



**DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
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MEMORANDUM FOR DISTRIBUTION C  
MAJCOMs/FLDCOMs/FOAs/DRUs

FROM: AF/A4  
1030 Air Force Pentagon, Suite 4E154  
Washington DC 20330

SUBJECT: Department of the Air Force Guidance Memorandum to Department of the Air Force Instruction (DAFI) 36-2654, *Combat Arms Training and Maintenance (CATM) Program*

By Order of the Secretary of the Air Force, this Department of the Air Force Guidance Memorandum immediately re-designates AFI 36-2654, *Combat Arms Program*, as a Department of the Air Force Instruction (DAFI) 36-2654, *Combat Arms Training and Maintenance (CATM) Program* and implements changes to DAFI 36-2654. As such, this publication applies to all civilian employees and uniformed members of the Regular Air Force, the Air Force Reserve, the Air National Guard, the United States Space Force, the Civil Air Patrol when conducting missions as the official Air Force Auxiliary, and those with a contractual obligation to abide by the terms of Department of the Air Force (DAF) publications. Compliance with this memorandum is mandatory. To the extent its direction is inconsistent with other DAF publications, the information herein prevails in accordance with Department of the Air Force (DAFI) 90-160, *Publications and Forms Management*.

This memorandum establishes guidance for Air Force Force Generation (AFFORGEN), clarifies roles and responsibilities, introduces DAF Small Arms and Light Weapons – Enterprise Governance, eliminates arming groups, and streamlines training based on arming requirements to support the future fight. Additionally, the sustainment guidance in this Guidance Memorandum replaces the guidance in DAF Manual (DAFMAN) 31-129, *USAF SA/LW Handling Procedures*. Finally, Chapter 5 is replaced to align with changes to AFFORGEN and arming requirements.

This memorandum becomes void after one year has elapsed from the date of this memorandum, or upon publishing of an interim change to, or rewrite of DAFI 36-2654, whichever is earlier.

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

Attachment.  
Guidance Changes

Current guidance in AFI 36-2654, *Combat Arms Program*, remains in effect with the following changes:

1.1.14. **(CHANGED)** Review and approve SA/LW qualification programs, qualification training criteria/standards, courses of fire, lesson plans, handbooks, and instructor guides before they are implemented.

1.1.17. **(CHANGED)** Serve as the DAF representative on the Joint Service Small Arms Program (JSSAP), Joint Service Small Arms Synchronization Team and the Joint Intermediate Force Capabilities Office's (JIFCO), Joint Coordination and Integration Group (JCIG) and Joint Integrated Product Team (JIPT). Participate in Joint Service SA/LW training, S&T/R&D, coordination, informational meetings, and equipment activities. Appoint other representatives as needed for DoD, other government agencies, JSSAP, JNLWD, Joint Service Small Arms Requirements Integration (JSSARI) Working Group and other required events and boards or technology evaluation and selection groups. AF/A4S will approve all DAF positions and decisions associated with the SA/LW community.

1.4.1.1. **(CHANGED)** Develop SA/LW qualification training criteria and standards, qualification training programs and courses of fire, lesson plans, handbooks and instructor guides. Review/approve SA/LW training programs (Non-Qualification) conducted at formal training courses, readiness training centers and readiness training sites. This includes conducting periodic reviews on training material every four years to ensure accuracy and currency.

1.4.1.3 **(CHANGED)** Assist career field managers with training development to support career field SA/LW proficiency/sustainment training programs. **Note:** For Security Forces, AFSFC will assist and coordinate with the MAJCOM/SF.

1.4.1.8. **(CHANGED)** Participate in joint service SA/LW training and equipment activities when appointed by AF/A4S. Work with other agencies and Services to determine if they have potential solutions and improvements for missions and requirements.

1.9.6.10 **(CHANGED)** Ensure the CATM Section Chief is Air Force Specialty Code (AFSC) 3P071B with the minimum rank of E6 or a DoD civilian equivalent (graduate of the Air Force CATM Apprentice Course) and is a graduate of the CATM Supervisor Course. Ensure lead instructors, tower operators, and SA/LW repair personnel are AFSC 3P0X1B or DoD civilian equivalent or others identified in this instruction and task certified to perform CATM activities. **(T-1)**

1.9.6.15. **(CHANGED)** Ensure adequate quantities of trained and certified non-CATM personnel are available to perform block officer and assistant instructor duties during live fire and classroom training when numbers of CATM personnel are not sufficient to meet mission requirements. **(T-3)**. Personnel require a 5-skill level and can only be used when insufficient numbers of CATM personnel are assigned to the CATM parent organization. **(T-2)**.

1.9.6.18. **(ADDED)** Ensure personnel conducting training follow the applicable TO guidance pertaining to maximum allowable number of rounds (ANOR) per day, safe distances, personal protective equipment, and backblast danger area restrictions. **(T-0)**

1.9.6.19. **(ADDED)** Ensure maximum use of Defender Weapon Trainers (DWT). DWTs must be lead instructor certified as outlined in **Chapter 3** and trained in accordance with **paragraph 1.9.9.4**.

1.9.7. **(CHANGED)** CATM Section Chief or Civilian Equivalent (CATM Manager) will:

1.9.7.1 **(CHANGED)** Manage the installation's CATM Program, Security Forces' Armory Operations, and serve as the weapons and tactics subject matter expert for the Security Forces commander.

1.9.7.9. **(DELETED)**

1.9.7.28. **(DELETED)**

1.9.7.29. **(DELETED)**

1.9.7.30. **(CHANGED)** Plan and conduct Excellence-In-Competition (EIC) matches with approval from AFSFC (for ammunition expenditure) and the Air Force Services Center, World Class Athlete and AF Shooting Program by emailing AFSVC/VMSS at [afsvc.wcap.workflow@us.af.mil](mailto:afsvc.wcap.workflow@us.af.mil). **(T-3)** Only currently certified CATM personnel may conduct EIC matches. **(T-1)** The EIC Project Officer handbook is located on the DAF CATM SharePoint® site.

1.9.7.31. **(DELETED)**

1.9.7.32. **(DELETED)**

1.9.9. **(ADDED)** CATM Trainer will:

1.9.9.1 **(ADDED)** Assist CATM Section Chief with their roles and responsibilities.

