BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 10-210

25 OCTOBER 2023

Operations

PRIME BASE ENGINEER EMERGENCY FORCE (BEEF) PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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

RELEASABILITY: There are no releasability restrictions on this publication

---

OPR: AF/A4CX

Certified by: AF/A4C
(Brig Gen Brian S. Hartless)

Supersedes: AFI10-210, 19 July 2019

Pages: 60

This publication implements Department of the Air Force Policy Directive 10-2, *Readiness*, and provides the requirements for the Air Force Prime Base Engineer Emergency Force (BEEF) Program. This instruction applies to all Regular Air Force (RegAF), Air Force Reserve (AFR), and Air National Guard (ANG) civil engineer units and personnel. This instruction does not apply to the United States Space Force. Air Reserve Component civil engineer units and their Prime BEEF teams will operate according to **Chapter 1** through **Chapter 7**, with the following **Exception:** All references to the Base Civil Engineer should include Air National Guard or Air Force Reserve civil engineer unit commander. Compliance with **Attachment 2**, **Attachment 3**, **Attachment 4**, and **Attachment 6** is mandatory. This publication may be supplemented at any level, but all supplements must be routed to the office of primary responsibility (OPR) of this publication for coordination prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("**T-0**, **T-1**, **T-2**, and **T-3**") number following the compliance statement. See Department of the Air Force Instruction (DAFI) 90-161, *Publishing Processes and Procedures*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor's commander for non-tiered compliance items. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. 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. Refer recommended changes and questions about this publication

to the OPR using the Department of Air Force Form 847, *Recommendation for Change of Publication*; route Department of Air Force Forms 847 from the field through the appropriate functional chain of command.

SUMMARY OF CHANGES

This document has been substantially revised and should be thoroughly read. Significant changes include the addition of special teams and capabilities, foundational and skill training frequencies, regional training sites, and an extensive rewrite of Air Reserve Component requirements.

Chapter 1

ROLES AND RESPONSIBILITIES

1.1. Air Force Deputy Chief of Staff for Logistics, Engineering & Force Protection (AF/A4). The AF/A4 is responsible for leadership, management, and integration of Air Force logistics readiness; aircraft, munitions, and missile maintenance; civil engineering; and security forces. The AF/A4 is also responsible for implementing policy and resource advocacy that reflect enhancements to productivity, combat readiness and quality of life for Air Force personnel.

1.1.1. The Director of Civil Engineers (AF/A4C). AF/A4C develops policy and provides oversight and guidance of the Air Force Prime BEEF program and, as the chair of the Air Force Civil Engineer Board, acts on recommendations from the Readiness Working Group and monitors progress toward total force readiness goals and objectives.

1.1.2. Chief, Readiness Division (AF/A4CX). As the OPR for the Air Force Prime BEEF program, AF/A4CX develops Prime BEEF strategy, policy, and guidance; provides oversight, resource advocacy and represents Prime BEEF matters in interdepartmental affairs.

1.1.3. Civil engineer governance structure. The Civil Engineer Board and the Readiness Working Group provide strategic direction to the total force Prime BEEF program. To read more about the civil engineer governance structure, visit **https://usaf.dps.mil/teams/10041/governance/sharedtables/pages/sharedtables.aspx**.

1.2. Major Commands (MAJCOMs).

1.2.1. Each MAJCOM ensures subordinate commands align forces with the force generation construct, report readiness of forces through applicable systems, and are ready to deploy as ordered.

1.2.2. MAJCOMs that have unique unit type code (UTC) equipment validate and consolidate their requirements into a prioritized list and submit the list to Air Force Civil Engineer Center (AFCEC), Director of Readiness (AFCEC/CX) by 1 April of each year to meet the current fiscal year program objective memorandum cycle.

1.2.3. MAJCOMs ensure Prime BEEF contingency activities comply with environmental provisions of all applicable international agreements and requirements in DoDI 4715.22; *Environmental Management Policy for Contingency Locations*, DoDI 4715.19, *Use of Open-Air Burn Pits in Contingency Operations*; applicable combatant command directives and operation plans, operation orders, fragmentary orders, or similar operational directives for specific contingency operations (e.g., Annex L, *Environmental Considerations to the Combatant Command Operation Plan*); and relevant Lead Service policy (e.g., location-specific environmental management plans).

1.2.4. Coordinate MAJCOM unique UTCs, designed operational capability statements and equipment supply listing (ESL) inputs for all Prime BEEF UTC capabilities with respective functional area managers and the Air Force Civil Engineer Center, Expeditionary Engineering Division, as applicable.

1.2.5. Serve as global force management coordinators.

1.2.5.1. Headquarters Air Combat Command, as delegated by SECAF presents Prime BEEF forces to the Joint Staff for employment by combatant commanders, including identification, sourcing, and tracking of Prime BEEF UTCs.

1.2.5.2. Headquarters Air Force Special Operations Command presents Prime BEEF UTCs to the Joint Staff and Special Operations Command for employment.

1.2.5.3. Headquarters Air Mobility Command responsibilities are respective to Air Mobility Prime BEEF UTCs.

1.2.5.4. Validate Manpower Force Packaging System and Logistics Force Packaging System inputs for UTC development, management, and maintenance activities for all Prime BEEF capabilities.

1.2.5.5. Coordinates with Air Force Installation and Mission Support Center (AFIMSC) and monitors readiness reporting per AFI 10-201, *Force Readiness Reporting* guidance.

1.2.6. MAJCOMs as force providers posture funded unit-level military authorizations in UTCs to support the force generation construct and to carry out designed operational capability statement requirements.

1.2.6.1. When posturing UTCs, the supporting MAJCOMs and Direct Reporting Units (DRUs), with input from AFIMSC decide the best use of unit authorizations to meet the most stringent operation plan demands and maintain flexibility to support Air Force, Force Generation steady state requirements. MAJCOMs and DRUs are authorized to change a Prime BEEF UTC commitment to a different unit following AF/A4CX approval.

1.2.6.2. MAJCOMs and DRUs functional area managers posture UTCs at each unit using the building block approach described in DAFI 10-401, *Operations Planning and Execution* and the War & Mobilization Plan-1 (W&MP-1), Civil Engineer Supplement. AFIMSC provides guidance to MAJCOMs and DRUs on how to create, register, and posture specialized and MAJCOM-unique UTCs required to support operation plan taskings. To the maximum extent possible, civil engineer UTCs should be applicable to the Air Force civil engineer community as a whole with very few unique UTC exceptions.

1.3. Air Force Installation and Mission Support Center (AFIMSC).

1.3.1. AFIMSC or AFIMSC Detachments with organize, train, and equip responsibilities posture all funded unit-level military manpower authorizations into UTCs at installations. Postured UTCs support wartime, contingency operations, and Air Force, Force Generation deployments and ensure personnel execute assigned wartime, manmade and natural disaster, and other contingency-related missions.

1.3.2. Provide oversight of standards, procedures, guidelines, and curriculum related to the execution of the RegAF Prime BEEF program managed by AFCEC to ensure all changes are coordinated among other affected AFIMSC functional communities and provides cross-functional coordination as required.

1.3.3. Provide funding to ensure RegAF personnel are organized, trained, and equipped to execute assigned wartime, disaster response (manmade and natural disasters), and other contingency-related missions.

1.3.4. Leverage civil engineer contingency training programs for use by mission partners where efficiencies can be gained and provide management of cross-functional curriculum.

1.3.5. Provide resource advocacy as the program element monitor for funding required to support the Prime BEEF program.

1.3.6. Coordinate with applicable RegAF MAJCOM A3s on taskings of Prime BEEF UTCs, including verifying taskings, recommending sourcing, recommending unit identification code changes, and providing reclama recommendations.

1.3.7. Provide intermediate-level oversight for readiness reporting, which includes developing corrective action plans and providing recommendations to the appropriate readiness reporting offices when deficiencies are identified.

1.3.8. Ensure all RegAF Prime BEEF units complete force readiness reporting for Prime BEEF UTCs per AFI 10-201.

1.3.9. Validate Air Force UTCs management and maintenance activities for all Prime BEEF capabilities.

1.3.10. Develops, drafts, and publishes all designed operational capability statements for Secretary of the Air Force-retained RegAF civil engineer units for MAJCOMs.

1.3.11. Conduct staff assistance visits. When scheduling staff assistance visits utilize the Gatekeeper guidance in DAFI 90-302, *The Inspection System of The Department of The Air Force*.

1.4. Air Force Civil Engineer Center.

1.4.1. The Director of Readiness (AFCEC/CX) establishes standards, procedures, guidelines, and curriculum related to the execution of the Air Force Prime BEEF program. Provides oversight of the Prime BEEF program and mission execution, including unit type code management, equipment requirements, readiness reporting, and development of planning guidance.

1.4.2. AFCEC Expeditionary Engineering Division (AFCEC/CXX) responsibilities include:

1.4.2.1. Provide oversight of expeditionary training curriculum and execution to include cross-functional coordination with mission partners.

1.4.2.2. Inform and coordinate RegAF requirements with the AFIMSC Prime BEEF program element by consolidating requirements from installations and manage requirements execution.

1.4.2.3. Manage the Air Force Prime BEEF contingency training program.

1.4.2.4. Oversee the contingency training curriculum to maintain currency, relevancy, and consistency between training sites. AFCEC/CXX chair an annual curriculum review with the designated representative of training sites serving as voting members. This group reviews and updates the curriculum for each civil engineer specialty. The civil engineer governance structure (discussed in **paragraph 1.1.3**) review and approve contingency training course additions and/or deletions that affect overall length of the course (not individual Air Force Specialty Code (AFSC) lesson duration) and decisions that drive major resource investments, military construction, and cadre additions.

1.4.2.5. Oversee the Civil Engineer Readiness Challenge program execution.

1.4.2.6. Provide curriculum oversight of civil engineer contingency training at the Regional Equipment Operator Training Site (REOTS), regional training sites (RTS), the Expeditionary Combat Support-Training and Certification Center (ECS-TCC**)**, and other sites providing civil engineer-specific contingency training. AFCEC ensures the civil engineer curriculum at these locations is consistent with current guidance, doctrine, and meets the total force training needs for civil engineers. See **Chapter 6** for further clarification on training by the Air National Guard and Air Force Reserve Command.

1.4.2.7. Serve as the subject matter expert for the Automated Readiness Information System (ARIS). AFCEC/CXX ensures ARIS follows all applicable source documents such as this instruction, allowance standards, and the equipment and supply listings.

1.4.2.8. Serve as the program manager for Prime BEEF. This includes the following responsibilities:

1.4.2.8.1. Provide UTC development and maintenance updates for all civil engineer UTCs to Air Force Installation and Mission Support, Expeditionary Support & Innovation (AFIMSC/XZ) and AF/A4CX.

1.4.2.8.2. Serve as Manpower and Equipment Force Packaging (MEFPAK) pilot unit for all standard Prime BEEF UTCs, which includes Engineer/Operations, Fire & Emergency Services (F&ES), Explosive Ordnance Disposal (EOD), and Emergency Management UTCs. **Note:** HQ Air Force Special Operations Command has UTCs that support specialized and unique special operations forces mission sets. The MEFPAK and pilot unit responsibility of these UTCs remain at Air Force Special Operations Command. Pilot unit responsibilities include:

1.4.2.8.2.1. Develop and coordinate proposed mission capability statements (MISCAP), MEFPAK updates, and logistics detail updates for Prime BEEF UTCs.

1.4.2.8.2.2. Review and certify accuracy and currency of UTCs every two years.

1.4.2.8.2.3. Manage total force standard Air Force equipment UTCs and allowance standards.

1.4.2.9. AFCEC Capabilities, Research and Development, and Acquisition Division (AFCEC/CXA) provide inputs for mission-related Prime BEEF capability requirements per Civil Engineer Capability Integration Panel (CECIP) Charter and AFI 10-601, *Operational Capability Requirements Development* and Chairman of the Joint Chiefs of Staff Instruction 5123.01I, *Charter of the Joint Requirements Oversight Council (JROC) and Implementation of the Joint Capabilities Integration and Development System (JCIDS)*.

1.5. Installation Commander. The installation commander is responsible for installation contingency operations for peacetime and wartime operations. Refer to AFI 10-2501, *Emergency Management Program,* for further details and directions.

1.6. Base Civil Engineer/Civil Engineer Unit Commander/Civilian Leader. Units posture Prime BEEF UTCs as directed by their MAJCOMs/DRUs. Civil engineer commanders equip their Prime BEEF UTCs following required equipment and supplies lists. Civil engineer commanders' roles include:

1.6.1. Program and implement required training for key personnel, including Prime BEEF program management training and all additional training requirements listed in this instruction and in AFI 10-201, DAFI 10-401, and AFI 10-403, *Deployment Planning and Execution*.

1.6.2. Civil engineer commanders that have operations flights with fifty or more military personnel appoint a senior non-commissioned officer within an AFSC of 3E0XX-3E6XX or civilian equivalent as unit Prime BEEF Manager.

1.6.3. Appoint a primary and alternate Unit Deployment Manager (UDM) per AFI 10-403. The primary UDM acts on behalf of the unit commander and is appointed from AFSCs 3E0XX - 3E6XX or civilian equivalent. Commanders change the primary UDM's control AFSC to the special duty identifier 8U000. The primary UDM may also serve as the Prime BEEF Manager but is not recommended. For RegAF units, the UDM should serve in this position for up to 24 months per AFI 10-403.

1.6.4. Assign a senior enlisted Airman as the Prime BEEF Liaison from each of the following flights within the civil engineer unit: operations, engineering, fire and emergency services, explosive ordnance disposal, emergency management flights, and installation management flight.

1.6.5. Report resource readiness and capability readiness per AFI 10-201 and UTC Readiness by following DAFI 10-401, and applicable command supplements. Civil engineer commanders report on mission essential tasks per AFI 10-201.

1.7. Unit Level Prime BEEF Manager. On behalf of the civil engineer commander, the Prime BEEF Manager ensures all Prime BEEF team members are organized, trained, and equipped to perform their contingency roles, as well as ensure assigned equipment is on-hand and ready to deploy. Units will budget for equipment, supplies, and temporary duty assignments. The Prime BEEF Manager roles include:

1.7.1. Serve as the single focal point for UTC management.

1.7.2. Prepare the unit Resource Readiness, Capabilities Readiness, and UTC Assessment reports with assistance from the UDM and functional subject matter expert(s).

1.7.3. Responsible for managing and documenting all Prime BEEF-related requirements (personnel, training, equipment, etc.) utilizing ARIS. The Prime BEEF Manager maintains current ARIS data. The Prime BEEF Manager has primary responsibility to update ARIS, while the primary/alternate UDM(s) and functional subject matter experts provide input for their specific AFSC requirements.

1.7.4. Complete the following training: Prime BEEF Program Management, Force Readiness Reporting, Advanced Readiness Reporting Course, Deliberate and Crisis Action Planning and Execution Segments (DCAPES) Training, Defense Readiness Reporting System (DRRS), and ARIS training courses. Units should contact AFCEC/CXX for current schedules.

