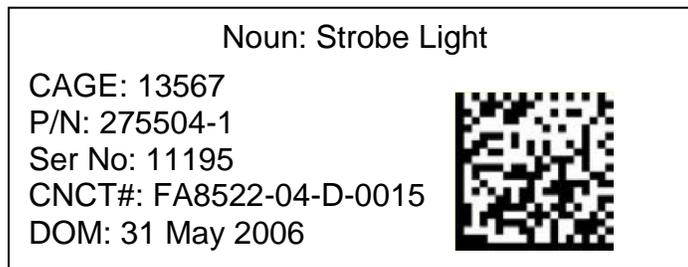


Figure 4. Sample UID Serialized Data Stream.

D> ^R_S 06 ^G_S 17V 12345 ^G_S 1P 123456789-ABCDEFGH ^G_S S 12345678 ^G_S 8K FA8522-04- D-0015 ^G_S
4D 06130 ^R_S ^E_OT

Figure 5. Sample Non UID/Non Serialized Lot Batch Data Plate/Label.

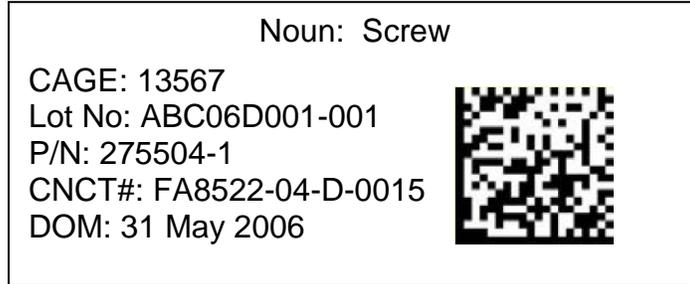


Figure 6. Sample Non UID/Non Serialized Lot Batch Data Stream.

D> ^R_S 06 ^G_S 17V 12345 ^G_S 1T ABC06D123-001 ^G_S 1P 123456789-ABCDEFGH ^G_S 8K FA8522-04- D-0015 ^G_S 4D 06130 ^R_S ^E_OT

Attachment 3 (Added-ACC)

ACC AFE QUALITY CONTROL (QC) PROGRAM

Note: (Added) Not applicable to AFRC/ANG units. AFRC/ANG will provide separate guidance and/or an attachment to this AFI supplement with respective AFE QC program guidance/requirements.

A3.1. (Added-ACC) General. The ACC AFE QC program is a supplement to guidance previously provided in this AFI. It encompasses most QC activity for the AFE program and ensures all equipment and vital programs are adequately inspected. This ensures only the highest quality equipment is provided to each aircrew member. As required, each unit will supplement these guidelines to develop a viable quality control program that will assess, analyze, and identify problem areas that may exist. Utilize this program to measure technician competence, equipment serviceability, and overall program integrity.

A3.1.1. **(Added-ACC) Daily QCIs:** NOTE: All required QCIs should be accomplished prior to the next flight.

A3.1.1.1. **(Added-ACC) Daily QCIs** will be performed on 100% of all personnel/recovery/drogue/ cargo/drag deceleration devices, torso harnesses, survival kits/vests, night vision devices, JHMCS, AERP mask/blower/intercom, and life preservers/rafts. In addition, all helmets will receive a QCI after initial build-up only.

A3.1.1.1.1. **(Added-ACC)** At a minimum, the survival kit QCI will include the following: component inspection, raft hook up and torque, and kit closure.

A3.1.1.2. **(Added-ACC)** AFE items not listed in paragraph A3.1.1.1. will receive a 25% daily QCI.

A3.1.1.3. **(Added-ACC)** All items received from outside support agencies will receive 100% QCI. These agencies include, but are not limited to: TMDE, medical supply, and munitions.

A3.1.1.4. **(Added-ACC)** QCIs will be performed on 100% of all 3-skill level work until the individual is task certified.

A3.1.2. **(Added-ACC)** The QCI process will also include other functions which require assessment on a routine basis. Section NCOICs or assistants will conduct and document checks on at least one of the major areas listed below on a weekly basis:

Explosive locker/munitions program

PMEL

CTKs

Administrative files to include technical orders, etc.

OJT program, to include task evaluations, etc.

Supply, to include control and accountability, documentation, supply product reviews, etc.

Inspection record files

Storage of equipment

Housekeeping

QA Program

AFE Aircrew Training and Equipment

Safety Program

A3.1.3. **(Added-ACC)** Documentation of QCI. Upon completion of the inspection, the inspector will document QCIs and ensure all pertinent information is gathered. The form will include, as a minimum, the following information.

A3.1.3.1. **(Added-ACC)** Item/equipment type, local control number, name of item inspector, date of QCI, discrepancy (if noted), name of QC inspector, and a suspense date for corrective action. Also, include areas for corrective action (*EXAMPLE:* page and paragraph from T.O.), date corrected, and initials of person correcting the discrepancy.

A3.1.4. **(Added-ACC)** Section NCOICs or assistants will conduct monthly training sessions on negative trends identified from the QCI process. Trend analysis will be reported to AFES.

A3.1.5. **(Added-ACC)** Classification/Definitions of Discrepancies.

A3.1.5.1. **(Added-ACC)** A major finding is defined as a condition that would endanger personnel, jeopardize equipment or system reliability, and affect safety of flight or warrant discontinuing the process or equipment operation.

A3.1.5.2. **(Added-ACC)** A minor finding is defined as an unsatisfactory condition that requires repair or correction, but does not endanger personnel, affect 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 causes the equipment from being 100% compliant with current directives.

A3.1.5.3. **(Added-ACC)** Units are authorized to track what is known as an administrative finding. An administrative finding is a documentation error that was overlooked that identifies critical information but has no effect on the operational process or use of the item.