1.9.9.2 **(ADDED)** Administer and track Instructor and Weapons Maintenance Evaluation Programs. **(T-2)** Ensure assigned instructors are trained, evaluated, and certified to perform CATM duties. **(T-2)**

1.9.9.3 **(ADDED)** Ensure enough personnel are trained and certified to perform firing line official (FLO) duties during live fire when adequate numbers of 3P0X1B personnel are not available. Document training and certification on the DAF Form 1098, *Special Task Certification and Recurring Training* or in their training records. **(T-3)**

1.9.9.4 **(ADDED)** Train and certify personnel, to include Security Forces (i.e., Defender Weapons Trainer [DWT]), conducting qualification training, to operate the base small arms

range in support of approved unit proficiency or sustainment training programs (see **paragraphs 2.3.2.2 – 2.3.2.7**), recreational programs and non-Air Force range use (see **paragraphs 2.3.3.1 – 2.3.3.3**). **(T-2) Note:** DWTs are only authorized to conduct qualification training for Security Forces personnel on the Rifle/Carbine and Handgun/Pistol. Certified personnel must possess an AF Form 483, *Certificate of Competency*, and complete refresher training annually to maintain their certification. **(T-2)** Document training of DAF personnel on an AF Form 1098 or in their training records and maintain a locally developed training log of all personnel certified to operate the range(s), indicating when their certification expires (refresher training is due). **(T-2)** Retain this log as outlined in **paragraph 2.3.2.5**. **Exception:** This requirement does not apply to certified CATM personnel.

1.9.9.5. **(ADDED)** Establish and administer a CATM firearms proficiency training program to ensure instructors develop and maintain expertise with all SA/LW they train. **(T-2)**

1.9.9.6. **(ADDED)** Assist base units in developing unit-level sustainment/proficiency training programs by helping them develop courses of fire, approving courses for use on the base firing range, certifying unit personnel as range officials and providing guidance on approved Air Force weapon handling procedures. **(T-3)**

1.9.9.7. **(ADDED)** Ensure assigned personnel receive explosive safety training. **(T-3)**

1.9.9.8. **(ADDED)** Manage and conduct CATM Basic Course prerequisite training requirements.

1.9.9.9. **(ADDED)** Maintain instructor folders on 3P0X1B or DAF Civilian equivalent or both assigned to a CATM position (hard copy or electronic). At a minimum, the instructor folder should contain:

1.9.9.9.1. **(ADDED)** Instructor and weapon maintenance evaluations as required in **paragraph 3.3.** and **paragraph 3.4.**

1.9.9.9.2. **(ADDED)** Current copies of the AF Form 522, *USAF Ground Weapons Training Data*, AF Form 55, *Employee Safety and Health Record*, and training certificates.

**1.10. (CHANGED) Waiver Requests for This Publication (DAFI 36-2654).** The waiver approval authority for non-tiered requirements and compliance items in this publication is the first general officer in the requesting unit's chain of command. The requesting unit must provide AF/A4SO a copy of all approved waivers or deviations as required by DAFMAN 90-161, *Publishing Processes and Procedures*. If needed, AF/A4SO provides a copy to the AFSFC for awareness. The publication OPR must include a copy of any waivers or exceptions issued regarding the publications and forms management requirements found in this publication to the Air Force Departmental Publishing Office for publishing. Units submit waiver requests using DAF Form 679, *Department of the Air Force Publication Compliance Item Waiver Request/Approval*, following the guidance in DAFMAN 90-161.

2.2.8. **(CHANGED)** Evaluations. Instructors who perform SA/LW training or maintenance or both will have current evaluations as required in **paragraph 3.3.** and **paragraph 3.4.** dependent on their duties, to include Security Forces conducting qualification training. **(T-2)**

2.2.14.3.3. **(CHANGED)** Qualification training of individuals, including zeroing of weapons, for in-garrison arming.

2.3.2.3. **(CHANGED)** All units using the range will have personnel task certified by the CATM Section Chief. **(T-1)** Units require the following range safety officials (RSO), a chief range officer (CRO), in the grade of E-6 or above, and range safety officers (RSO) in the grade of E-5 or above or DoD civilians of equivalent grades in those positions. **(T-2) Exception:** Security Forces personnel with a minimum grade of E-5 or above may conduct RSO/CRO duties. The CRO has overall responsibility for all range operations and safety. The RSO(s) supervise shooters on the firing line and maintain shooter safety during firing. The ratio of RSOs to shooters will be 1:3 for non-CATM personnel conducting unit sustainment or proficiency training or both for rifle, handgun, and shotgun. **(T-1)** CATM will ensure that during range operations, at least one range officer (CRO or RSO) is present at the range that has received and can administer Tactical Combat Casualty Care (TCCC) or equivalent first aid training. **(T-2)** Personnel performing CRO and RSO duties will not perform any other responsibilities during range use. **(T-1)** Personnel performing CRO or RSO duties must be qualified on the Air Force Qualification Course (AFQC) or equivalent, on the weapons for which they conduct training. **(T-1)**

2.3.2.4. **(CHANGED)** CATM sections will develop a comprehensive training and certification program through a range operations certification training course or similar program. **(T-3)** At a minimum, the CATM Section Chief will include opening and closing procedures, weapon safety, RSO ratios, firing line procedures, tower operator duties, SA/LW-clearing procedures, range limitations and emergency notification procedures. **(T-3)** This certification must include evaluation during live-fire. **(T-3)** CATM personnel must periodically spot check units during range use to ensure procedures are followed. **(T-3)** CATM should conduct spot checks quarterly for each unit and maintain a local log of the checks. The CATM organizational commander will approve all range safety official training plans. **(T-3)**

2.3.3.8. **(CHANGED)** Non-DAF units/personnel must formally request and receive permission from the installation commander to use the installation's small arms range. **(T-2)** Once approved, for non-DoD units/personnel, the servicing CES will prepare either a license or permit per AFI 32-9003, *Granting Temporary Use of Air Force Real Property*. Personnel are not authorized to use the range until a license or permit is issued. DAFI 34-101, *Department of the Air Force Morale Welfare and Recreation Programs and Eligibility to Use Ranges*, requires approval for public members to use a range shared with the Morale, Welfare and Recreation Rod and Gun Club.

2.4.9.1.1. **(CHANGED)** CATM personnel will receive and wear a red baseball type cap with the words CATM embossed or embroidered with 1-inch black letters. Previously issued COMBAT ARMS caps remained authorized and units should replace through attrition. **Note:** Refer to DAFI 36-2903 for further guidance.