1.8. Civil Engineer UDM. Primary and alternate UDM training and responsibilities are described in AFI 10-403. UDMs complete additional training, including Prime BEEF Program Management, Advanced Readiness Reporting, and ARIS training courses.

1.9. Prime BEEF Liaison. Responsibilities include:

1.9.1. Posture flight personnel against all applicable UTC positions while working with the Prime BEEF Manager and UDM.

1.9.2. Advocate for contingency training within the flight.

1.9.3. Develop and coordinate a training schedule with the Prime BEEF Manager and UDM.

1.9.4. Establish a team of subject matter experts to assist the Prime BEEF Manager and UDM with maintaining contingency materials and equipment in a “ready state” at all times.

1.9.5. Coordinate unit manpower and equipment issues for the Prime BEEF Manager and UDM in support of the Prime BEEF Program.

Chapter 2

PROGRAM OBJECTIVES AND REQUIREMENTS

2.1. Objectives. The objectives of the Prime BEEF program are to develop and maintain highly skilled civil engineer forces capable of:

2.1.1. Reacting rapidly to provide agile combat employment (ACE), or other scheme of maneuver, in support of Air Force, force generation (AFFORGEN), contingency and installation sustainment missions.

2.1.2. Supporting specialized mission, employed in-place, and designed operational capability requirements.

2.2. Requirements.

2.2.1. Unit commanders develop their Prime BEEF program to ensure civil engineer personnel can meet operations plan taskings, impromptu contingency taskings within unit capabilities, and other unit-specific deployment requirements. Taskings may include support to combatant commands, joint or combined task forces, and Air Force, force generation.

2.2.2. Specific civil engineer capabilities for Prime BEEF unit type codes (UTCs) are described in their MISCAP statement, which can be found in Civil Engineer Supplement to the W&MP-1 at **https://usaf.dps.mil/sites/13072/sitepages/publications.aspx**. However, general civil engineer contingency missions include but are not limited to:

2.2.2.1. Command and control of civil engineer forces.

2.2.2.2. Joint service and combatant command requirements.

2.2.2.3. Force beddown of Air Force units, weapons systems, and platforms.

2.2.2.4. Integrated base response and recovery, to include emergency repair of Air and Space installations, airfield damage repair, utility repairs, and construction management.

2.2.2.5. Fire prevention and emergency response programs.

2.2.2.6. Rendering safe and disposing of unexploded explosive ordnance and improvised explosive devices.

2.2.2.7. Monitoring and protecting resources subject to the “All Hazards” of threats from major accident, natural disasters, improvised explosive devices, weapons of mass destruction, and enemy or terrorist use of chemical, biological, radiological, and nuclear (CBRN) weapons.

2.2.2.8. Maintain operation and maintenance of critical facilities and infrastructure.

2.2.3. Staff augmentation teams’ information is in **Chapter 7** and provides details about the capabilities to support echelons above wing level organizations.

2.2.4. Civilian civil engineer forces are used for in-place employment to support operations at home station. In the event military forces are deployed, commanders and civilian leaders ensure civilian forces are organized, trained, equipped, and available to support mission-essential requirements. In-place forces prepare to employ contract support, Individual Mobilization Augmentees, Air Force Contract Augmentation Program, or military or civilian resources from other Air Force locations to meet the in-place mission, depending on the extent and duration of the contingency, to include installation recovery from enemy attack, natural or manmade disaster, or other mission-impacting event. In-place forces should be familiar with the Installation Emergency Management Plan and AFI 10-2501, *Emergency Management Program*.

2.2.5. The Civil Engineer Supplement to the W&MP-1, provides general wartime operating and planning guidance. Operation plans delineate specific theater concepts and requirements.

2.2.6. The Manpower and Equipment Force Packaging (MEFPAK) system (as described in DAFI 10-401 contains Prime BEEF UTCs under the alphanumeric series "4F***." The Manpower Force Packaging System component of the MEFPAK contains MISCAP statements and manpower force element listings for each UTC, while the Logistics Force Packaging System component of MEFPAK contains the UTC logistics details for equipment and supplies listing (ESL). AFCEC/CXX will use the ESL as the source document for the Logistics Force Packaging System database when building the logistics details. **(T-1)** Further guidance is found in DAFI 10-401.

2.2.7. Prime BEEF personnel must maintain security clearances in accordance with tasking reporting instructions and Permanent Change of Station requirements per DoD Manual 5200.02_AFMAN 16-1405, *Air Force Personnel Security Program*. **(T-1)**

2.3. Project Approval. A unit's Prime BEEF construction, maintenance, and repair activities will follow project programming requirements and approval levels. **(T-2)** Work accomplished by Prime BEEF forces must be executed and tracked according to the standardized work prioritization system outlined in AFI 32-1001, *Civil Engineer Operations*. **(T-2)** Regular Air Force and Air Reserve Component forces shall follow Joint Publication 3-34, *Joint Engineer Operations*, for project approval procedures while deployed on a joint or combined contingency operation. **(T-0)** Civil engineer commanders should coordinate with higher headquarters (e.g., Commander, Air Force Forces, or component command staffs) for area of responsibility project approval procedures.

2.4. Observations, Innovations, and Lessons. All squadron commanders deployed to a contingency location will submit a unit-level after action report on either non-secure internet protocol router or secure internet protocol router as soon as practical to permit timely action. **(T-3)** Submit After Action Reports through the Joint Lessons Learned Information System or by submitting an AF Form 4329, *AF Observation, Issue or Lessons Learned* (for use on the NIPRNET) or AF Form 4330, *After Action Summary Report* (for use on the NIPRNET). **(T-3)** These reports are accomplished after deployment, exercise, or other major event. See AFI 10-1302, *Air Force Lessons Learned Program* for more information.

2.4.1. All deployed squadron commanders, officers-in-charge, noncommissioned officers-in-charge, and individual augmentees are encouraged to submit individual observations, innovations, and lessons as they are encountered during their deployment rather than waiting to consolidate them all in the After-Action Reports. AFCEC should immediately act upon and disseminate submitted observations, innovations, and lessons. Individual observations, innovations, and lessons are submitted on the Air Force-Joint Lessons-Learned Information System website using the "Add an Observation" form.

2.4.2. All personnel are encouraged to submit pre-deployment training observations, innovations, and lessons. These are submitted on the Air Force-Joint Lessons-Learned Information System website using the "Add an Observation" form.

Chapter 3

PERSONNEL

3.1. Assigning People to Unit Type Codes (UTC). AFI 10-403, *Deployment Planning and Execution* provides the general rules for assigning individuals to fill UTC requirements for deployment and employment purposes. Prime BEEF Program units adhere to the following rules:

3.1.1. Fire & Emergency Services (F&ES) substitutions will be tied to Department of Defense fire certification skills. **(T-0)**

3.1.2. Colonel (O-6), 3E000, 3E700, 3E800, and 3E900 positions shall not be filled by a person with a lower grade or skill level, unless allowed by the MISCAP statement. **(T-1)**

3.1.3. Officer positions may be filled by individuals holding any educational suffix. **Exception:** 32E3H (Explosive Ordnance Disposal) requirements must be filled by a qualified officer possessing the correct duty Air Force Specialty Code (AFSC) and grade; any deviation must be coordinated with the EOD program director. **(T-1)**

3.1.4. Authorized Air Force civil engineer substitutions are listed in **Table 3.1**.

Table 3.1. Authorized Air Force Civil Engineer Substitutions.

AIR FORCE SPECIALTY CODE TITLE	AIR FORCE SPECIALTY CODE	AUTHORIZED SUBSTITUTIONS FOR 5-SKILL LEVEL AND ABOVE	AUTHORIZED SUBSTITUTIONS FOR 3-SKILL LEVEL
Electrical	3E0X1	None	3E0X2, 3E1X1
Electrical Power Production	3E0X2	None	3E0X1, 3E1X1
Heating Ventilation Air Conditioning and Refrigeration	3E1X1	None	3E0X1, 3E0X2
Pavements and Construction Equipment	3E2X1	None	3E3X1
Structural	3E3X1	None	3E2X1
Water and Fuel System Maintenance	3E4X1	3E4X3	3E1X1
Pest Management	3E4X3	None	None
Engineering	3E5X1	None	None
Operations Management	3E6X1	Notes 1 & 2	Note 2
Fire & Emergency Services	3E7X1	None	None
Explosive Ordnance Disposal (EOD)	3E8X1	None	None

Emergency Management	3E9X1	None	None
First Sergeant	8F000	3EX9X, 3EX7X	N/A
Note 1: Any 9-level superintendent from 3E0, 3E2, 3E4, 3E5, 3E6 can fill the 4FPAN UTC. **Note 2:** For UTC 4FPET, individuals holding a 5- or 7-skill level in AFSCs 3E0X1, 3E0X2, 3E1X1, 3E2X1, 3E3X1, 3E4X1 and 3E5X1 can substitute for a 3E6X1 requirement.			

3.2. UTC Assignment. Units assign individuals to postured UTC positions according to notes in the MISCAP statements. When there are no notes, units shall fill each UTC using the following sequence and priorities:

3.2.1. An individual holding the control AFSC (enlisted) or the duty AFSC (officers) at the required skill level. **(T-3)**

3.2.2. An individual holding a control AFSC one or two skill levels higher than required (enlisted) or one grade higher than required (officers). **(T-3)**

3.2.3. An individual holding a control AFSC one skill level lower than required or one grade lower than required (enlisted or officers). **(T-3) Note:** First and second lieutenants are considered a single grade and can substitute in a captain grade requirement providing they are able to complete the assigned mission and have passed WMGT 101, *Air Force Civil Engineer Basic Course.* For additional guidance, refer to AFI 10-403.

3.2.4. Units fill each UTC using the following priorities:

3.2.4.1. Operations & Engineering UTCs: 4FPES, 4FPE4, 4FPET, 4FPS*, 4FPA*. **(T-3)**

3.2.4.2. Fire & Emergency Services UTCs: 4FPFJ, 4FPFN, 4FPFP. **(T-3)**

3.2.4.3. Emergency Management UTCs: 4FPWB, 4FPWC, 4FPWD, 4FPWE, 4FPWF, 4FPWH. **(T-3)**

3.2.4.4. Explosive Ordnance Disposal UTCs: 4FPXD, 4FPXC, 4FPXE, 4FPXG, 4FPXB, 4FPXF, 4FPXH. **(T-3)**

3.2.4.5. Exceptions to these guidelines may be driven by unique MAJCOM missions, (e.g., Air Force Special Operations Command).

Chapter 4

TRAINING

4.1. Philosophy. Prime BEEF forces train to meet a full range of tasks expected in a contingency environment. These tasks are contained in each Career Field Education and Training Plan (CFETP) and in this instruction. This instruction and the Wartime Task Standard, located on the AFCEC Expeditionary Engineering SharePoint® site at **https://usaf.dps.mil/sites/13072/default.aspx**, are the source documents for Prime BEEF training. All Prime BEEF training requirements are vetted and approved through the civil engineer governance structure.

4.2. Applicability. Military personnel assigned to Regular Air Force (RegAF) and Air Reserve Component (ARC) civil engineer units will train to standards identified in **paragraph 4.3**. **(T-2)** Headquarters, major commands, primary subordinate units, direct reporting units, staff augmentation teams, and individual mobilization augmentee civil engineers, receive, at a minimum, the ancillary training listed in DAFI 36-2670, *Total Force Development*. Ancillary training is conducted as required prior to deploying. Civilian personnel assigned to deployable UTCs, and civilians identified to provide wartime home station support will meet training requirements as defined by parent MAJCOMs and DRUs. **(T-2)**

4.3. Requirements. Military personnel assigned to civil engineer units will complete foundational training, skills and knowledge, and Silver Flag mission qualification per training tables in **Attachment 2**, **Attachment 3**, **Attachment 4**, and **Attachment 6**. **(T-1)** All training identified in these attachments are considered mission essential and are resource and capability reportable. See AFI 10-201 for more information. Schedule contingency training not conducted at home station through AFCEC/CXX. MAJCOMs and DRUs coordinate these training requirements during official data calls from AFCEC/CXX.

4.3.1. Foundational training. Provides the foundation to building ready engineers and is identified in **Attachment 2**, Prime BEEF Training Requirements. Foundational training includes knowledge-based and hands-on training. Units should make every effort to incorporate realism into their respective foundational training programs. Field gear (to include primary weapons or training weapons) should be used during hands-on training such as convoy operations, defensive fighting positions, etc. When available, incorporate chemical, biological, radiological, and nuclear (CBRN) individual equipment during training events. Consider wearing field gear and/or CBRN individual equipment during normal daily activities to acclimate Airmen to conducting tasks. Institutional forces will accomplish foundational training upon deployment notification. **(T-2)**

4.3.1.1. MAJCOMs and DRUs may direct additional command-required training to maintain optimum readiness.

4.3.1.2. Foundational training schedule. RegAF units will conduct monthly foundational training in accordance with the annual standardized schedule located on their respective SharePoint® sites (Fire and Emergency Services, Explosive Ordnance Disposal, and Emergency Management, and Prime BEEF). **(T-3)** Adhering to this standardized schedule ensures all mandatory training is accomplished as directed in **Attachment 2** and prior to deployment cycle.

4.3.2. Skills and knowledge training requirements. The training focuses on bare base beddown and sustainment operations using basic expeditionary airfield resource (BEAR) assets in a realistic environment. Engineers will perform individual contingency tasks per **Attachment 4. (T-1)** Where possible, combat skills are added to training events to ensure realism and help fortify warrior ethos.

4.3.2.1. Wartime or contingency environments often involve the use of specialized and unique mission-essential equipment not used in day-to-day civil engineer operations. Due to cost and complexity, mission-essential contingency equipment and trainer expertise are not commonly found at continental United States installations. However, inadequate training on these key equipment items can negatively impact mission capabilities required for contingency operations success. Allowance Standard 429LOOJ provides authorizations for training assets that Prime BEEF units can procure to support home station training, field training, and local base exercises. Field training sets consist of items such as tents, generators, various BEAR electrical equipment items, and environmental control units. Prime BEEF units should contact their MAJCOM functional area managers for further information on this allowance standard.

4.3.2.2. Mission essential equipment training (MEET). Airmen will train to proficiency levels prescribed in the approved curriculum in accordance with the Expeditionary Training Working Group-approved objectives. **(T-1)** Where local training capabilities do not exist, specialty training sites listed in **Attachment 5** can be utilized. The skills and knowledge training table in **Attachment 4** identifies the minimum number of trained personnel per UTC. Units should make every effort to train and certify additional personnel who could be tasked as alternates to fill a critical position. Airmen holding a 3-skill level may complete training, however, those 3-levels are not included in resource readiness reportable calculations.

4.3.2.3. Mission essential equipment training instructor certification requirements. To ensure mission essential equipment instructors are competent and proficient in delivering effective training, the following certification tasks must be completed, prior to instructing their first mission essential equipment course.