2.9.2.1. **(CHANGED)** To ensure compatibility with training needs, installation stakeholders will consider all weapons (e.g., M110A1, Mk22, M2A1, M240B, M3A1, etc.) required to support the installation before pursuing a community partnership range to replace a base range or in lieu of constructing a base range. This will include night fire, vehicle firing, automatic firing, tracer use, security risk/response time, surge priority use and all facets of the training required.

**3.2. (CHANGED) CATM Training Requirements:** Instructors performing assigned duties either at home station or deployed must meet criteria for training and qualification identified in the Air Force Enlisted Classification Directory (AFECD). **(T-1)** The CATM Section Chief, and Trainer ensures all assigned instructors are trained, evaluated, maintain skill proficiency, and participate in continuation training. For upgrade training, unit-training managers enter newly assigned 3P031B personnel into the appropriate upgrade training status code in accordance with DAFI 36-2670, *Total Force Development*. The CATM section will use AFSC 3P031B personnel in their newly acquired specialty rather than in other duty positions. Continual on-the-job training (OJT) will allow advancement to 5- and 7-skill levels.

3.3.1. **(CHANGED)** Lead Instructor Evaluations. The CATM Trainer will evaluate lead instructors once the individual has successfully completed two training evaluations. **(T-3)** Satisfactory completion of this evaluation authorizes an individual to perform lead instructor duties without supervision. The evaluator must be present for the entire program of instruction, including live-fire and preventive maintenance evaluation. **(T-1)**

3.3.2.1. **(CHANGED)** For lead instructor evaluations, the evaluation by the CATM Trainer must cover the complete qualification course training program to include performance of tower operator duties and evaluating preventive maintenance. **(T-2)**

3.3.3. **(CHANGED)** Once lead instructor certified, each CATM instructor that performs instruction duties will receive an annual evaluation each calendar year to ensure continued quality of instruction and training. **(T-2)** This evaluation occurs randomly within 60-days of the anniversary date of the previous annual evaluation or lead instructor evaluation if there was no annual evaluation. The CATM Trainer does not notify the instructor being evaluated until the day of the evaluation. The CATM Trainer must conduct this annual evaluation on a different SA/LW each year (evaluations cannot be on the same type of SA/LW for consecutive years). **(T-3)** This evaluation follows the same requirements as lead instructor evaluation.

3.3.4. **(CHANGED)** Conducting evaluations. The CATM Trainer conducts lead instructor and annual evaluations. **Note:** At large or non-traditional CATM organizations with multiple teams/crews, the CATM organizational commander may designate multiple CATM Trainers to conduct evaluations. The individual's trainer conducts training evaluations. The immediate supervisor or someone higher in the chain of command conducts evaluations on the CATM Section Chief when they perform lead instructor duties. Instructors subordinate to the Section Chief do not normally conduct official evaluations on the Section Chief; however, task certified lead instructors subordinate to the NCOIC may conduct official evaluations on the Section Chief with AF/A4SO approval when necessary to meet mission needs. Other instructors may perform informal evaluations on any instructor to provide additional feedback on their performance.

Higher headquarters CATM officials may also accomplish lead instructor and “no notice” evaluations. The evaluator critiques each instructor evaluated. The evaluator must provide feedback within two-workdays following the evaluation. **(T-3)** The instructor, supervisor and CATM Trainer should be present during the feedback session. If instructor performance was unsatisfactory, include the Section Chief in the feedback session.

**3.3.7. (ADDED) Fielding and Re-Certification Evaluations:** The Section Chief is considered the installation’s subject matter expert (SME) on SA/LW, CATM training, and may need to self-certify when a new system is fielded. When a new SA/LW system, accessory, or enabler is fielded it is incumbent on the Section Chief to prepare the shop or section or both.

**3.3.7.1. (ADDED)** The Section Chief will familiarize himself or herself with the AF/A4SO approved lesson plan, course(s) of fire, and pertinent training material. Once familiarized, the Section Chief will conduct live-fire qualification on the appropriate qualification course. When qualified, the Section Chief is ready to train other CATM instructors.

**3.3.7.2. (ADDED)** The Section Chief will teach other instructors and oversee live-fire qualification. **Note:** The immediate supervisor or someone higher in the chain of command conducts evaluations on the Section Chief when they perform lead instructor duties per **paragraph 3.3.4**. Once qualified, other instructors may start the lead instructor evaluation process.

**3.3.7.3. (ADDED)** The Section Chief will use the same procedures, where applicable, for maintenance evaluations or when instructor certifications laps or both using applicable lesson plans, training material, manuals, and Technical Orders.

**3.5.2. (DELETED)**

**(REPLACE) Chapter 5**

**(REPLACE) WEAPONS TRAINING**

**5.1. (ADDED) Purpose.** This chapter defines policy and procedures to execute the training program.

**5.2. (ADDED) Qualification and Frequency.**

**5.2.1. (ADDED)** DoDD 5210.56, *Arming and the Use of Force* identifies the minimum training requirements and frequency of qualification training needed to arm DoD personnel. This guidance governs home station (peacetime) arming and specifically states requirements do not apply to DoD personnel engaged in military operations subject to the standing or other rules of engagement. Personnel who receive this training (based on mission need) may be military, DoD civilian or civilian contractors in support of DAF missions. Personnel with an arming requirement will complete qualification training every 12-months on all SA/LW with which they are armed or employ. **(T-0)**

5.2.2. **(ADDED)** Individuals/Air Force Specialty Codes (AFSC) who are required to be armed for their home station mission and personnel assigned to Demand Force Teams (DFTs) under AFFORGEN will qualify every 12-months. **(T-1)**

5.2.2.1. **(ADDED)** Home station arming consists of individuals, and or AFSCs, that must arm as a requirement of either their AFSC, function, or mission (e.g., Security Forces, AFOSI agents, Aircrew armed for anti-hijacking, etc.).

5.2.2.2. **(ADDED)** DFTs are composed primarily of unit type codes (UTCs) from units or capabilities that operate independently, including unique, highly specific, combat, combat support, or combat service support capabilities. Example DFT capabilities include but are not limited to the Expeditionary Medical Support System (EMEDS), Rapid Engineering Deployable Heavy Operational Repair Squadron Engineer (REDHORSE) Teams, and Tactical Air Control Party (TACP). AF/A3T will coordinate with AF/A4S (regarding SA/LW training) and determine the DFTs for each Global Force Management Allocation Plan (GFMAP) cycle annually, incorporating inputs from MAJCOMs and Functional Area Managers.