4.3.2.3.1. MEET instructor certification. Candidate instructors must be current in AFSC MEET course(s). **(T-1)** Must shadow a certified instructor for a minimum of two courses with one course completed at any of the following regional training site (RTS) locations: 119th, 145th, 163rd, or 201st. **(T-1)** See **Table A5.1** for site information. AFCEC/CXX will provide funding for travel to these locations. **(T-1)**

4.3.2.3.2. Certified instructor will evaluate candidate instructors. **(T-1)** The evaluation will be recorded on an AETC Form 281, *Instructor Evaluation Checklist*. **(T-1)**

4.3.2.3.2.1. The evaluator provides recommendation to the candidates NCOIC, senior enlisted leader, and commander, along with recommendations for correction or reevaluation, if needed. **(T-1)**

4.3.2.3.2.2. New instructors will not individually instruct a MEET course until a MEET instructor has certified them. **(T-1)**

4.3.2.3.2.3. Training locations will send AETC Form 281 to AFCEC CXXT and AFCEC Operations Directorate, Force Development Division (AFCEC/COF) after instructor certification, for records keeping. **(T-1)**

4.3.2.3.3. Reoccurring MEET instructor qualification. Every 36 months, MEET instructors will have a follow-up evaluation for each MEET course they instruct. **(T-1)** This evaluation will be performed by a certified instructor with the same AFSC. **(T-1)** The evaluation will be recorded on an AETC Form 281. **(T-1)**

4.3.2.3.3.1. Evaluator will provide recommendation to the training location NCOIC, senior enlisted leader, and commander of the instructor, along with, recommendations for correction or reevaluation, if needed. **(T-1)**

4.3.2.3.3.2. Training locations will send AETC Form 281 to AFCEC CXXT and AFCEC/COF after instructor re-certification for records keeping. **(T-1)**

4.3.3. Rapid damage repair (RDR) training. The RDR process is critical to the recovery of an airfield. Due to the limited number of installations that are equipped and able to train the RDR process, specialty training sites (**Attachment 5**) have been established to provide training opportunities to the total force.

4.3.3.1. The required AFSCs that will attend RDR training are 3E0XX-3E6XX. **(T-2)** At a minimum, units will ensure 25% of each identified AFSC with a 5 or 7 skill level attend RDR Training. **(T-2)** Training is valid for 24 months (RegAF) and 48 months (ARC).

4.3.3.2. Rapid damage assessment (RDA). For units postured with the 4F9DA, Damage Assessment UTC, a rapid airfield damage assessment system (RADAS) training event must be conducted every ninety (90) days with the entire RADAS team (addition of two Geospatial Expeditionary Planning Tool (GeoExPT) operators). **(T-1)** This event may be combined with other training events. The training event must be a minimum of thirty (30) minutes, have at least two (2) takeoff and landings, and exercise initial data collection and mission re-taskings. **(T-2)** Furthermore, units must exercise Airfield Damage Assesment Teams (ADATs) on operational airfield pavements every ninety (90) days. **(T-2)** Collected data must be processed thru GeoExPT. **(T-2)** Recommend this be conducted in conjuction with the RADAS exercise.

4.3.4. Silver Flag mission qualification. Engineers demonstrate performance of critical contingency tasks that support their assigned Air Force, force generation force element. The Silver Flag mission qualification validates a unit's ability to complete bare base beddown, sustainment, and recovery operations using basic expeditionary airfield resource assets in a realistic environment. Units ensure force elements complete a Silver Flag mission qualification, as a UTC, in their "Prepare" or "Certify" phase. The Silver Flag mission qualification will be conducted at an AFCEC approved contingency training location. **(T-1)**

4.3.5. Government vehicle and heavy equipment operations training. All military Prime BEEF personnel who operate vehicles and heavy equipment will have a valid state motor vehicle license in accordance with AFI 24-301, *Ground Transportation*, and have a government driver's license for vehicles. **(T-1)** For equipment not requiring licensing, documentation verifying they may operate the equipment will be identified in training records and tracked in ARIS. **(T-1)** **Attachment 3** identifies vehicle and equipment requirements, per AFSC.

4.3.6. Prime BEEF 96-Hour contingency training event. Each military member assigned to a Prime BEEF UTC will participate in a 96-hour Prime BEEF contingency training event per **Attachment 2**. **(T-1)** When completing this requirement, refer to the AFCEC optional contingency training template located on the AFCEC Expedtionary Engineering SharePoint® at **https://usaf.dps.mil/sites/13072/default.aspx**.

4.3.7. Enhanced technical information management system. Certain AFSCs require the use of Technical Orders (T.O.s) in the accomplishment of their jobs. These AFSCs include Electrical Power Production (3E0X2), Heating, Ventilation, Air Conditioning and Refrigeration (3E1X1), Structural (3E3X1) and Engineering (3E5X1). Access to T.O.s require an account, accessible via the Air Force Portal. AFSCs (3E0X2, 3E1X1, 3E3X1 and 3E5X1) should maintain a shop level account with each member of the shop added to the account. Secondly, each AFSC should have a baseline number of T.O.s added to the account that captures equipment experienced in a contingency environment. Accounts access ensure these AFSCs have current information necessary to maintain contingency equipment and enable worldwide missions. The CE Dash (**https://usaf.dps.mil/teams/CEDASH/scripts/homepage/home.aspx**) provides the list of minimum T.O.s maintained and updated by appropriate Force Development Manager.

4.4. Documentation. The Prime BEEF Manager will document training administered through the Prime BEEF program following guidelines established in the Records Disposition Schedule and will document training utilizing ARIS. **(T-2)** Use course sessions and sign-in rosters to show completed training requirements. **(T-2)** Upload signed rosters for each course session into ARIS as the source documents for training attendance validation. **(T-2)** Commander endorsed memorandums can be used in lieu of a signed course roster. Civil engineer commanders may give credit for applicable foundational training to individuals who performed and documented tasks. For deployment related training use the return date from the contingency or exercise deployment as the training completion date.

4.5. Task Qualification Training (TQT). Referenced in AFI 10-2501, *Emergency Management Program*, Career Field Managers identify wartime tasks to be performed and task-certified while wearing CBRN individual protective equipment. Wartime training tasks are considered TQT and are identified in civil engineer Air Force specialty codes, career field education and training plans. Unit Commanders follow guidance of AFI 10-201 to document the status of TQT using the chemical, biological, defense readiness training report. **(T-0)** TQT should be completed in Mission Oriented Protective Posture Level 4, unless otherwise stated in each civil engineer AFSC career field education and training plans (CFETP) or identified by Career Field Managers.

4.6. General Contingency Responsibilities.

4.6.1. Upon assignment to the unit, civil engineer commanders ensure all military personnel receive Prime BEEF orientation training as identified in **Table A2.1**. This training should emphasize an individual's role and how they fit into the program. It includes an overview of civil engineer doctrine and explains the organization, training, equipment, operating concepts, and contingency missions pertaining to the unit. The Prime BEEF Manager will update unit personnel on significant changes to the programs as they occur. **(T-2)**

4.6.2. Contingency training project. A contingency training project is a multi-trade project which should include as many civil engineer AFSCs as possible. At a minimum, each contingency project will include one each 32E3, 3E5X1, and 3E6X1, and a combination of at least three operations flight AFSCs. **(T-2)** Contingency training project are no less than 500 labor hours and without an upper limit. Project data will be loaded into ARIS, using the "Contingency Training Project" course session along with completion date to receive training credit. **(T-2)** Foundational training for officer and enlisted personnel includes project management and construction skills including the following: planning, programming, design, horizontal and vertical work, and operations to enhance wartime skills. Contracted, civilian service flights, and units not assigned at least one 4FPET UTC are exempt from the contingency project requirement except: Kadena AB, Ramstein AB, Joint Base Elmendorf-Richardson and Joint Base McGuire-Dix-Lakehurst.

4.7. Expedient Methods.

4.7.1. Expedient methods provide civil engineer craftsmen with ideas, options, and procedures for accomplishing expedient repairs to damaged structures and utility systems when standard equipment and materials are not available or when necessary for minimum-essential restoration of base facilities and services. Civil engineer commanders should incorporate lessons learned, playbooks and tactics, techniques, and procedures into foundational training to develop ready Airmen engineers.

4.7.2. Force beddown. For civil engineers to expediently beddown forces, training on basic BEAR package configurations, and playbook options are essential. These lessons cover items such as base layout, utility systems, facility hardening, and environmental management.

4.7.3. Environmental Management. Civil engineer units play a lead role in environmental management at home station and deployed locations. Civil engineer commanders ensure there is sufficient environmental management expertise on deployable UTCs. Personnel will comply with all environmental provisions and applicable international agreements, per deployed location. **(T-0)** Review requirements in DoDI 4715.22, DoDD 3000.10, *Contingency Basing Outside the United States*, DoDD 4715.1E, *Environment, Safety and Occupational Health* and DoDI 4715.19, as well as relevant combatant command and lead service policy.

4.7.3.1. At least one officer and one alternate (non-commissioned officer) within the 4FPET UTC, and all personnel within the 4FPAX UTC must be trained to perform assigned duties as environmental managers. **(T-3)** Applicable training on environmental management requirements for contingency locations includes Air Force Institute of Technology course, WENV 175, Environmental Management in Deployed Locations. Equivalent experience, determined by unit CC may meet this requirement. Prime BEEF Managers must manually add this training requirement to identified personnel in ARIS. **(T-3)**

4.7.3.2. Personnel who operate open-air burn pits, including contractors, must complete training as required by DoDI 4715.19. **(T-0)** The training must address safe burn pit siting, operations, waste identification, safety and emergency procedures, record keeping, and security. **(T-0)**

4.7.3.3. Follow guidance for burn-pit and other environmental management operations in Air Force Handbook 10-222, Volume 4, *Environmental Considerations for Overseas Contingency Operations*, and pay particular attention to chapters on Drinking Water, Wastewater, Air Quality, Hazardous Materials, Hazardous Waste, Solid Waste, Petroleum, Oil and Lubricants, Pesticides, Spill Prevention, and Response Planning. Pest Management Specialists (3E4X3) need to be familiar with requirements identified in the Pesticides chapter. Overseas environmental policy and guidance for contingency locations can be found on the AFCEC Overseas Environmental Program SharePoint® at **https://usaf.dps.mil/teams/eDASH/WPP/HomePage/Home.aspx?tab=progs**.

4.8. Arming Groups. RegAF Prime BEEF, RegAF staff augmentation teams (S-Team) and total force explosive ordnance disposal personnel are assigned to arming group A. ARC Prime BEEF and S-Team personnel are assigned to arming group B. Arming group A and B personnel will qualify with their primary duty weapon (M-4 rifle) per AFI 36-2654, *Combat Arms Program*. **(T-1)** For each UTC authorized to use pistols (see **Table 5.2**), the unit should assign primary and alternates who are trained and qualified in accordance with AFI 36-2654. **Note:** The unit deployment manager will manually assign these requirements in ARIS. **(T-3)** All personnel assigned to EOD UTCs will qualify on M-4/M4A1 rifle, M-9/M-18 pistol and will qualify on the M110A1 and/or M240B as required in reporting instructions or other guidance. **(T-1)** All personnel assigned to emergency management UTCs will qualify on M-4/M4A1 rifle and M-9/M-18 pistol. **(T-1)** 3E4X3s will qualify on the M-870 shotgun as identified in **Table 5.2**.

4.9. Crane Operator Training and Certification. 3E2X1 personnel required to operate mobile hydraulic cranes in the performance of their duties must be both certified and qualified through an approved AFCEC-sponsored training course. **(T-0)** This course meets Occupational Safety and Health Administration, Standards (29 CFR Part1926.1427, *Operator Training, Certification and Evaluation*). For any additional certification and qualification procedures, contact the 3E2X1 Force Development Manager.

4.9.1. Certification is obtained by completing the 80-hour AFCEC Mobile Crane Certification course offered by the Expeditionary Combat Support – Training and Certification Center (ECS-TCC**)**, Regional Equipment Operator Training Site (REOTS), 435 Construction & Training Squadron (CTS), 801 REDHORSE Training Squadron-Operation Location-Alpha (RHTS OL-A), 554 REDHORSE Squadron (RHS), or by requesting an exception to policy from the 3E2 Force Development Manager (AFCEC/COF) to attend a civilian certification venue. Those that attend an approved civilian certification venue will also need to attend the 40-hour AFCEC Crane Qualification Course to be fully certified. **(T-2)** Certification is valid for a period of 60 months from the date of issue at which time the member must re-accomplish the 80-hour AFCEC Crane Certification Course for re-certification. **(T-2)** Qualification ensures that operators are and remain familiar with the AF crane specific requirements and operations.

4.9.2. Qualification is obtained by completing the 40-hour AFCEC Crane Qualification Course offered by the ECS-TCC, REOTS, 801 RHTS OL-A, 435 CTS, 554 RHS, 145 RTS, 163 RTS or 119 (RTS). **(T-2)**

4.9.3. Training requirement applicable to 5- and 7-levels only. A minimum of one person assigned to each 4FPET and 4FPAS unit type codes will be qualified and certified within the respective career field education and training plan. **(T-2)** Use DAFMAN 91-203, *Air Force Occupational Safety, Fire and Health Standards* to determine operator qualification requirements.

4.9.4. Qualification ensures that operators are and remain familiar with the AF crane-specific requirements and operations. Qualification is obtained by successfully completing the 40-hour AFCEC Crane Qualification Course offer by the ECS-TCC, REOTS, 435 CTS, 554 RHS, 145 RTS, 163 RTS or 119 RTS.

4.9.5. All qualifications are valid for a period of 30 months from the date of issue. Successful completion of an approved certification course also fulfills the qualification requirement. Once 30 months have lapsed from date of issue of certification, members will be required to attend the 40-hour AFCEC Crane Qualification Course, which extends qualification currency until an individual's certification is expired. **(T-2)**

4.10. Joint Construction Management System (JCMS) Software. Provides a standardized joint tool to manage initial (up to six months), temporary (up to two years), and semi-permanent (up to ten years) contingency construction projects that comply with UFC 1-201-01 Non-Permanent DoD Facilities in Support of Military Operations. Access JCMS either online or at a stand-alone computer via the software. It provides drawings for troop labor construction, reports on required manpower/labor and bill of materials for every facility type available in its database down to the construction activity. These construction documents and bill of materials are customizable to meet specific requirements and can be exported to Microsoft Project®. Information on JCMS is found at **https://usaf.dps.mil/:f:/r/sites/13072/Deployed%20Resources/Joint_Construction_Management_System?csf=1&web=1**, CXX SharePoint® site.

Chapter 5

EQUIPMENT AND SUPPLIES

5.1. Mobility Equipment and Supplies. Civil engineer commanders will equip their Prime BEEF unit type codes (UTCs) per the respective equipment and supplies listing (ESL). **(T-2)**

5.1.1. Requirements, documents, and databases. The civil engineer community uses three documents/databases to manage UTC equipment and supplies: the ESL, allowance standards, and the Logistics Force Packaging System. These documents and databases define equipment and supply requirements, authorization for accountable equipment items, and information for building the logistics details.

5.1.1.1. The ESL source document, generated from Automated Readiness Information Systems (ARIS), is the authoritative source document for all civil engineer UTC equipment requirements. ARIS is also the only source for details on how to report equipment items in the Air Force Input Tool for Resource Readiness. This document enables the civil engineer community to standardize requirements between UTCs and is the primary document used to conduct annual inventories and forecast funding for those UTCs. Most continental United States UTCs are stored centrally at Grissom Air Reserve Base, IN. EOD UTCs are stored at each installation that are tasked with a specific deployment mission. Outside the continental United States units store and manage their UTCs locally. Units outside the continental United States and units with non-centralized UTCs will conduct inventories and inspections annually or after deployments/exercises, whichever is soonest, comparing the on-hand assets to the ESL and updating the results in ARIS. **(T-2)** When shortages in wartime equipment are noted, units should take immediate action and budget to acquire missing items or conduct commercial market analysis to determine suitable substitutes. AFCEC/CXX reviews the ESL every three years and submits for approval through the civil engineer governance structure. **(T-2)** Once approved, AFCEC/CXX updates ARIS to reflect changes.

5.1.1.2. Allowance standards provide authorizations for units to acquire accountable equipment items listed in the ESL.

5.1.1.3. The Logistics Force Packaging System contains the pallet load and packing list information for each UTC. AFCEC/CXX will ensure the Logistics Force Packaging System details include all items as listed in the latest approved ESL. **(T-1)**

5.1.2. Personal clothing. All regular Air Force civil engineers will maintain a personal bag with items listed in **Table 5.1**. **(T-3)** All civilian members assigned to a deployable UTC should be encouraged to maintain an equivalent personal bag. Until activation, Air Reserve Component personnel require only those uniform items prescribed in AFI 36-3012, *Military Entitlements*.

5.1.2.1. Commanders will forecast funding, initially issue, and replace the mandatory items in **Table 5.1** as required. **(T-3)**

5.1.2.2. Each Airman's personal bag contains both mandatory and personal items. Mandatory items are authorized, and unit funded or initial issue items. Personal items, except for initial issue are highly recommended and the responsibility of each Airman to procure.

Table 5.1. Personal Bag.

PERSONAL BAG – MEN AND WOMEN	
Mandatory Items (Authorized and unit funded as required)	
Nomenclature	Quantity
Poncho, (uniform pattern appropriate)	1 Each
Boots, Combat, Safety-Toed, Uniform appropriate boots (Members will have 2 pairs, the 2nd pair is maintained by members annual clothing allowance)	2 Pair
Gloves, safety	2 Pair
Trousers, APECS (All Purpose Environmental Clothing System), (uniform pattern appropriate)	1 Each
Parka, APECS (uniform pattern appropriate)	1 Each
Reflective Belt	1 Each
Duffle Bag or A-bag equivalent	1 Each
Face Covering (balaclava) – as applicable	2 Each
Personal Items (Responsibility of individual Airman and individually procured)	
Nomenclature	Quantity
Trousers, Utility (one can be worn)	4 Each
Shirts, Utility one can be worn)	4 Each
Cap, Utility (one can be worn)	2 Each
Belt, Riggers (with buckle)	1 Each
T-Shirts, As required (one can be worn)	6 Each
Undergarments (one set can be worn)	6 Each
Cotton Socks	4 Each
Laundry Bag	1 Each
Jacket, Improved Physical Training Uniform (PTU)	1 Each
Pants, Improved Physical Training Uniform (PTU)	1 Each
Socks, Athletes	6 Each
Trunks, Improved Physical Training Uniform (PTU)	4 Each
T-Shirt, Physical Training Uniform	4 Each
Wash Cloth	2 Each
Towel, Bath	2 Each
Prescription Glasses, Military issued with gas mask inserts	2 Pair
30 Days of Prescribed Medications	30 Day Supply
Hearing Aids	If needed
Shower Shoes	1 Pair
Civilian Clothes with Casual Shoes	3 Outfits
Padlock	1 Each
Fleece Cap (uniform color appropriate)	1 Each
Personal Hygiene Items	30 Day Supply

5.1.3. Mobility bags. Each person assigned to a standard deployable UTC is allocated one general purpose bag (A-bag), one extreme cold weather bag (B-bag), and one CBRN individual protective equipment bag (C-1) according to sustainment groups listed in AFI 23-101, *Materiel Management Policy*. The ESL lists mobility bag requirements. The A- and B-bag items are listed in AFI 23-101, and C-bag requirements are listed in AFI 10-2501, *Emergency Management Program*. Logistics Readiness Squadron will maintain the standard bags. **(T-3) Exceptions:** Each person assigned to an EOD UTC is issued and maintains their mobility bags except for the C-1 bag listed in the ESL. **(T-1)** Units provide the EOD individual equipment and unit retention items through the Battlefield Airmen Rapid Refresh & Replenishment System. **(T-1)** Mobility bags are only required for the maximum simultaneously deployable capability of the unit.

5.1.4. Special protective clothing. Units will maintain properly sized protective clothing for each Pest Management (3E4X3) and assigned Fire and Emergency Services (3E7X1) technician. **(T-1)** Units will also maintain arc flash gear, cotton Operational Camouflage Pattern and fire-resistant undergarments (if cotton uniforms are not available, 100 percent cotton coveralls suffice) for each Electrician (3E0X1), Power Production (3E0X2), Heating, Ventilation, Air Conditioning & Refrigeration (3E1X1) and Water and Fuel Systems Maintenance (3E4X1) technician assigned to a deployable Prime BEEF UTC. **(T-1)** Individuals holding these AFSCs who are assigned to UTC will deploy with properly sized special protective clothing and undergarments as listed in the ESL. **(T-1)** Firefighter operations and EOD personnel will wear fire-resistant/flame retardant variants of approved Air Force uniforms as the daily uniform due to the inherently dangerous and quick response nature of their duties. **(T-3)** EOD Flights will issue all assigned EOD personnel the required items in the Battlefield Airmen Rapid Refresh and Replenishment System to include cold and inclement weather protective clothing items. **(T-3)**

5.1.5. Team and tool kits. Prime BEEF UTCs will include the full complement of team and consolidated tool kits in accordance with the ESL. **(T-1)** Units can contact local Logistics Readiness Squadron to obtain a copy of the Allowance Standards 429, 456, 459, 490, 538, and 660 which contain equipment authorizations for Prime BEEF UTCs.

5.1.6. Weapons and ammunition. The primary duty weapon for civil engineers is the M-4. Each position of a 4FP* UTC requires one M-4 rifle and 210 rounds of ammunition unless otherwise stated by mission requirements. **(T-1)** Each rifle requires seven 30-round magazines. **(T-1)** Headquarters staff, Civil Engineer Staff Augmentation Teams, Civil Engineer Maintenance, Inspection, and Repair Teams, and Airfield Pavements Evaluation Team UTCs may optionally equip using pistols only; however, this does not relieve these units of having the M-4s. All EOD funded military authorizations, postured in either standard or non-standard UTCs requires their primary duty weapon and pistol. **(T-1)** Emergency Management funded military authorizations, postured in either standard or non-standard UTCs require their primary duty weapon and pistol. **(T-1)**

5.1.6.1. Civil engineer commanders may authorize pistols and accompanying ammunition for cargo couriers, armory guards, or other such duties where the M-4 would hinder operations.

5.1.6.2. **Table 5.2** lists the maximum number of rifles and pistols authorized per UTC. For weapons and demolition munitions authorizations, refer to Allowance Standard 538 and Ground Munitions Authorization Tables located on the Global Ammunition Control Point.

5.1.6.3. Per the Ground Munitions Authorization Table, unit Prime BEEF Managers will forecast annually for mobility ground ammunition (5.56 mm, 9 mm, 2¾ bird shot, and 2¾ buck shot) for all Prime BEEF requirements (excluding EOD). **(T-1)** Prime BEEF managers must contact the local Munitions Accountable Supply Officer for creating, forecasting, and maintaining mobility ground ammunition requirements. **(T-1)**

5.1.6.4. If weapons are stored and/or maintained on a civil engineer equipment account, Prime BEEF managers will be responsible for maintaining AF Technical Order Form 105, *Inspection Maintenance Firing Data for Ground Weapons*, and quarterly and annual inspections. **(T-1)** If weapons are centrally stored and maintained on a single account managed by the Logistics Readiness Squadron, then documenting AF Technical Order Form 105 with quarterly and annual inspections is conducted by the local Logistics Readiness Squadron as directed in AFI 36-2654, *Combat Arms Program*. **(T-1)**

Table 5.2. Arming Requirements by Unit Type Code.

UNIT TYPE CODE	M-4S OR M4A1S REQUIRED AND AUTHORIZED	M-9S ORM-18S REQUIRED AND AUTHORIZED	M-870S REQUIRED AND AUTHORIZED
4F9AC	7 (Note 1)		
4F9AD	3 (Note 1)		
4FPAM	3		
4FPAN	1 (Note 1)		
4FPAP	4		
4FPAQ	3		
4FPAR	3		
4FPAS	4		
4FPAT	3		
4FPAU	3		
4FPAV	3		
4FPAW	1 (Note 1)		
4FPAX	2		1
4FPSG	1 (Note 1)		
4FPSD	1 (Note 1)		
4FPSB	1 (Note 1)		
4FPWF	1	1	
4FPWB	1	1	
4FPWC	4	4	
4FPWD	3	3	
4FPWE	4	4	
4FPWH	4	4	
4F9B1	8		

UNIT TYPE CODE	M-4S OR M4A1S REQUIRED AND AUTHORIZED	M-9S ORM-18S REQUIRED AND AUTHORIZED	M-870S REQUIRED AND AUTHORIZED
4FPJ1	8	8 (Note 1)	
4FPJ3	1		
4F9J8	2	2	
4F9J9	12		
4FPLB	15		
4FPE4	5		
4FPES	3 (Note 1)		
4FPET	26 (Note 1)		
4FPFF	1 (Note 1)		
4FPFN	1 (Note 1)		
4FPFJ	2 (Note 1)		
4FPFP	6		
4FPS5	2	2	
4FPS6	4	4	
4FPS7	6	6	
4FPXG	4	4 (Note 2)	
4FPXC	4	4 (Note 2)	
4FPXD	3	3 (Note 2)	
4FPXF	4	4 (Note 2)	
4FPXH	4	4 (Note 2)	

Note 1: At the civil engineer commander's discretion or in accordance with deployed location reporting instructions, units may additionally equip qualified officers and enlisted personnel on these UTCs with M-9s or M-18s. This does not replace the requirement for M-4s for force protection.

Note 2: Explosive Ordnance Disposal UTC includes additional weapons training requirements.

5.1.7. Tactical communications systems. Prime BEEF UTCs are authorized Department of Defense-mandated Joint Tactical Radio System communications equipment in accordance with Allowance Standard 660, which is maintained in a ready state at Grissom Air Reserve Base, IN. **Note:** Explosive Ordnance Disposal and outside the continental United States units maintain Joint Tactical Communications assets at home station. **(T-1)**

5.2. Continental United States-Sustainment and Theater In-Place Equipment Requirements. Continental United States-sustaining and theater in-place civil engineer forces will meet equipment requirements as determined by their parent Regular Air Force MAJCOMs, Direct Reporting Units and AFIMSC. **(T-2)**

5.3. Equipment Status Reporting.

5.3.1. Units report equipment status in accordance with AFI 10-201.

5.3.2. If weapons are stored and/or maintained on a separate civil engineer equipment account, resource readiness reporting procedures do not change. When weapons are centrally stored and maintained on a single account managed by the Logistics Readiness Squadron, they fall under the Logistics Readiness Squadron for reporting, as required by the ESL and authorized by Allowance Standard 538. **(T-1)**

5.4. War Reserve Materiel Asset Management. Civil engineer units outside the continental United States will manage War Reserve Materiel assets by following AFI 25-101, *War Reserve Materiel (WRM)*. **(T-1)**

Chapter 6

AIR RESERVE COMPONENT

6.1. Applicability. Chapter 6 applies to Air Reserve Component (ARC) forces, to include Air Force Reserve Command, Civil Engineer Readiness Division (AFRC/A4O) and National Guard Bureau, Readiness Division (NGB/A4X).

6.2. Readiness Reporting. AFRC/A4O and NGB/A4X respectively will ensure all Prime BEEF units complete force readiness reporting for Prime BEEF UTCs in accordance with AFI 10-201. **(T-1)** In turn, AFRC/A4O and NGB/A4X will provide summary reports to Air Force Director of Civil Engineers, Readiness Division, Prime BEEF (AF/A4CXB). **(T-1)**

6.3. Posturing. ARC will determine the best use of unit authorizations to meet the most stringent operation plan demands and maintain flexibility to support Air Force, force generation steady state requirements. **(T-2)** ARC units will posture Prime BEEF UTCs as directed by DAFI 10-401. **(T-2)** Civil Engineer commanders are responsible for posturing their Prime BEEF UTCs in accordance with unit manning documents. **(T-1)** Units will budget for equipment to support civil engineer foundational training assets, temporary duty assignments and ANG only mission specific requirements. **(T-1)**

6.4. Base Civil Engineer/Civil Engineer Unit Commander/Civilian Leader. Civil engineer commanders will appoint a Prime BEEF Manager. **(T-2)**

6.4.1. AFRC units will assign a full-time member as the primary Prime BEEF manager utilizing any SNCO within 3E0X1 – 3E6X1 AFSCs and alternates will be any SNCO within 3E0X1 – 3E9X1 AFSCs. **(T-2)**

6.4.2. ANG units assign a full-time member (SNCO 3E0X1 – 3E6X1 AFSC or civilian equivalent) as the primary Prime BEEF Manager. Units may also use a training AFSC (3F2X1) to fill the Prime BEEF Manager position, where applicable. The selected Prime BEEF Manager should attend mandatory training (**paragraph 1.7.4.**) and have sufficient time for overlap prior to officially assuming this responsibility. The Prime BEEF Manager should ensure all unit assigned members are organized, trained, and equipped to perform their contingency roles and all equipment is on-hand and ready to deploy.

6.4.3. Civil engineer ARC commanders appoint either full-time staff members, traditional reservists, or full-time guardsmen as primary and alternate UDMs. All funded Reserve 8U000 unit manning document authorizations reside at the group level and are civilian positions. ARC commanders will not change their unit level appointed UDM's AFSC to 8U000 nor assign a deployment availability code of 65 or assignment availability code of 45. It is mandatory that all primary UDMs attend the Prime BEEF Manager, UDM, ARIS in-residence course. **(T-2)**

6.5. Curriculum Oversight at ARC Training Locations. AFCEC will provide curriculum oversight of civil engineer skills and knowledge training at Regional Training Sites (RTS) and Expeditionary Combat Support - Training and Certification Center (ECS-TCC) for centrally managed courses only. **(T-1)** All other courses administered at the RTS are approved by NGB/A4X. All other courses administered at the ECS-TCC are approved by AFRC/A4O.