5.2.2.3. **(ADDED)** Security Forces will complete carbine and handgun Defender Qualification Course (DQC) while all others will complete AFQC Tables I – III, outlined in DAFMAN 36-2655. **(T-2) Exception:** Accessions following the guidance in **paragraph 5.2.6.**

5.2.3. **(ADDED)** Personnel assigned to the AFFORGEN (RegAF) cycle who are not identified in **paragraphs 5.2.2.1.** and **5.2.2.2.** will complete qualification within 12 months of their “Available to Commit” end date. Personnel will complete AFQC Tables I – III, outlined in DAFMAN 36-2655. **Note:** This qualification will be valid for 12 months or the entire duration of the deployment, regardless of length.

5.2.4. **(ADDED)** Personnel assigned to the AFFORGEN (ARC) cycle who are not identified in **paragraphs 5.2.2.1.** and **5.2.2.2.** will complete qualification training every 48-months to coincide with their “Prepare” phase. Personnel will complete AFQC Tables I – III, outlined DAFMAN 36-2655. **(T-2)** Personnel must be qualified within 12-months of their “Available to Commit” end date. **Note:** This qualification will be valid for 12 months or the entire duration of the deployment, regardless of length.

5.2.5. **(ADDED)** Force & Infrastructure Category (FIC) 2, under AFFORGEN (e.g., labs, depots, test ranges, schools, hospitals), are not required to conduct qualification training. **(T-2)** )

5.2.6. **(ADDED)** Accessions include Basic Military Training (BMT) trainees, Officer Training School (OTS) cadets, and United States Air Force Academy (USAFA) cadets. USAFA and OTS cadets may receive a one-time training event (qualification or orientation) on either the rifle or handgun. **Note:** BMT accessions complete qualification training on the Air Force Basic Qualification Course (AFBQC), as outlined in DAFMAN 36-2655.

**5.3. (ADDED) Sustainment, Proficiency and Mechanical Training Frequencies.**



5.3.1. **(ADDED)** Before conducting live fire training, the CATM Section Chief must approve courses/type of fire for each SA/LW used on the installation's range to ensure safety limitations are met. **(T-2)** The unit will conduct unit proficiency and sustainment training. Unit personnel may request range usage from the installation's CATM section (if conducting live fire) based on availability. **Note:** See **Chapter 2** for training requirements.

5.3.2. **(ADDED)** AFSCs directed by their Functional or AFCFM are required to complete mandatory unit live-fire sustainment training after completion of qualification training on their primary weapon(s). Security Forces personnel with an arming requirement will conduct proficiency and sustainment training as directed by their MAJCOM/SF, in addition to annually firing Shoot, Move and Communicate as outlined in DAFMAN 36-2655. **(T-1)**

5.3.2.1 **(ADDED)** MAJCOM/SF sustainment training programs will not exceed the munitions quantities listed in Ground Munitions Authorization Tables (GMAT), Table 2B.1, *Security Forces Members Proficiency or Familiarization Training Allowance* and will be coordinated with AFSFC/S3T.

5.3.2.2. **(ADDED)** Munitions are forecasted under Functional User Code (FUC) S3 (Security Forces) or C1 (Combat Arms). If forecasted on different FUCs, the total numbers will not exceed Table 2B.1.

5.3.3. **(ADDED)** M2, M240B, MK19 machine gunners, and assistant gunners must complete mechanical training 5 to 7 months after live-fire training. **(T-1)** Mechanical training consists of classroom instruction and passing all the performance evaluations. **Note:** Any other unique qualification frequencies are identified in the applicable chapter of DAFMAN 36-2655.

5.3.4. **(ADDED)** Advanced Designated Marksman (ADM) personnel will qualify twice each year and complete mandatory sustainment training twice each year, alternating between qualification and sustainment each calendar year (CY) quarter as directed in the Advanced Designated Marksman AFQC in DAFMAN 36-2655. **(T-1)** For example, if the member completes initial qualification in Feb 24 (first quarter of CY) they must complete sustainment training by 30 Jun 24 (end of second quarter of CY). The next CY quarter they must complete recurring qualification. In this example, they are required to qualify by 30 Sep 24. This cycle continues, alternating between sustainment training and recurring qualification each CY quarter until the arming requirement no longer exists.

5.3.5. **(ADDED)** Personnel are exempt from unit live-fire sustainment and mechanical training while deployed. Additionally, ADM personnel are exempt from semi-annual qualification and sustainment training requirements while deployed and qualifications remain valid for the entire length of deployment.

**5.4. (ADDED) Initial Live-Fire Qualification.** Initial live-fire qualification is detailed, in-depth academic and live-fire training designed to give an individual the knowledge and skills necessary to meet qualification standards for arming with a specific type of SA/LW (individual, gunners, and assistant gunners).

5.4.1. **(ADDED)** Initial full-distance live-fire qualification training is mandatory for MK19, M2/M2A1, M240B machine guns and the M249 automatic rifle. **(T-1)** AF/A4SO may approve M240B and M249 initial 10-meter qualification when the one-way travel time to a local full-distance range is more than two hours (non-TDY), when local full-distance ranges are not available, or use is cost prohibitive. This is the exception and units should only request this after all efforts have been exhausted. The requesting Security Forces/CATM organizational commander will route request (after installation coordination as required by local guidance) to AFSFC for review, MAJCOM/SF for concurrence/non-concurrence, and then to AF/A4SO for approval or disapproval. **(T-1) Note:** No approval is required for 10-meter recurring qualification with the M240 and M249.

5.4.2. **(ADDED)** Individuals who have not qualified on the MK19, M2/M2A1, M240B machine guns and the M249 automatic rifle within 24-months must requalify using initial training standards. **(T-1)**

**5.5. (ADDED) Recurring Qualification Training.** Recurring qualification is used to counter proficiency and skill retention lost over time. Individuals must have already been initially qualified (live fire) on the weapon. **(T-1)**

5.5.1. **(ADDED)** A “training session” is defined as one trip to the classroom/range to receive qualification training. “Re-fires” are defined as additional attempts during a qualification training session (occurs when a student fails to qualify). If a student fails to qualify, only one re-fire is permitted. **(T-3)** A student who fails the re-fire is scheduled for remedial training.