6.6. Air Force Institute of Technology (AFIT) Training. All SMSgts are required to complete the Civil Engineer Superintendent Course (AFIT WMGT 570), as a prerequisite, prior to promotion to CMSgt. **(T-1) Note:** This is not a skill level awarding course.

6.7. Annual Tour/Annual Training (AT).

6.7.1. As applicable to AFRC.

6.7.1.1. This section identifies unit preparation and actions necessary for execution of Prime BEEF deployment for training (DFT), Silver Flag mission qualification, foundational training, skills and knowledge, and innovative readiness training. All AT requests must flow through AFRC/A4O for coordination to receive command support. **(T-2)** Regardless of functional area within civil engineers, unit requests must be endorsed by their MSG/CC or equivalent and Wing/CC. **(T-3)**

6.7.1.2. Air Force, force generation (AFFORGEN) taskings (including other real-world missions) will receive priority over AT. **(T-2)** Units will send AT requests to AFRC/A4O by 15 May each year. **(T-2)** Scheduled skills and knowledge training is considered second priority, while DFT and other training requirements are third priority.

6.7.1.2.1. All DFTs will be coordinated through the official AFRC DFT process. **(T-2)** Unit personnel will be required to attend the assigned DFT upon unit commander's acceptance. **(T-2)** After action reports are required to be submitted to AFRC/A4O within 30 days of returning from deployed activity. **(T-3)**

6.7.1.2.2. A cancellation request must be submitted to AFRC/A4O for approval on a case-by-case basis for extenuating circumstances only. **(T-2)**

6.7.1.2.3. Contingency training course cancellation notifications must be submitted to AFRC/A4O NLT 75 days prior to quota release in order to advertise the slot/s amongst AFR units and have the obligations in ARIS swapped by AFCEC. **(T-2)**

6.7.1.3. AFR Prime BEEF units should prioritize Silver Flag mission qualification, skills and knowledge courses and contingency training when developing their annual training plan.

6.7.2. As applicable to ANG.

6.7.2.1. ANG Prime BEEF units will prioritize Silver Flag mission qualification, skills and knowledge courses and foundational training when developing their annual training plan. Outside of these priorities, units are encouraged to use RTS and the DFT program for their AT.

6.7.2.2. ANG members can obtain credit for a contingency training project through the DFT program. See ANGI 36-501, *Air National Guard Civil Engineer Deployment for Training Program*, for information on requirements.

6.7.2.3. Per DAFI 36-2670, *Total Force Development*, units will integrate AT objectives into their annual training plan and provide a copy to NGB/A4X NLT 30 April each year **(T-2)**

6.8. Training Sites.

6.8.1. AFRC/A4O and the Expeditionary Combat Support-Training & Certification Center (ECS-TCC) established the 3-to-5 level upgrade training course as a core training requirement to improve civil engineer readiness by expediting core AFSC qualifications. The ECS-TCC will provide upgrade training to learn skills not readily available in the field through participation in foundational training and/or the accelerated mission readiness training and EOD mission qualification training. **(T-2)**

6.8.1.1. All AFRC members in a 3-skill level AFSC, except 3E7/3E8 will fall within training status code B or F. **(T-2)** These members will attend the ECS-TCC 3-to-5 level upgrade training course at Dobbins Air Reserve Base. **(T-2)** All applicable blocks of the 3-to-5 level course must be completed within the first 18-months of upgrade training by using annual tour, non-AMRT reserved Reserve personnel appropriation, or operation and maintenance funds. **(T-3)**

6.8.1.2. The 3-to-5 level upgrade training course may be waived on a case-by-case basis if 5-level core tasks are completed at another installation and/or course. Waiver requests must be sent to AFRC/A4O within 12-months of the member's technical school graduation date. Waiver request will be approved or denied by the AFRC MAJCOM functional manager. **(T-2)**

6.8.2. ANG RTS visit requirement. ANG Prime BEEF units will schedule an RTS visit every 24 months for 66% of the unit. **(T-2)** For units without a 4FPET UTC, RTS visit is required minimum once per Reserve component period cycle. **(T-1)** This requirement can be met with team or shop visits, skills and knowledge courses, or unit training assemblies at the RTS. For 3E7/3E8/3E9 AFSCs, live fire or exercising at the Combat Readiness Training Centers (CRTC) or RTS will suffice. **(T-2)** Regional emergency management chiefs schedule DFTs for their region every 48 months at either an RTS or CRTC. ANG Prime BEEF units will provide an after-action report to NGB/A4X for each training event. **(T-2)**

6.8.3. The following are sufficient to receive credit for an RTS visit:

6.8.3.1. Attend a RTS for:

6.8.3.1.1. A traditional full unit, multi-AFSC training event.

6.8.3.1.2. Unit training assembly (UTA) weekend.

6.8.3.1.3. 96-hour contingency training event.

6.8.3.1.4. Skills and knowledge courses.

6.8.3.1.5. REOTS.

6.8.3.1.6. Crane initial and refresher course.

6.8.3.1.7. Tractor-trailer-training (3T) course.

6.8.3.2. Attend a CRTC for 3E7X1 – 3E9X1 course (where an existing AFSC specific course exists).

6.9. Prime BEEF 96-Hour Contingency Training Event. Exceptions. The applicable AFRC/A4O or NGB/A4X may allow unit commanders to divide the 4-day requirement into two sessions.

6.10. Fire & Emergency Services (F&ES) Flight. AFRC firefighters performing inactive duty for training periods are in a training status and will not augment host F&ES flight manning. **(T-2)** AFRC firefighters performing annual tours, Reserve personnel appropriation orders or military personnel appropriation orders can be used as operational personnel, per AFMAN 36-2136, *Reserve Personnel Participation*.

6.10.1. F&ES flights must coordinate their annual training plan with the host fire department and squadron commander. **(T-2)** Once approved, the F&ES superintendent or appointee will send the plan to the respective Numbered Air Force and/or HQ AFR/A4C and upload to the AFRC F&ES SharePoint® by 1 October of each year. **(T-2)**

6.10.2. Fire Emergency Self-Assessment Program is a continuous evaluation to ensure firefighters are organized, trained, and equipped to perform critical mission capabilities. The program requires HQ AFR/A4C and Numbered Air Forces to routinely assess quarterly updates for compliance. **(T-2)** Noncompliance will result in a deficiency report requiring a corrective action plan approved by HQ AFR/A4O. **(T-2)**

Chapter 7

SPECIAL TEAMS AND CAPABILITIES

7.1. Civil Engineer Special Capabilities. While not precisely aligned with a Prime BEEF or RED HORSE unit, CE special capabilities are organized to support Air Force missions at home station and contingency installations.

7.2. Staff Augmentation Team (S-Team). S-Teams are engineer teams that supports echelons above installation level in support of natural disaster responses or contingencies during wartime or stability operations. ARC S-Teams are aligned according to **Table 7.1** for skills and knowledge training and development but can support any combatant command as a demand force team under AFFORGEN.

7.2.1. A 4-person staff augmentation team (4FPS6) integrates within an existing staff. It supports engineer command and control, operational planning, theater beddown planning and provides limited technical capabilities that are inherent to career field education and training plan (CFETP) 32E 7-level civil engineer officer core capabilities.

7.2.2. A 6-person staff augmentation team (4FPS7) also integrates within an existing staff to provide engineer command and control, operational planning, and theater beddown planning. The team includes an additional engineer and 3E5 to support technical design, infrastructure assessment, and advanced construction management capabilities that are inherent to CFETP 32E 7-level / 3E5 7-level civil engineer core capabilities.

7.2.3. A 2-person command and control staff augmentation team (4FPS5) augments division level O-6 staff. Additionally, this UTC is sourced when S-Teams requires a 24hr capability.

Table 7.1. ARC Skills and Knowledge Training and Development Team Alignments.

ARC	Supported Command/State	Staff Augmentation Team
AFR	U.S. Air Forces in Europe/Air Forces Africa (USAFE/AFAFRICA)	622 CEF
AFR	U.S. Air Forces Central (AFCENT)	822 CEF
AFR	Pacific Air Forces (PACAF)	922 CEF
ANG	Air Forces Southern (AFSOUTH)/Air Force Global Strike Command (AFGSC)/Air Forces Transportation (AFTRANS)/Missouri	231 CEF
ANG	Headquarters Air Force (HAF) /USAFE/Maryland	235 CEF
ANG	PACAF/Air Forces Northern (AFNORTH)/ U.S. Space Force (USSF)/Colorado	240 CEF
ANG	AFAFRICA/ANG/North Carolina	245 CEF
ANG	PACAF/Washington	248 CEF

7.2.4. S-Team must meet training table requirements as listed in **Attachment 6. (T-1)** In addition to this training, S-Team personnel should be familiar with key plans, standards, and policies of their unit's supported command. This includes Operations Plans, Base Support Plans, Time-Phased Force Deployment Data, and theater construction standards. S-Teams need proper clearance to review plans. Personnel should also receive Air Force Forces staff training provided by the supported command prior to contingency operations or major exercises at the staff level. Prior to supporting operations in other countries, members should familiarize themselves with GeoBase imagery and Host-Nation construction capabilities.

7.3. Civil Engineer Maintenance, Inspection, and Repair Teams (CEMIRT). CEMIRT provides in-theater depot-level maintenance and repair of diesel driven power generators, electrical distribution, and control systems, and fixed or mobile aircraft arresting systems. CEMIRT also provide emergency troubleshooting, maintenance, and repair to bare base and real property installed electrical power generation and distribution equipment. DoD emergency-essential civilians provide increased capability to CEMIRT when assigned.

7.4. Airfield Pavement Evaluation (APE). APE is the DoD's sole entity providing full-spectrum airfield pavement evaluations across the globe. Capabilities include surface condition inspection and determination of pavement section's structural capacity using non-destructive heavy weight deflectometer and destructive testing with pavement coring, concrete flexural strength testing, automated dynamic cone penetrometer testing and soil analysis. They perform runway friction/slope analysis, and power check apron anchor proof load testing. APE also provides reach back support in areas of pavement and geotechnical engineering and construction.

7.5. Base Expeditionary Airfield Resources (BEAR). The 635th Materiel Maintenance Squadron (MMS) is the pilot unit for BEAR UTCs, advises on acquisition of BEAR assets, and provides technical expertise on war reserve materiel (WRM) in support of Air Force forces requirements. The 635 MMS provides expertise associated with planning, set-up, and employment of BEAR assets in a contingency environment where little or no infrastructure exists. The 635 MMS is the sole training location in the construction, inspection, maintenance, and repair of large area shelters to ensure life cycle management of these assets. As enablers, 635 MMS engineer teams deploy to support joint force commanders when needed and can employ rapid response teams for camp beddown and recovery efforts after natural disasters where WRM assets may be needed.

7.6. AFCEC Airbase Technologies Branch. Performs research and development and fielding for civil engineering to close capability gaps with new equipment and materials to meet national defense objectives.

TOM D. MILLER, Lieutenant General, USAF
DCS/Logistics, Engineering & Force Protection

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

29 CFR 1926.1427, *Operator Training, Certification and Evaluation,* 7 February 2019

32 CFR 989, *Environmental Impact Analysis Process,* 1 August 2022

32 CFR 989.37, *Procedures for Analysis Abroad,* 1 August 2022

32 CFR 989.38, *Requirements for Analysis Abroad,* 1 August 2022

National Environmental *Policy Act of 1969 (NEPA)* 42 U.S.C. 4321-4347

EO 12114, *Environmental Effects Abroad of Major Federal Actions*, 4 January 1979

CJCSI 5123.01I, *Charter of the Joint Requirements Oversight Council (JROC) and Implementation of the Joint Capabilities Integration and Development System (JCIDS),* 30 October 2021

DoDD 3000.10, *Contingency Basing Outside the United States,* 27 August 2021

DoDD 4715.1E, *Environment, Safety and Occupational Health,* (ESOH), 19 March 2005

DoDI 4715.19, *Use of Open-Air Burn Pits in Contingency Operations,* 13 November 2018

DoDI 4715.22, *Environmental Management Policy for Contingency Locations,* 18 February 2016

DoDI 6055.17, *DoD Emergency Management (EM) Program,* 13 February 2017

DoDM 5200.02_AFMAN 16-1405, *Air Force Personnel Security Program*, 1 August 2018

Joint Publication 3-34, *Joint Engineer Operations,* 6 January 2016

W&MP-1, *Civil Engineer Supplement to the War and Mobilization Plan, Vol 1*, 13 April 2020

DAFPD 10-2, *Readiness,* 20 May 2021

DAFI 10-401, *Operations Planning and Execution,* 13 January 2021

DAFI 31-101, *Integrated Defense* (ID), 25 March 2020

DAFI 36-2670, *Total Force Development*, 25 June 2020

DAFI 90-302, *The Inspection System of The Department of The Air Force,* 15 March 2023

DAFMAN 90-161, *Publishing Processes and Procedures,* 15 April 2022

DAFMAN 91-203, *Air Force Occupational Safety, Fire and Health Standards,* 25 March 2022

AFI 10-201, *Force Readiness Reporting,* 22 December 2020

AFI 10-403, *Deployment Planning and Execution,* 17 April 2020

AFI 10-601, *Operational Capability Requirements Documentation and Validation*, 27 April 2021

AFI 10-2501, *Emergency Management Program,* 10 March 2022

AFI 10-1302, *Air Force Lessons Learned Program,* 30 July 2019

AFI 23-101, *Materiel Management Policy,* 22 October 2020

AFI 24-301, *Ground Transportation,* 22 October 2019

AFI 25-101, *War Reserve Materiel (WRM),* 27 August 2019

AFI 32-1001, *Civil Engineer Operations,* 4 October 2019

AFI 32-7091, *Environmental Management Outside the United States,* 13 November 2019

AFI 33-322, *Records Management and Information Governance Program,* 28 June 2021

AFI 36-2654, *Combat Arms Program,* 16 April 2020

AFI 36-3012, *Military Entitlements,* 6 April 2023

AFI 48-137, *Respiratory Protection Program,* 12 September 2018

AFI 90-821, *Hazard Communication (HAZCOM) Program,* 13 May 2019

ANGI 32-001, *Air National Guard Civil Engineer Training Site Program,* 7 April 2021

ANGI 36-501, *Air National Guard Civil Engineer Deployment for Training Program*, 8 March 2021

AFMAN 10-2503, *Operations in a Chemical, Biological, Radiological and Nuclear (CBRN) Environment,* 14 May 2019

AFMAN 36-2136, *Reserve Personnel Participation,* 6 September 2019

AFPAM 10-219, Volume 2, *Civil Engineer Contingency Response and Recovery Preparations,* 18 October 2018

AFPAM 10-219, Volume 3, *Civil Engineer Contingency Response and Recovery Procedures,* 7 May 2015

AFTTP 3-2.44, *Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological and Nuclear Reconnaissance and Surveillance,* 31 March 2021

AFTTP 3-2.46, *Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological and Nuclear Passive Defense,* 1 May 2016

AFTTP 3-2.55, *Chemical, Biological, Radiological, and Nuclear Threats and Hazards,* 1 June 2018

AFTTP 3-32.5, Volume 2, *Explosive Ordnance Disposal (EOD) Aerospace Systems/Vehicles,* 30 July 2015

AFTTP 3-32.5, Volume 3, *Explosive Ordnance Disposal (EOD) Improvised Explosive Device (IED) Operations,* 13 April 2016

AFTTP 3-32.5, Volume 4-O, *Explosive Ordnance Disposal (EOD) Weapons of Mass Destruction (WMD) Response,* 18 November 2021

AFTTP 3-32.5, Volume 5, *Explosive Ordnance Disposal (EOD) Nuclear Weapons Response Operations,* 16 February 2016

AFTTP 3-32.5, Volume 6, *Explosive Ordnance Disposal (EOD) Unexploded Explosive Ordnance (UXO) Operations*, 28 April 2015

AFTTP 3-32.5, Volume 7, *Explosive Ordnance Disposal (EOD) Range Operations*, 24 February 2015

AFTTP 3-32.5, Volume 10, *Explosive Ordnance Disposal (EOD) Rapid Airfield Damage Recovery (RADR) and Explosive Hazards Mitigation (EHM)*, 13 March 2023

AFH 10-222, Volume 4, *Environmental Considerations for Overseas Contingency Operations*, 1 September 2012

Allowance Standard 429, *Civil Engineering*

Allowance Standard 456, *Explosive Ordnance Disposal*

Allowance Standard 459, *Readiness and Emergency Management*

Allowance Standard 490, *Fire and Emergency Services*

Allowance Standard 538, *Small Arms*

Allowance Standard 660, *Communications*

Allowance Standard 429LOOJ, *Civil Engineer Training Items for Units*

Armed Forces Pest Management Board Technical Guide 15, *Pesticide Spill Prevention and Management* 16 July 2021

Prescribed Forms

None

Adopted Forms

DD Form 1826-1, *Pesticide Applicator Card*

DAF Form 847, *Recommendation for Change of Publication*

AF Form 4329, *AF Observation, Issue or Lessons Learned* (for use on the NIPRNET)

AF Form 4330, *After Action Summary Report* (for use on the NIPRNET)

AETC Form 281, *Instructor Evaluation Checklists*

AFTO Form 105, *Inspection Maintenance Firing Data for Ground Weapons*

Abbreviations and Acronyms

AFCEC—Air Force Civil Engineer Center

AFCENT—U.S. Air Forces Central

AFFORGEN—Air Force, Force Generation

AFGSC—Air Force Global Strike Command

AFIMSC—Air Force Installations and Mission Support Center

AFNORTH—Air Forces Northern

AFR—Air Force Reserve

AFRC—Air Force Reserve Command

AFSC—Air Force Specialty Code

AFSOUTH—Air Forces Southern

AFTRANS—Air Forces Transportation

AMRT—Accelerated Mission Readiness Training

ANG—Air National Guard

APE—Airfield Pavement Evaluation

ARC—Air Reserve Component

ARIS—Automated Readiness Information System

AT—Annual Tour/Annual Training

BEAR—Basic Expeditionary Airfield Resource

BEEF—Base Engineer Emergency Force

CBRN—Chemical, Biological, Radiological, and Nuclear

CEMIRT—Civil Engineer Maintenance, Inspection, and Repair Teams

CFETP—Career Field Education and Training Plan

DFT—Deploy for Training

DRU—Direct Reporting Unit

ECS-TCC—Expeditionary Combat Support-Training & Certification Center

EOD—Explosive Ordnance Disposal

ESL—Equipment Supply Listing

EIAP—Environmental Impact Analysis Process

F&ES—Fire & Emergency Services

MAJCOM—Major Command

MEET—Mission Essential Equipment Training

MEFPAK—Manpower Equipment Force Packaging

MMS—Material Maintenance Squadron

NGB—National Guard Bureau

OPR—Office of Primary Responsibility

PACAF—Pacific Air Forces

RegAF—Regular Air Force

REOTS—Regional Equipment Operators Training Site

RHS—Rapid Engineer Deployable (RED), Heavy Operational Repair Squadron, Engineer (HORSE) Squadron

RTS—Regional Training Site

S-Team—Staff Augmentation Team

TQT—Task Qualification Training

UDM—Unit Deployment Manager

USAFE/AFAFRICA—U.S. Air Forces in Europe & Air Forces Africa

USSF—United States Space Force

UTC—Unit Type Code

WRM—War Reserve Material

Office Symbols

AF/A4—Air Force Deputy Chief of Staff for Logistics, Engineering & Force Protection

AF/A4C—Air Force Director of Civil Engineers

AF/A4CX—Air Force Director of Civil Engineers, Chief, Readiness Division

AF/A4CXB—Air Force Director of Civil Engineers, Readiness Division, Prime BEEF

AFCEC/COF—Air Force Civil Engineer Center, Operations Directorate, Force Development Division

AFCEC/CX—Air Force Civil Engineer Center, Director of Readiness

AFCEC/CXA—Air Force Civil Engineer Center, Capabilities, Research and Development, and Acquisition Division

AFCEC/CXX—Air Force Civil Engineer Center, Expeditionary Engineering Division

AFIMSC/XZ—Air Force Installation and Mission Support, Expeditionary Support & Innovation

AFRC/A4O—Air Force Reserve Command, Civil Engineer Readiness Division

AFRC/A5XW—War and Mobilization Plans

NGB/A4X—National Guard Bureau, Readiness Division

Terms

Air Reserve Component (ARC)—The ARC is comprised of the Air National Guard and Air Force Reserve Forces.

Area of Responsibility—The geographical area associated with a combatant command within which a combatant commander has authority to plan and conduct operations.

Arming Groups—Arming and qualification categories designated by Air Force Career Field Managers. Arming Group A: Air Force personnel who are armed to perform their in-garrison duties or as a requirement of their AFSC. Arming Group B: Are individuals/AFSCs who are not armed in-garrison or identified as Group A but have a higher potential for armed conflict.

Automated Readiness Information System (ARIS)—ARIS is the system used to manage UTC resources, personnel, equipment, supplies, and infrastructure needed to achieve unit readiness. It is also a tool for installations, major commands, and Air Force Installation Mission Support Center detachments that enhances information flow and accuracy of deployment training and UTC equipment assets. ARIS also enables the day-to-day management of the installation's chemical, biological, radiological, and nuclear defense and emergency management training. It meets the requirement of AFI 10-201 for providing an authoritative data source for all resource readiness measurements.

Basic Expeditionary Airfield Resources (BEAR)—Vital equipment and supplies necessary to beddown and support combat forces at austere locations where little or no infrastructure exists.

Civil Engineer Governance Structure—The entity that oversees all civil engineer program changes.

Civil Engineer Supplement to the War and Mobilization Plan, Volume 1 (W&MP-1)—The Air Force supporting plan to the Joint Strategic Capabilities Plan. The five volumes of the War and Mobilization Plan extend through the Future Years' Defense Program to provide continuity in short- and mid-range war and mobilization planning. It provides current planning cycle policies and planning factors for the conduct and support of wartime operations. The War and Mobilization Plan, volume 1 encompasses all functions necessary to match facilities, manpower, and materiel with planned wartime activity.

Cardiopulmonary Resuscitation Certification—Certification that requires instruction by a qualified American Red Cross or American Heart Association certified trainer and extensive hands-on training.

Combat Skills—Training that includes, but is not limited to, working in small units, leadership, operating in a joint environment, land navigation, GPS systems, vehicle rollover recovery, weapons training, and tactics and movement.

Contingency—A situation requiring military operations in response to natural disasters, terrorists, subversives, or as otherwise directed by appropriate authority to protect US interests.

Contingency Location—A non-enduring location outside of the United States that supports and sustains operations during named and unnamed contingencies or other operations as directed by appropriate authority and is categorized by mission life-cycle requirements as initial, temporary, or semi-permanent. (DoDD 3000.10).

Defensive Operations—Operations for personal and work party security, convoy operations, integrated defense, defensive fighting positions, camouflage, concealment, & deception, revetments, and obstacles. Defensive operations training emphasizes command, control, and communications; selection and construction of defensive positions; movement to defensive positions; fire and maneuver; and reacting to attacks.

Designed Operational Capabilities Statement—Document that outlines each measured unit's capabilities and contains the unit's identification, mission tasking narrative, mission specifics, and measurable resources. The Designed Operational Capabilities statement is used for the purposes of organizing, training, and equipping the unit. It is not a tasking document for crisis operations.

Environmental Impact Analysis Process (EIAP)—The Air Force procedures promulgated at 32 CFR Part 989, *Environmental Impact Analysis Process* provide for environmental impact analysis both within the United States and abroad. The authority for, and rules governing, each aspect of the EIAP differ depending on whether the action takes place in the United States or outside the United States, the EIAP separate procedures for each type of action. The focus of the EIAP regulation deals primarily with environmental impact analysis under the authority of the National Environmental Policy Act of 1969 (NEPA) (42 USC 4321-4347), while the primary procedures for environmental impact analysis of actions outside the United States are in accordance with EO 12114, *Environmental Effects Abroad of Major Federal Actions* and contained in 32 CFR 989.37, *Procedures for Analysis Abroad* and 989.38, *Requirements for Analysis Abroad* and AFI 32-7091, *Environmental Management Outside the United States*, Chap 5. The EIAP procedures are essential to achieve and maintain compliance with NEPA and the President's *Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the NEPA* (40 CFR Parts 1500-1508) ("Council on Environmental Quality Regulations"). To comply with NEPA and complete the EIAP, the Council on Environmental Quality Regulations and 32 CFR Part 989 are used together.

Environmental Management Plan—A site-specific plan developed to identify potential environmental risks and associated resource requirements needed to protect the environment and comply with applicable international agreements, DoD policy, and environmental compliance requirements incorporated into environmental annexes and plans (e.g., Annex L, Environmental Considerations to the combatant command's operation plan) as appropriate. (DoDI 4715.22, *Environmental Management Policy for Contingency Locations*).

Explosive Ordnance—All munitions containing explosives, nuclear fission or fusion materials, and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket, and small arms ammunitions; all mines, torpedoes, and depth charges; demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.

Field Sanitation and Health Training—Training in personal hygiene, control of communicable diseases, kitchen and mess sanitation, extreme climate problems, field hygiene, water purification, and related topics.

Force Beddown—The provision of expedient facilities for troop support to provide a platform for the projection of force.

Foundational Training—Basic general contingency and AFSC specific training which provides the foundation to building ready engineers, includes knowledge-based and hands-on training.

GeoBase—An Air Force Geospatial Information System used to create and exploit geospatial information and services to optimize agile combat support (ACS) and minimize operational risk.

Individual Mobilization Augmentee—An individual reservist attending drills who receives training and is preassigned to an Active Component organization, a Selective Service System, or a Federal Emergency Management Agency billet that must be filled on, or shortly after mobilization. Individual mobilization augmentees train on a part-time basis with these organizations to prepare for mobilization. Inactive duty training for individual mobilization augmentees is decided by component policy and can vary from 0 to 48 drills a year.

Lead Service—The Service that ensures the planning, design, coordination of requirements, construction, operation of the location, and provision of base operations support to the mission and tenants at a contingency location (DoDD 3000.10).

Logistics Force Packaging Systems—A Manpower and Equipment Force Packaging subsystem that provides equipment and materiel requirements and summarized transportation characteristics through its logistics detail component.

Manpower Force Packaging System—Subsystem of Manpower and Equipment Force Packaging. For each UTC it provides: (1) the title of the unit or force element and its unique UTC; (2) the MISCAP statement; and (3) the manpower detail by function, grade (officers only), and Air Force specialty code required to meet the defined capability.

Manpower and Equipment Force Packaging System (MEFPAK)—A data system designed to support contingency and general war planning with pre-defined and standardized manpower and equipment force packages. Manpower and Equipment Force Packaging operates in the command-and-control environment and is composed of two subsystems: the Manpower and Equipment Force Packaging System and the Logistics Forces.

Mission Capability Statement (MISCAP)—A short paragraph describing the mission capabilities expected of a specific UTC. It contains pertinent information such as the type of base to which the unit deploys, the unit's functional activities, the response capabilities, and augmentation requirements necessary to conduct specific missions.

Mission Essential Equipment Training (MEET)—Part of Skills and Knowledge training that focuses on specific equipment for certain UTCs by Air Force specialty code training requirements of hands-on certification.

Mission Oriented Protective Posture—A flexible system of protection against chemical, biological, radiological, and nuclear contamination in which personnel must wear only that protective clothing and equipment appropriate to the threat level, work rate imposed by the mission, temperature, and humidity.

Open-Air Burn Pit—A designated area for disposing solid waste by burning in the outdoor air at a contingency. (DoDI 4715.19)

Operation Plans—A plan for one or more operations that deployed units conduct simultaneously or in a series of connected stages. Higher authorities normally issue operation plans as directives based on stated assumptions to allow subordinate officers to prepare supporting plans and orders.

Rapid Airfield Damage Assessment System (RADAS)—A remotely operated system for rapid damage assessment of airfield damage and UXO after an attack and supplies data necessary to select minimum airfield operating surface (MOAS).

Rapid Airfield Damage Recovery (RADR)—Encompasses all actions required to rapidly repair runways and runway support structures to recover operations on an airfield after an attack. RADR actions include rapid airfield damage assessment, rapid mitigation of explosive hazards, and rapid repair of damaged surfaces and critical infrastructure.

Rapid Damage Assessment (RDA)—First phase of RADR. Focuses on collecting and analyzing data to determine the presence of hazards and overall airfield condition to include the number, location and type of craters, UXO, and other damage characteristics such as camouflets and spalls. Assessment is accomplished using a combination of manual and automated data collection systems. Automated systems such as RADAS reduce the UXO threat to Airmen and the assessment timeline. Data collected during this phase is used to select the most appropriate MAOS to repair.

Rapid Damage Repair (RDR)—Third phase of RADR. Once the explosive hazard threat is sufficiently mitigated in a repair zone, RDR teams begin repairing craters, camouflets, spalls, and other damage impeding flying operations on the MAOS. In some scenarios, hundreds of craters could require repair within acceptable time frames to meet the commander's Air Tasking Order (ATO). This requires multiple teams, each using an assembly line process to achieve repair objectives. Where logistics supply/resupply cannot support the repair in a timely manner, repair capabilities are prepositioned.

Rapid Explosive Hazard Mitigation (REHM)—Phase two of RADR. Due to high probability that significant numbers of UXO will be present on access routes, in equipment and material staging areas, and on the selected minimum airfield operating surface. A family of UXO assessment and mitigation tools, platforms, and systems provides EOD technicians the capability to safely and rapidly mitigate the UXO threat. These platforms and systems, operated (or supervised) by EOD personnel, allow surface and subsurface UXO positive identification, neutralization, collection, removal, and ultimate disposal on and off the airfield operating surfaces, access routes, and equipment and material staging areas.