5.5.2. **(ADDED)** Individuals who fail to meet a specific qualification training standard during multiple phase courses may continue to fire the entire course before receiving an on-the-spot re-fire attempt on the phase they failed. Group re-fire attempts may be administered after the entire course is fired or anytime between phases.

**5.6. (ADDED) Remedial Firearms Training.** This is in-depth training to emphasize shooting fundamentals. Remedial training sessions are kept small, or individualized, to focus on specific problems and afford the trainee an opportunity to improve. **Note:** Do not mix initial or recurring students with remedial students in the same classes.

5.6.1. **(ADDED)** Instructors may issue additional ammunition for use during remedial zeroing and teaching phases. Conduct ball and dummy exercises, similar drills, or simulator training, as needed, before evaluation.

5.6.2. **(ADDED)** Students are permitted one re-fire during the remedial training session(s). A student who fails on the second attempt is scheduled for a second remedial class.

5.6.3. **(ADDED)** If a student fails to qualify and has been scheduled for remedial training, the firing line official will prepare a written assessment of the shooter’s problems. **(T-3)** This evaluation assists future instructors to focus efforts on the problems. Maintain the assessment until the next scheduled remedial training class.

5.6.4. **(ADDED)** If the student fails to qualify after the second remedial class, the CATM Section Chief will provide the individual's unit commander a written summary of probable causes of the failures. **(T-3)** If the commander determines the individual's duties require arming and recommends the individual for additional training, the student will attend another remedial class with no more than two attempts at qualifying. **(T-3)**

5.6.5. **(ADDED)** If the individual still fails to qualify after the third remedial training session, the commander determines the individual's suitability for armed duty or contingency deployment. **(T-3)**

**5.7. (ADDED) Orientation Training. Note:** Orientation training does not qualify an individual for armed duty.

5.7.1. **(ADDED)** Handgun. Handgun orientation training may be conducted for USAFA and ROTC officer accessions. This training consists of classroom instruction in general firearms safety, basic operation, and marksmanship fundamentals. After completion of classroom training, students participate in a live-fire session by completing Phase II (evaluation) of the handgun AFQC, outlined in DAFMAN 36-2655.

5.7.2. **(ADDED)** Rifle. Rifle orientation training may be conducted for USAFA and ROTC officer accessions. This training consists of classroom instruction in general firearms safety, basic operation, and marksmanship fundamentals. After completion of classroom training, students participate in a live-fire session following the guidance outlined in DAFMAN 36-2655. **Note:** USAFA and ROTC students will use iron sights only if trained on the M16A2 rifle.

5.7.3. **(ADDED)** Machinegun. Machinegun orientation training may be conducted during Security Forces formal technical training. This training consists of classroom instruction in basic operation and marksmanship fundamentals. After completion of classroom training, students participate in a live-fire session by completing Phase II, Orders 1 and 2 of the machine gun AFQC outlined in DAFMAN 36-2655.

5.7.4. **(ADDED)** Automatic rifle. Automatic rifle orientation training may be conducted during Security Forces formal technical training. This training consists of classroom instruction in basic operation and marksmanship fundamentals. After completion of classroom training, students participate in a live-fire session by completing Phase I Order 1 and Phase II Order 2 of the automatic rifle AFQC outlined in DAFMAN 36-2655.

5.7.5. **(ADDED)** Grenade launcher. Grenade launcher orientation training may be conducted during Security Forces formal technical training. This training consists of classroom instruction in basic operation and marksmanship fundamentals. After completion of classroom training, students participate in a live-fire session by completing Phase I Orders 1, 3 and 5 of the grenade launcher AFQC outlined in DAFMAN 36-2655.

**5.8. (ADDED) Deployment Qualification Training Requirements.** For a deployment individuals must complete the applicable AFQC in its entirety as required without a waiver, other than those approved by the combatant command (CCMD), for the weapon(s) required for

the deployment. **Note:** The CCMD may impose requirements that are more stringent or may not approve the application of home station waivers. The unit deployment manager will verify reporting instructions to ensure their personnel receive required training and that CCMD requirements are met. (T-3)

5.8.1. **(ADDED)** Personnel who complete qualification training in the “Certify” phase are qualified for 12-months or the entire duration of the deployment, whichever is longer.

5.8.2. **(ADDED)** Personnel complete qualification training wearing individual combat equipment (ICE) and perform all reloading portions from the magazine pouches or vest they expect to use when deployed. **(T-2)**

5.8.2.1. **(ADDED)** As a minimum, ICE must include helmet, individual body armor, load bearing apparatus, magazine pouches (if not incorporated in a vest), holster/magazine pouches for the handgun if applicable and protective (gas) mask. Commanders may require other unique ICE to be worn during firing, with approval from the CATM Section Chief to ensure range safety is not compromised. For ranges where helmets cannot be worn during live-fire due to hearing protection requirements, CATM will perform dry-fire training with students wearing helmets in the classroom and on the range and conduct performance evaluations to ensure proficiency. **(T-2)**

5.8.2.2. **(ADDED)** Aircrew personnel who will not perform any ground combat duties at the deployed location or use ICE are exempt from the ICE requirement during qualification training. Aircrew personnel with an arming requirement with the Aircrew Personal Defense Weapon (i.e., GAU-5A) complete qualification training outlined in DAFMAN 36-2655.

5.8.3. **(ADDED)** Personnel permanently assigned to sister service installations and directly supporting joint service missions who are authorized to use sister service firearms qualifications as outlined in **paragraph 5.10** may use this qualification for deployment if accomplished within the required time.

5.8.4. **(ADDED)** Personnel whose qualifications were current prior to departure from home station for deployment will remain qualified for 30-days upon return to home station regardless of their original expiration dates, not to exceed a total qualification length of 14-months.

5.8.5. **(ADDED)** Personnel who are taking an issued weapon on the deployment will complete live-fire zero with the issued SA/LW, utilizing all issued aiming devices and sights (optics) prior to leaving home station if they used a different weapon to complete qualification training. **(T-1)** If possible, individuals fire and qualify with the actual assigned military weapon they will be assigned during deployment. There are locations with pre-positioned SA/LW and firing the actual weapon before the deployment is not feasible. In these cases, if possible, the installation/site commander at the deployed location should make allowances for conducting zero firing soon after the deployed personnel arrive.