Regular Air Force (RegAF)—The Regular Air Force is comprised of active-duty forces.

Unit Deployment Manager (UDM)—The unit deployment manager is a member assigned to a unit that manages all deployment readiness and training aspects for all deployable personnel and equipment within their unit to ensure they are deployment ready. In addition, unit deployment manager's support redeployed personnel in the Redeployment Support Process with commanders/civilian leaders of their units.

Unit Type Code (UTC)—A Joint Chiefs of Staff developed and assigned code, consisting of five characters that uniquely identify a "type unit."

Attachment 2

PRIME BEEF TRAINING

Table A2.1. Prime BEEF Training Requirements.

SUB-CATEGORY/ TOPIC	REQUIRED AIR FORCE SPECIALTY CODES OR UNIT TYPE CODES	FREQUENCY†	SOURCE FOR TRAINING MATERIAL‡	COMBAT SKILLS TRAINING REQUIREMENT
General Contingency Responsibilities				
Prime BEEF Orientation Course	All* (Note 1)	Initial	MyLearning	No
Air Force Contract Augmentation Program Overview	32EX, SNCO, 3EXXX Senior AFSC Reps	24 months 48 months (ARC)	Lesson Plan	No
Contingency Training Project	IAW **paragraph 4.6.2.**	12 months 36 months (ARC)	N/A	No
Damage Assessment and Response Team (DART)	32E3, 3E000, 3E071, 3E371, 3E471, 3E571	24 months 48 months (ARC)	MyLearning AFPAM 10-219V3	No
Prime BEEF 96-Hour Contingency Training Event	All*	24 months 48 months (ARC)	N/A	No
Combat Skills Training				
Tactical Convoy Operations Course (Notes 2 & 3)	All*	24 months 48 months (ARC)	MyLearning Lesson Plan	Yes
Land Navigation Course (Notes 2 & 3)	All*	24 months 48 months (ARC)	MyLearning Lesson Plan	Yes
Integrated Defense Course (Notes 2 & 3)	All*	24 months 48 months (ARC)	MyLearning Lesson Plan	Yes
Introduction to Night Vision Devices	All*	Initial	MyLearning	Yes
Tactical Communications Course	All*	48 months	MyLearning	Yes
Individual Movement Techniques (Note 3)	All*	24 months 48 months (ARC)	Lesson Plan	Yes
Defensive Fighting Positions (Note 3)	All*	24 months 48 months (ARC)	Lesson Plan	Yes

SUB-CATEGORY /TOPIC	REQUIRED AIR FORCE SPECIALTY CODES OR UNIT TYPE CODES	FREQUENCY†	SOURCE FOR TRAINING MATERIAL‡	COMBAT SKILLS TRAINING REQUIREMENT
Command and Control Training				
Unit Type Code Management Course	32EX, 3EXXX SNCOs	Initial	MyLearning	No
Troop Leading Procedures /Military Decision-Making Process (Note 3)	32EX, SNCOs, 3EXXX Senior AFSC Reps	24 months 48 months (ARC)	Lesson Plan	Yes
Disaster and Attack Preparations	32EX	24 months 48 months (ARC)	‡AFPAM 10-219V2	No
Control Center Operations (CCO) Course	32EX, 3E000, 3EX9X Except 3E7, 3E8 and 3E9	Initial	MyLearning	No
Rapid Damage Assessment (RDA) Teams	32EX, 3EXXX SNCOs except 3E9XX	48 months	MyLearning	No
Rapid Airfield Damage Recovery Overview	All except 3E9XX	24 months	MyLearning	No
Field Sanitation and Health Training				
Extreme Climate Deployment	All*	Initial	MyLearning	Yes
Field Sanitation, Personal Hygiene & Pest borne Diseases Courses	All*	Initial	MyLearning	Yes
CPR Certification	IAW CFETPs	Current (Note 4)	(Note 5)	Yes
Expedient Methods Training				
Bare Base Conceptual Planning Course	32EX, 3EX7X, except 3E5XX	24 months 48 months (ARC)	MyLearning	No
Bare Base Overview	All*	Initial	MyLearning	No
Contingency Operational Environmental Considerations	IAW **Paragraph 4.7.3.1.**	36 months 48 months (ARC)	MyLearning DoDI 4715.22 ‡AFH 10-222V4 **WENV 175	No

Environmental Management	IAW **Paragraph 4.7.3.1.**	48 months	‡AFH 10-222V4 DoDI 4715.19 **WENV 175	No
SUB-CATEGORY /TOPIC	REQUIRED AIR FORCE SPECIALTY CODES OR UNIT TYPE CODES	FREQUENCY†	SOURCE FOR TRAINING MATERIAL‡	COMBAT SKILLS TRAINING REQUIREMENT
Weapons Skills Training				
M-4/M4A1 Qualification	All*	Per AFI 36-2654	Base CATM	Yes
M-9/M18 Qualification	IAW **Table 5.2** of this publication	Per AFI 36-2654	Base CATM	Yes
M110A1 Qualification	3E8XX	Per AFI 36-2654	Base CATM	Yes
M-24OB Qualification	3E8XX	Per AFI 36-2654	Base CATM	Yes
M-870 Qualification	3E4X3	Per AFI 36-2654	Base CATM	No
Silver Flag Mission Qualification				
AFFORGEN Mission Qualification	IAW Paragraph 4.3.4	IAW Paragraph 4.3.4		No
3E0X1 Specific Training				
Arc Flash Safety Awareness	3E0X1	12 months	MyLearning	No
3E0X2 Specific Training				
Arc Flash Safety Awareness	3E0X2	12 months	MyLearning	No
3E1X1 Specific Training				
Arc Flash Safety Awareness	3E1X1	12 months	MyLearning	No
3E2X1 Specific Training				
Regional Equipment Operation Training Site (REOTS)	3E2X1 (ANG Only)	36 months	Ft Indiantown Gap, PA	No
Crane, 15 Ton or Larger	3E251/71	30 months	(IAW Paragraph 4.9.3)	No
Spall and Crack Repair Course	3E2X1	24 months 48 months (ARC)	MyLearning	No
Passive Defense Techniques	3E2X1	24 months	MyLearning	No

3E3X1 Specific Training				
Revetments Course	3E3X1	24 months	MyLearning	No
SUB-CATEGORY /TOPIC	REQUIRED AIR FORCE SPECIALTY CODES OR UNIT TYPE CODES	FREQUENCY†	SOURCE FOR TRAINING MATERIAL‡	COMBAT SKILLS TRAINING REQUIREMENT
3E4X1 Specific Training				
Arc Flash Safety Awareness	3E4X1	12 months	MyLearning	No
3E4X3 Specific Training				
Respiratory, HAZCOM, Spill Prevention Control, and Countermeasures, Workplace Safety	3E4X3	24 months	‡AFI 48-137 ‡DAFMAN 91-203 ‡Technical Guide 15 ‡AFI 90-821	No
Pest Certification	3E453/73	36 months	(Note 6)	No
3E5X1 Specific Training				
Rapid Damage Assessment (RDA) Teams	3E5X1	18 months	MyLearning	No
Engineering Contingency Responsibilities Course	3E5X1	36 months	MyLearning	No
Bare Base Planning and Layout Course	3E5X1	48 months	MyLearning	No
Mishap Survey Course	3E551/71	24 months	MyLearning (Note 7)	No
3E7X1 Specific Training				
Aircraft Live Fire Training	3E7X1	24 months	F&ES Annual Training Plan, Base OIs	No
Structural Live Firefighting Training	3E7X1	24 months	F&ES Annual Training Plan, Base OIs	No
J-FIRE	3E7X1	24 months	F&ES Annual Training Plan, Base OIs	No
MAAS (Install/Operate) Familiarization	3E7X1	24 Months	F&ES Annual Training Plan, Base OIs	No
Pallet Buildup Familiarization	3E7X1	24 Months	MyLearning	No

Haz Dec Certification	3E7X1	Initial	MyLearning, Base LRS	No
SUB-CATEGORY /TOPIC	REQUIRED AIR FORCE SPECIALTY CODES OR UNIT TYPE CODES	FREQUENCY†	SOURCE FOR TRAINING MATERIAL‡	COMBAT SKILLS TRAINING REQUIREMENT
UTC/UFM Familiarization	3E7X1	24 Months	F&ES Annual Training Plan, Base OIs	No
AFFORGEN /ACE TTP/ICT Familiarization	3E7X1	24 months	F&ES Annual Training Plan, Base OIs	No
ACE TTP Implementation, (3-Pers Rescue at CL)	3E7X1	24 months	F&ES Annual Training Plan, Base OIs	No
Aircraft Generation, Recovery (Marshalling, Towing Familiarization)	3E7X1	24 months	MyLearning	No
Crash Damage Disabled Aircraft Recovery Familiarization	3E7X1	24 months	F&ES Annual Training Plan, Base OIs	No
Cargo Loading & Tie Down Familiarization (Airlift & Ground)	3E7X1	24 months	F&ES Annual Training Plan, Base OIs	No
Expeditionary Fuel Systems Familiarization	3E7X1	24 months	F&ES Annual Training Plan, Base OIs	No
3E8X1 Specific Training (Note 8)				
Active Range Clearance War Skills	3E8X1	Initial	‡EOD MTP	No
Aircraft Exercise	3E8X1	12 months	‡AFTTP 3-32.5V2	No
Conventional Ordnance Exercise (Peacetime)	3E8X1	12 months	‡AFTTP 3-32.5V6	No
Conventional Ordnance Exercise (Contingency)	3E8X1	12 months	‡AFTTP 3-32.5V6	No
Improvised Explosive Device Exercise (Peacetime)	3E8X1	12 months	‡AFTTP 3-32.5V3	No

Improvised Explosive Device Exercise (Contingency)	3E8X1	12 months	‡AFTTP 3-32.5V3	No
Air Base Recovery Exercise	3E8X1	12 months	‡AFTTP 3-32.5V10	No
SUB-CATEGORY /TOPIC	REQUIRED AIR FORCE SPECIALTY CODES OR UNIT TYPE CODES	FREQUENCY†	SOURCE FOR TRAINING MATERIAL‡	COMBAT SKILLS TRAINING REQUIREMENT
Nuclear Weapon Response (Note 9)	3E8X1	12 months	‡AFTTP 3-32.5V5	No
Wartime Chemical /Biological Exercise	3E8X1	12 months	‡ AFTTP 3-32.5V6	No
WMD Exercise	3E8X1	12 Months	‡AFTTP 3-32.5V4	No
3E9X1 Specific Training				
All Hazards Threat Assessment	3E9X1	12 months	Silver Flag Lesson Plan	No
HAZMAT Operations Level Refresher	3E9X1	12 months	F&ES or 3E9 Tech School	No
HAZMAT Technician Level Refresher	3E9X1	12 months	F&ES or 3E9 Tech School	No
Flight Operations & Hazmat Response	3E9X1	12 months	AFI 10-2501, AFMAN 32-1007, AFMAN 10-2503	No
Pallet Buildup Familiarization	3E9X1	24 Months	Lesson Plan	No
Integrated Risk Management Process (Note 10)	3E9X1	12 months	Silver Flag Lesson Plan	No
Chemical Operations (Note 11)	3E9X1	12 months 24 months (ARC)	AFTTP 3-2.44, 3-2.46, 3-2.55	No
Biological Operations (Note 11)	3E9X1	12 months 24 months (ARC)	AFTTP 3-2.44, 3-2.46, 3-2.55	No
Radiological /Nuclear Operations (Note 11)	3E9X1	12 months 24 months (ARC)	AFTTP 3-2.44, 3-2.46, 3-2.55	No
CBRN Control Center Exercise (Note 11)	3E9X1	12 months 24 months (ARC)	‡AFMAN 10-2503 ‡AFTTP 3-2.44	No

Legend

* “All” refers to all Prime BEEF AFSCs, (i.e., all 32EX and 3EXXX).

**Air Force Institute of Technology (AFIT) course.

† “Frequencies for ARC members are the same as RegAF unless noted otherwise.

‡ Where a publication (AFMAN, AFTTP, etc.) is identified as the source for training material, individuals will read the current published version and be able to identify relationships of basic facts and state general principles about the subject. **(T-3)**

Initial = Identifies one-time training requirements.

Initial = Training must be completed upon assignment to that UTCs. **(T-2)**
Notes:

Note 1: Key and emergency essential civilians assigned to Civil Engineer units are included.

Note 2: The Computer Based Training is a pre-requisite to this course followed by field training in accordance with a lesson plan using field gear and primary weapons.

Note 3: Complete field training in accordance with the lesson plan using field gear and primary weapons.

Note 4: Frequency of training is dictated by the certification course completed.

Note 5: Certification must be presented by an American Red Cross or American Heart Association certified trainer. **(T-0)**

Note 6: DOD Pest Management Certification for pesticide application (DD Form 1826-1, *Pesticide Applicator Card*, and categories 3, 5, 6, 7 & 8) must be current throughout the duration of a tasking.

Note 7: 3E5X1 personnel shall complete the Mishap Survey Course on the Civil Engineer VLC web-based training and perform hands-on applications as part of foundational training to be considered "Satisfactorily Trained.” **(T-3)** Training instructions, checklists and guidelines can be printed from the web-based training references.

Note 8: ARC EOD flights conduct non-AFSC training during their pre-deployment training phase and are not required to track/report this training outside of their unit’s Certify to deploy phase.

Note 9: ARC 3E8X1 are exempt until assigned this mission.

Note 10: Members may receive credit for IRMP if participated in the installation IRMP process such as conducting/participating in the CBRN and EM planning portions, conducting/briefing hazard assessments, and tracking identified vulnerabilities and the status of mitigation actions IAW DoDI 6055.17, *DoD Emergency Management (EM) Program* and DAFI 31-101, *Integrated Defense* (ID) and AFI 10-2501, *Emergency Management Program*. Annotate member's roles/responsibilities in ARIS when giving credit. Use AFCEC IRMP web-based training & QTP as refresher when member does not participate or is limited in the IRMP process.

Note 11: Flights use Emergency Management Proficiency Training Plan for task objectives and scenario development. Minimum 8 hours of operations, with Airmen operating at their skill level and, if possible, consistent with their UTC MISCAP.

Links for SOURCE FOR TRAINING MATERIAL‡
Civil Engineer Playbooks:
https://usaf.dps.mil/teams/10041/ceplaybooks/pages/playbookviews.aspx
Curtis E. Lemay Center:
https://www.airuniversity.af.edu/LeMay/Display/Article/1099686/intermediate-courses/
Lesson Plans: Located on AFCEC Expeditionary Engineering SharePoint®. Access can be requested through SharePoint® manager prior to viewing Contingency Training.
https://usaf.dps.mil/sites/13072/SitePages/Contingency-Training.aspx
Technical Guide 15: https://www.acq.osd.mil/eie/afpmb/docs/techguides/tg15.pdf
e-Publishing: https://www.e-publishing.af.mil/
MyLearning: https://lms-jets.cce.af.mil/moodle/course/index.php

Attachment 3

PRIME BEEF VEHICLE AND EQUIPMENT TRAINING

A3.1. All Prime BEEF personnel will have a valid state motor vehicle license in accordance with AFI 24-301, *Ground Transportation*, and have a government driver's license for vehicles. (T-1) For equipment not requiring licensing, documentation verifying they may operate the equipment will be identified in training records and tracked in ARIS. **(T-1) Note:** AFCEC determines requirements for UTCs 4F9AC and 4F9AD. **(T-2)** Upon notification of a deployment, personnel should complete additional training to improve proficiency.