5.8.5.1. **(ADDED)** CATM personnel will make provisions for individuals deploying with a SA/LW from extended storage to zero their weapon if they are already qualified or if their weapon has been changed for any reason. **(T-1)**

5.8.5.2. **(ADDED)** For contingency operations, all weapons carried by DAF personnel must be zeroed by the deploying individual prior to departing the home station or staging area. **(T-1)**

5.8.6. **(ADDED)** Short notice deployments will be handled as just in time training.

## **5.9. (ADDED) Overseas Firearms Qualification Information.**

5.9.1. **(ADDED)** Personnel Processing Code (PPC) identifies if an assignment requires individuals to be qualified. Personnel with questions about PPCs or overseas firing requirements should contact their local Military Personnel Section (MPS), Military Personnel Flight (MPF) or gaining command for guidance on this personnel action. The CATM section only provides qualification training not interpretation of the codes or justification. For unique situations, refer to **paragraph 5.15** for qualification extension options. **Note:** On occasion, Continental United States (CONUS) to CONUS assignments may have a PPC, in this case, CATM will provide training per the PPC.

5.9.1.1. **(ADDED)** Personnel being reassigned from overseas to bases in the CONUS do not require SA/LW qualification. They receive qualification training, if required, at their gaining base.

5.9.1.2. **(ADDED)** The unit scheduler for personnel requesting qualification training for a PCS assignment is responsible for verifying the individual's requirement to receive training before scheduling them for a class. **(T-3)**

5.9.2. **(ADDED)** MAJCOM PPC identified individuals with overseas assignments normally receive either rifle/carbine qualification training (enlisted) or handgun qualification training (officer) unless function or mission dictate otherwise. The goal is for these individuals to meet live-fire qualification training standards. However, if an individual fails to qualify after three attempts, the losing MPS/MPF should contact the gaining command for guidance.

5.9.3. **(ADDED)** When an assignment has a PPC assigned requiring an individual to be qualified, the MPS/MPF personnel relocation element notifies the individual's unit by identifying the requirement in the relocation notification. As with other qualification training, the individual schedules training with CATM through their unit. If training is not entered in ARIS, the individual or the individual's unit ensures the AF Form(s) 522 is provided to the MPS/MPF for transfer to the new assignment. During in-processing, the gaining MPS/MPF ensures the AF Form(s) 522 is given to the member's new unit. See the MPS/MPF for further guidance.

**5.10. (ADDED) SA/LW training for DAF personnel by other than CATM.** There are select circumstances where DAF personnel may receive qualification or other firearms training by personnel not identified as CATM Instructors in **paragraph 1.9.8.1**.

5.10.1. **(ADDED)** Qualification training for personnel by sister services for deployment. In short notice or unanticipated circumstances, personnel may have no alternative other than to report to deployment training conducted by another Service or agency (e.g., US Army Power Projection Platform) without prior qualification. This is an exception to policy and only used after all efforts to get the individual qualified by CATM have been exhausted.

5.10.1.1. **(ADDED)** When personnel report to deployment training conducted by another Service or agency under such conditions, training and qualification by the host Service may be required. Commanders may use one of two courses of action to offset this shortfall: send CATM personnel to the training location to qualify members, or if not feasible, request approval from AF/A4SO to utilize host Service training, qualification courses and training personnel to qualify personnel.

5.10.1.2. **(ADDED)** If leadership selects the second option above, qualification training must satisfy the training objectives for the appropriate weapon(s) listed in DAFMAN 36-2655. **(T-1)**

5.10.1.3. **(ADDED)** Other Service qualifications under these conditions are only valid for the specific mission requiring the training and may not be used for home station arming of personnel.

5.10.1.4. **(ADDED)** Route request for Sister Service qualification approval via memorandum format through AFSFC for review, MAJCOM/SF, and then approval by AF/A4SO.

5.10.2. **(ADDED)** Qualification training for personnel assigned to sister services. Personnel permanently assigned to sister service installations and directly supporting joint service missions, such as Tactical Air Control Party or Air Support Operations Center personnel, are authorized to use sister service approved qualification courses conducted by host service personnel as their primary method of accomplishing qualification training during their tour of duty. Units with personnel receiving qualification training from other Services must arrange to have their qualification data entered into ARIS. **(T-2)** The CATM section at the installation providing administrative support is responsible for updating qualification data submitted by the unit in ARIS. This ensures a record of qualification is visible within the system.

5.10.2.1. **(ADDED)** Other Service qualifications cannot be used to arm personnel for home station arming missions on Air Force installations. Individuals who are reassigned from a sister service installation to an DAF installation must complete DAF qualification training to remain qualified. **(T-2)**

5.10.2.2. **(ADDED)** Units using this option must ensure individuals receive Combat Mindset training during qualification training following the guidance in **Chapter 3**. **(T-1)**

5.10.3. **(ADDED)** **Qualification training for AFOSI agents attending U.S. Air Force Special Investigations Academy (USAFSIA).** HQ AFOSI may utilize Federal Law Enforcement Training Center (FLETC) certified instructors and task certified AFOSI agents to ensure enough personnel to support the USAFSIA firearms training program. The following paragraphs apply only to training conducted at the USAFSIA.

5.10.3.1. **(ADDED)** When sufficient numbers of CATM or civilian equivalent personnel are not available, USAFSIA/CC may authorize FLETC employed firearms instructors at the USAFSIA who have successfully completed the Firearms Instructor Training Program and Law Enforcement Instructor Training Program to perform lead instructor, tower operator, assistant instructor, and firing line official duties for DAF qualification training of AFOSI students/agents at the USAFSIA on the AFOSI issued handgun (military), and the M16/M4 series rifle/carbine. FLETC firearms instructors must successfully complete the live-fire qualification course before conducting BAT and annually thereafter. **(T-1)** These personnel will be trained and evaluated by a task certified CATM instructor whenever possible. **(T-2)**

5.10.3.2. **(ADDED)** FLETC firearms instructors must follow the guidance in this instruction as well as the guidance in the appropriate chapter of DAFMAN 36-2655, while conducting DAF qualification training to trainees. **(T-1)** FLETC firearms instructors will use DAF approved lesson plans for this training. **(T-1)**

5.10.3.3. **(ADDED)** FLETC firearms instructors that meet the requirements in **paragraph 2.11.3.1** may certify AFOSI agents to perform assistant instructor and/or firing line official duties at the USAFSIA following the guidance in **Chapter 3**.