A3.2. Units that do not have access to vehicles or equipment in Table A3.1. Should make every attempt to train and or license on those vehicles. Practical solutions to equipment and vehicle shortfalls include contacting a nearby military installation to borrow or use equipment and/or programming unit funds to send individuals to training sites such as the Expeditionary Combat Support-Training and Certification Center (ECS-TCC), Regional Equipment Operator Training Site (REOTS), and Regional Training Sites (RTS).

A3.3. Air Force specialty code 3E7X1 participate in a continuous driver's training program until qualified on aircraft rescue and fire fighting vehicles assigned to the installation. (T-1) This requirement should include at least one aircraft rescue vehicle, a structural vehicle, and water tender.

Table A3.1. Vehicle and Equipment Training Requirements.

VEHICLE/EQUIPMENT TRAINING REQUIREMENTS (5 AND 7 LEVELS)														
VEHICLE	32EX	3E000	3E0X1(3)	3E0X2(3)	3E1X1(3)	3E2X1(3)	3E3X1(3)	3E4X1(3)	3E4X3(3)	3E5X1	3E6X1	3E7X1	3E8XX	3E9XX
Dump Truck				X			X	X						
Water Distributor Truck								X	X			X(1)		
Electrical Line Truck				X										
Up-armored High Mobility Multipurpose Wheeled Vehicle	X(1)	X(1)	X	X	X	X	X	X	X	X	X		X	X
Tractor-Trailer						X(4)	X(4)							
Front-End Loader			X	X	X(1)		X(1)	X(1)	X(1)	X(1)	X(1)		X	
All Terrain Forklift, 10-13K	X(1)	X(1)	X	X	X		X	X		X(1)		X(1)	X(1)	X(1)
Forklift, 6K					X						X			
Extendable Boom Forklift			X(1)		X	X					X			
Fire Vehicles												X(2)		
Sweeper Vacuum			X											
EQUIPMENT	32EX	3E000	3E0X1(3)	3E0X2(3)	3E1X1(3)	3E2X1(3)	3E3X1(3)	3E4X1(3)	3E4X3(3)	3E5X1	3E6X1	3E7X1	3E8XX	3E9XX
Sweeper Front Mounted Rotary									X					
Pneumatic Roller			X			X								
Vibratory Roller			X											
Compact Track Loader							X(1)	X				X(1)		
Mobile Volumetric Mixer						X	X(1)							
Mobile Asphalt Plant				X		X								
Polaris Ranger or equivalent Low Speed Vehicle												X		X

Note 1: Personnel in these career fields are recommended, but not required to be trained, licensed.
Note 2: Applies to aircraft rescue and fire fighting vehicles assigned to the installation.
Note 3: All 9-levels may use Primary AFSC to identify required vehicle/equipment training requirements.
Note 4: Training requirement applicable to 5 and 7 levels only. A minimum of two persons assigned to each 4FPET, 4FPAS and 4FPAT unit type codes will be qualified and licensed. Training is obtained at Home Station and the Regional Equipment Operators Training Site (REOTs) at Fort Indiantown Gap PA. The training at REOTs is no longer in ARIS and students need to contact the site directly for scheduling.

Attachment 4

PRIME BEEF SKILLS AND KNOWLEDGE TRAINING

Table A4.1. Skills and Knowledge Training Requirements.

Unit Type Code	Air Force Specialty Code	Reverse Osmosis Water Purification Unit (ROWPU)	Mobile Aircraft Arresting System (MAAS)	High Power Generator (HPG)	Basic Expeditionary Airfield Resources Distribution System (BDS)	Emergency Airfield Lighting System (EALS)	Large Area Shelter Maintenance Repair (LASMR)	Water and Fuel Expeditionary Repair System (WaFERS)
4FPET	3E051 or 3E071				2/24 (RegAF) 2/48 (ARC)	2/24 (RegAF), 2/48 (ARC)		
	3E052		1/24 (RegAF), 1/48 (ARC)	1/24 (RegAF) 1/48 (ARC)				
	3E351 or 3E371						3/24 (RegAF) 3/48 (ARC)	
	3E451 or 3E471	2/24 (RegAF) 2/48 (ARC)						1/24 (RegAF) 1/48 (ARC)
4FPAU	3E451	1/24 (RegAF) 1/48 (ARC)						1/24 (RegAF) 1/48 (ARC)
4FPAQ	3E051					1/24 (RegAF) 1/48 (ARC)		
4FPAP	3E052 or 3E072		1/24 (RegAF), 1/48 (ARC)	1/24 (RegAF) 1/48 (ARC)				
4FPAT	3E351 or 3E371						2/24 (RegAF) 2/48 (ARC)	
4F9B1	3E052 or 3E072		4/48 (All)					

Note: The first number in each column designates how many people per designated skill level(s) per UTC must be hands-on certified on a specified equipment item. **(T-1)** The second number designates the training frequency in months. Personnel must be hands-on certified

using the approved AFCEC plans of instructions, with the certification documented in their career field education & training plan and ARIS. **(T-1)** In order to achieve hands-on certification, individuals must complete appropriate mission essential equipment training course conducted at an approved training site (e.g., Regional Training Site, Expeditionary Combat Support-Training and Certification Center, mobile training teams), must meet the minimum "go/no go" standards identified in the Mission Essential Equipment Training curriculum, and must have their training records signed off by their trainer and/or certifier. **(T-1)**

Attachment 5

PRIME BEEF SPECIAL TRAINING SITES AND LOCATIONS

A5.1. Silver Flag Sites. Silver Flag mission qualification is conducted at Tyndall Air Force Base FL; Ramstein Air Base, GE; and Andersen Air Base, GU. These sites focus on training students to perform critical contingency tasks as a team. The training focuses on bare base beddown and sustainment operations using basic expeditionary airfield resource assets in a realistic environment. Where possible, combat skills are added to the curriculum to ensure realism and help fortify a warrior ethos throughout the training.

A5.2. Expeditionary Combat Support-Training and Certification Center (ECS-TCC). The ECS-TCC is located at Dobbins Air Reserve Base, GA. The Center provides certified instructors to administer and facilitate Skills and Knowledge training, Mission Essential Equipment Training (MEET), expeditionary, contingency, and upgrade training on behalf of Headquarters AFRC/A4O and AFCEC/CX. The site also provides other individual-focused specialized training to include core task certification, special purpose vehicle credentialing and licensing in accordance with **Table A3.1**, tractor-trailer and mobile hydraulic crane certification; airfield damage repair; minimum airfield operating strip layout and surveying applications; detection equipment training and active CBRN response evolutions; vehicle driver-operator training and live-fire burn exercises; unit control center operations (command, control, and communications); Explosive Ordnance Disposal incident response scenario training (classroom and practical applications) and mine-hound improvised explosive device detector training. The Learning Resource Center affords personnel the opportunity to complete certification testing, Air Force Qualification Training Packages, and access to update resource management and training systems. The ECS-TCC provides unit specific training session upon requests.

A5.3. Regional Training Site (RTS). Regional Training Sites can tailor to almost any unit's training needs with fully qualified and certified cadre assigned. These sites offer a training environment free from the normal distractions associated with base activities. The RTSs are designed to enhance training for Silver Flag mission qualification, exercises, and proficiency upgrade training. The training sites are available for foundational training, skills & knowledge to include Mission Essential Equipment Training (MEET) requirements in a self-paced environment. Select RTSs provide units with conference and working groups areas and options for rations, quarters, and equipment for all types of training. The following training opportunities are available at cadre led sites: Emergency Airfield Lighting System, Mobile Aircraft Arresting System, Reverse Osmosis Water Purification Unit, Paint Striper, Fiberglass Reinforced Polymer, Field Shower Unit, High Power Generators, Water Heaters, Field Deployable Environmental Control Units, Minimum Airfield Operating Surface Marking Kit, Mobile Emergency Operations Center, Shelter Systems, Rapid Airfield Damage Repair, Heavy Equipment Operations, and GeoBase. Cadres led sites are managed and operated by NGB/A4XX in partnership with local Air National Guard Civil Engineer unit. For further information on the RTS capabilities refer to ANGI 32-001, *Air National Civil Engineer Training Site Program*. **Note:** Non-skills and knowledge training at a RTS is unit funded.

A5.4. Regional Equipment Operator Training Site (REOTS). Regional Equipment Operator Training Site is located at the 201st RED HORSE Squadron, Fort Indiantown Gap, PA. Its purpose is to elevate equipment operator proficiency to wartime standard requirements. REOTS also provides MEET initial and refresher crane training.

A5.5. Air Education and Training Command and Air Force Institute of Technology Courses. Air Education and Training Command conducts formal contingency training courses on subjects such as bare base equipment, air base combat engineering, and readiness management. For course descriptions, refer to the Educational and Training Course Announcements website: **https://www.aetc.af.mil/**. Air Force Institute of Technology courses provide direct training and knowledge of the Prime BEEF program and contingency operations and develop skills that enable civil engineers to execute downrange missions more effectively. For further information, refer to the Air Force Institute of Technology website: **https://www.afit.edu/index.cfm**.

A5.6. 635 Materiel Maintenance Group, Holloman Air Force Base, NM. Locations such as the 635 Materiel Maintenance Group offer training on various pieces of basic expeditionary airfield resources equipment.

A5.7. Major Command Courses. Some major commands/direct reporting units/AFIMSC offer a variety of courses tailored to meet supplemental or special civil engineer requirements within command.

A5.8. Army power projection platforms. Power projection platforms are Army installations that strategically deploy active component brigades, mobilize, and deploy high priority Army Reserve component units. They also provide combat skills training for Air Force personnel deploying to high threat areas. Power projection platforms offer extensive hands-on training for combat skills.

A5.9. Individuals can receive in-depth training on many specialized contingency equipment items at sites listed in Table A5.1.

Table A5.1. Civil Engineer Training Sites.

CIVIL ENGINEER TRAINING SITES					
West Coast	**Midwest**	**South Region**	**East Coast**	**PACAF**	**USAFE**
163 Regional Training Site, March ARB, CA	119 Regional Training Site, Fargo, ND	622 Expeditionary Combat Support - Training and Certification Center, Dobbins ARB, GA	145 Regional Training Site, Charlotte, NC	554 Red Horse Squadron, Andersen AB, Guam	435 CTS, Ramstein AB, GE
151 EOD Regional Training Site, Salt Lake City, UT	188 Regional Training Site, Ft Smith, AR	801 RHTS, Tyndall AFB, FL	201 Regional Training Site & Regional Equipment Operator Training Site, Ft Indiantown Gap, PA		
	115 EOD Regional Training Site, 115th Fighter Wing, Madison, WI		166 CES, EOD Regional Training Site, Ft Indiantown Gap, PA		

Attachment 6

STAFF AUGMENTATION TEAMS

Table A6.1. Staff Augmentation Team Training Requirements.

SUB-CATEGORY/TOPIC	REQUIRED AIR FORCE SPECIALTY CODES OR UNIT TYPE CODES	FREQUENCY	SOURCE FOR TRAINING MATERIAL‡	CE WARTIME TASK STANDARD
Staff Augmentation Team General Contingency/Combat Skills Training				
Air Force Contract Augmentation Program Overview	4FPS6/4FPS7	48 months	Lesson Plan	Yes
Operating in a Joint Environment	4FPS6/4FPS7	Initial	Lesson Plan	Yes
Staff Augmentation Team Command and Control, Expedient Methods Training				
Unit Type Code (UTC) Management Course	4FPS6	Initial	MyLearning	Yes
Troop Leading Procedures/Military Decision-Making Process	4FPS6	Initial	Lesson Plan	Yes
Control Center Operations (CCO) Course	32EX, 3E000	Initial	MyLearning	Yes
Airfield Damage Repair (ADR)	4FPS6	48 months	MyLearning	Yes
Bare Base Conceptual Planning Course	4FPS6	48 months	MyLearning	Yes
Bare Base Overview	4FPS6/4FPS7	Initial	MyLearning	Yes
Staff Augmentation Team Weapons Skills Training				
M-4/M4A1 Qualification	All	IAW paragraph 4.8	Base CATM	Yes
M-9/M18 Qualification	All	IAW paragraph 4.8	Base CATM	Yes
Staff Augmentation Team 3E5X1 Specific Training				
Rapid Damage Assessment	3E5X1	24 months	MyLearning	Yes
Bare Base Planning and Layout Course	3E5X1**	48 months	MyLearning	Yes
GeoExPT – Operate Software	3E5X1	48 months	(Note 1)	Yes

Staff Augmentation Team Staff Training				
Contingency Wartime Planning Course	1 per 4FPS6	Initial	In-residence (Note 2)	No
Mobilization and Demobilization Process	4FPS6	Initial	War and Mobilization Plans (AFRC/A5XW), ‡AFI 10-402	No
Contingency Engineer Command Course	1 per 4FPS6	Initial	WMGT 585*	No
Joint Engineer Operations Course (JEOC)	1 per 4FPS6	Initial	WMGT 590*	No
Installation Planning Principles	1 per 4FPS7	Initial	WENG 519*	No
Contingency Facility Design	1 per 4FPS7	Initial	WENG 481*	No
Project Programming	1 per 4FPS7	Initial	WMGT 423*	No
Joint Construction Management System (JCMS) Software	32E and 3E5	Initial	AFCEC/CXX SharePoint® site	No
CAPE Certification Course	1 per S-Team	36 Months	Note 3	No

Legend

* Air Force Institute of Technology (AFIT) course.
** AFRC Staff Augmentation Team exempt.
‡ Where a publication (AFMAN, AFTTP, etc.) is identified as the source for training material, individuals read the current published version and be able to identify relationships of basic facts and state general principles about the subject.
Initial = Identifies one-time training requirements.
Note 1: GeoExPT software usage is required and does not require a licensing agreement.
Note 2: Curtis E. Lemay Center information located at https://www.airuniversity.af.edu/LeMay/Display/Article/1099686/intermediate-courses/
Note 3: PACAF and AFAFRICA requirements.

Links for Source for Training Material‡
MyLearning: https://lms-jets.cce.af.mil/moodle/course/index.php
Lesson Plans: Located on AFCEC Expeditionary Engineering SharePoint® (Request access through SharePoint® site) https://usaf.dps.mil/sites/13072/default.aspx
Civil Engineer Playbooks:
https://usaf.dps.mil/teams/10041/ceplaybooks/pages/playbookviews.aspx/
e-Publishing: https://www.e-publishing.af.mil/