5.10.3.4. **(ADDED)** If CATM maintenance support is unavailable (lack of assigned CATM personnel or not reasonably available at a nearby installation), USAFSIA/CC may approve use of the FLETC Gunsmith Shop to inspect and repair student/agent DAF SA/LW. Inspect and repair SA/LW in accordance with **Chapter 6** of this instruction and the applicable AFTO. When FLETC gunsmiths perform inspections or maintenance, they will provide a copy of the inspection report and/or repair documents to the DAF office designated by USAFSIA/CC for entry into ARIS. **(T-2)** All inspections and repairs must be entered into ARIS on the AFTO Form 105. **(T-2)**

5.10.4. **(ADDED)** **Qualification training for Civilian Police Officers (CPO) and SF Law Enforcement attendees attending Veteran Affairs Law Enforcement Training Center (VALETC)**. AFSFC manages use of VALETC certified instructors to ensure enough personnel to support the DAF Civilian Police Officers (CPO) firearms training program. The following paragraphs apply only to training conducted at VALETC.

5.10.4.1. **(ADDED)** When sufficient numbers of CATM or civilian equivalent personnel are not available, AFSFC/CC may authorize VALETC firearms instructors who have successfully completed the Instructional Development (ISD), Firearms Instructor (FAI) and Long Gun Instructor (LGI) courses to perform lead instructor, tower operator, assistant instructor, and firing line official duties for DAF qualification training of CPO and Law Enforcement students on the handgun and rifle/carbine AFQC. VALETC firearms instructors must successfully complete live-fire qualification on the course(s) before conducting training and annually thereafter. **(T-1)** These personnel will be trained and evaluated by a task certified CATM instructor whenever possible. **(T-2)**

5.10.4.2. **(ADDED)** VALETC firearms instructors must follow the guidance in this instruction as well as the guidance in the appropriate chapter of DAFMAN 36-2655 while conducting DAF

qualification training. **(T-1)** VALETC firearms instructors will use DAF approved lesson plans for this training.

5.10.4.3. **(ADDED)** VALETC firearms instructor certifications will be reviewed annually during the VALETC curriculum review conducted by AFSFC. **(T-2)**

5.10.5. **(ADDED)** Qualification training for DAF personnel by sister services SA/LW instructors assigned to a CATM section. The following paragraphs outline when those personnel can conduct qualification training with DAF personnel.

5.10.5.1. **(ADDED)** Sister service personnel assigned to CATM sections must be a graduate of a service specific SA/LW instructor certification course.

5.10.5.2. **(ADDED)** Sister service personnel assigned to CATM section must meet all instructor certification training procedures outlined in this instruction.

5.10.5.3. **(ADDED)** CATM Section Chiefs with sister service personnel assigned to their section will create a localized training plan to teach sister service personnel DAF specific processes and TTPs. This training will be documented and maintained in the sister service instructor's training folder. **(T-2)**

5.10.5.4. **(ADDED)** DAF personnel are not to authorize sister service personnel to conduct CATM Section Chief duties regardless of rank. **(T-1)**

5.10.6. **(ADDED)** Personnel must be live-fire qualified by CATM personnel before participating in any other non-qualification live-fire training including training provided by DAF, a sister service, contractor, or other agency. **(T-2)**

## **5.11. (ADDED) Small Arms Expert Marksmanship Ribbon (SAEMR).**

5.11.1. **(ADDED)** Personnel may not fire any DAF qualification courses or other service's qualification programs for the sole purpose of obtaining the expert ribbon. Award the SAEMR to the following personnel:

5.11.1.1. **(ADDED)** Personnel who live-fire qualify with an expert score on the Handgun AFQC, Rifle/Carbine AFQC, or both to include the Handgun Basic Arms Training Course, the Basic Defender Qualification Course (BDQC) and/or the Defender Qualification Course (DQC) and meet all other course objectives outlined in DAFMAN 36-2655.

5.11.1.2. **(ADDED)** Personnel who are unable to fire the AFQC/BDQC/DQC but achieve an expert score (through live fire) on another Service's qualification program such as the U.S. Army M16 rifle qualification course. **Note:** AF/A4SO must pre-approve this course for personnel, and/or units. **(T-2)**

5.11.1.3. **(ADDED)** Personnel who live-fire qualify with an expert score on the rifle or handgun orientation training and meet all other course objectives identified in DAFMAN 36-2655.



5.11.2. **(ADDED)** The DAF Form 522 is the basis for the SAEMR award. The individual awarded the SAEMR is responsible for bringing the DAF Form 522 to the MPS/MPF Awards and Decorations section. The MPS/MPF enters the award on the individual's automated personnel record.

5.11.3. **(ADDED)** DAFMAN 36-2806, *Military Awards: Criteria and Procedures* prescribes authority for the award of this ribbon. DAFI 36-2903, *Dress and Personal Appearance of United States Air Force and United States Space Force Personnel*, shows proper wear of the SAEMR.

5.11.4. **(ADDED)** One Bronze Service Star can be awarded in addition to the SAEMR when an individual qualifies as expert with both the rifle and a handgun. Only one award per weapon type (rifle or handgun) is made no matter how many times the individual qualifies as expert.

**5.12. (ADDED) Virtual Training Systems (VTS).** VTS (firearm simulators) are efficient and time effective tools to provide real world training at the unit level in the following areas: use of force, theater or command specific rules of engagement, tactical and judgmental scenarios. VTS are good for initial through advanced marksmanship, remedial training and personnel are encouraged to utilize VTS to practice marksmanship fundamentals prior to qualification training.

5.12.1. **(ADDED)** Units requiring proficiency and sustainment training (e.g., AFFORGEN) are encouraged to use VTS. Additionally, units should use VTS to mitigate training gaps, such as non-availability of full-distance rifle and machine gun ranges, as well as other problems with inadequate training facilities.

5.12.2. **(ADDED)** VTS firearm simulators must meet the capabilities requirements outlined by AF/A4S. Units may obtain these requirements from the DAF CATM SharePoint® site. AF/A4S and the AFSFC will not be able to support systems that do not meet these requirements with operation and training guidance.

**5.13. (ADDED) Blanks and Close Combat Mission Capability Kit (CCMCK):** Unless specified in a training program, such as the Security Forces Shoot, Move and Communicate (SMC) Course, personnel are not required to maintain firearms qualification strictly to participate in this training. See DAFMAN 31-129 for more information.

5.13.1. **(ADDED)** Bird/wildlife Aircraft Strike Hazard Program. CATM should assist unit trainers in OJT task certifying personnel using blanks. These personnel are not certified to go "solo" until they have completed training as outlined in the approved local Bird/wildlife Aircraft Strike Hazard plan. See **paragraph 5.13.2.**

5.13.2. **(ADDED)** Individuals who carry a weapon with ammunition, other than marking cartridges/blanks, that fires any type of projectile (including shot) must complete the appropriate qualification course outlined in DAFMAN 36-2655 before carrying the weapon with this type of ammunition. **(T-0).** This includes personnel performing duties such as EOD, Bird/wildlife Aircraft Strike Hazard, Large Mammal Removal or Pest Control, when equipped with this type of ammunition.

**5.14. (ADDED) General Exceptions:**

5.14.1. **(ADDED)** Individuals stationed in countries or areas within a country where customs, laws, or international agreements make it impossible to receive firearms training are not required to have firearms training for the duration of the assignment, not to exceed 24-months. This provision does not preclude MAJCOMs from maintaining qualification intervals at established TDY locations. **Note:** Individual SA/LW qualifications must be current prior to being granted this 24-month exception. **(T-1)** This 24-month exception is the total length of qualification, and no extensions may be granted (individuals cannot be qualified longer than 24-months). **(T-0).**

5.14.2. **(ADDED)** Students attending technical training courses at JBSA are exempt from firing SA/LW phases/orders requiring chemical warfare protective equipment (i.e., gas mask and gloves). Although not required, students may fire these phases/orders upon arrival at their first duty station. Individuals must fire these phases/orders before deployment. **(T-1) Exception:** Basic Defender Course and Basic Defender Officer Course graduates qualify on the full course of fire for the BDQC as outlined in DAFMAN 36-2655.

**5.15. (ADDED) Qualification Extensions.** When mission requirements or small arms range limitations prevent CATM from conducting qualification training, organizations may use the following options to extend qualifications. Individuals must be currently qualified (not past the expiration date on the DAF Form 522) on the weapon and course to receive an extension. **(T-0).** Personnel on an extension are not permitted to deploy to a contingency operation, combat zone or designated hostile fire area that requires weapon qualification. **(T-2)** Extensions do not change the requirement for firearms familiarization (classroom academic) and annual use of force training in non-deployed circumstances. The total length of qualification, including all extensions, cannot exceed 24-months from the date of qualification training under any circumstances. **(T-0).** Unit training sections ensure qualification extensions are posted on the individual's DAF Form 522.

5.15.1. **(ADDED) Squadron Commander Extensions.** The authorizing official (arming authority) for the unit may grant one-time qualification extension of up to 180-calendar days. **(T-3)** Extensions can only be granted by the individual's current commander; it is not transferable if the individual changes units.

5.15.1.1. **(ADDED)** Unit commanders may grant a 30-day qualification extension to individuals who were qualified at the time they reported for training but failed the course. This extension cannot cause the individual's qualification to exceed 12-months.

5.15.1.2. **(ADDED)** This 30-day extension gives commanders some flexibility in meeting home station arming requirements. This option does not permit personnel to deploy to high threat areas. If a person fails to qualify after the second attempt, the person is considered unqualified at the time of the second failure, and they are not authorized an extension. **Note:** This provision is not automatic. It can only be administered on a case-by-case basis with the written approval of the individual's unit commander/designated official.

5.15.2. **(ADDED) Installation Level Extensions.** Installation commanders, senior-level Air Force Reserve and ANG commanders may grant one-time qualification extensions of up to 12 continuous months for their affected personnel. The granting authority informs each unit of the types of firearms, courses of training, duration of extensions, and authorizing documents. **(T-2)** Squadron commander and installation level extensions may not exceed a total of 12 continuous months when combined. **(T-0).** Consider the following before granting lengthy extensions.

5.15.2.1. **(ADDED)** Impact on the force protection mission.

5.15.2.2. **(ADDED)** The number of individuals requiring extension, the extension effects and specific arming requirements.

5.15.2.3. **(ADDED)** The reason for the extension, corrective action, compensatory measures, and get-well date.

5.15.3. **(ADDED) MAJCOM Extensions.** MAJCOM authorizing officials may approve qualification extensions of 12 continuous months. Document these extensions in memorandum format, ensuring the type(s) of firearm(s), courses of training, and duration of extension are listed in the memorandum. MAJCOMs will specify an approving authority for their commands. **(T-2)**

## **5.16. (ADDED) General Requirements.**

5.16.1. **(ADDED)** Completion of qualification training does not authorize an individual to be armed and is only one step in the process commanders use to authorize arming of their assigned personnel. See AFI 31-117, *Arming and the Use of Force by Air Force Personnel*.

5.16.2. **(ADDED)** Commanders follow the guidance in this instruction and AFI 31-117 to ensure personnel meet all suitability and additional requirements before allowing them to be scheduled for training, armed or to have access to SA/LW. Commanders are responsible for ensuring their personnel scheduled for any type of training are following Title 18, United States Code (USC) Section 922, (also known as the Gun Control Act of 1968, as amended by the “Lautenberg Amendment”), as outlined in DoDI 6400.06, *DoD Coordinated Community Response to Domestic Abuse Involving DoD Military and Certain Affiliated Personnel*. **(T-0).** CATM personnel do not verify compliance with, or complete required documentation associated with, Title 18, United States Code (USC) Section 922, as this is a unit responsibility.

5.16.3. **(ADDED)** Qualification courses listed in DAFMAN 36-2655 provide the minimum training and evaluation requirements necessary for personnel to employ individual and crew-served SA/LW. Qualification training culminates in an evaluation by certified CATM instructors that ensures students demonstrate their ability to employ the weapon safely and effectively.

5.16.4. **(ADDED)** Due to resource limitations and limited training availability, non-essential training is prohibited. **(T-2)** The DAF does not conduct familiarization training. This includes activities such as weapons demonstrations, morale shoots, firepower demonstrations, training of civilian community organizations, and allowing non-DoD personnel to fire government SA/LW or ammunition. **(T-2) Exception:** This does not include qualification or sustainment training of

personnel contracted by DAF who require qualification and arming as part of their contract. Furthermore, this policy does not include qualification/sustainment training or arming of personnel employed by the State or contracted by the State to provide security for the ANG as part of their contract.

5.16.5. **(ADDED)** The unit commander requesting qualification training must ensure personnel are in the “Certify” phase of their AFFORGEN cycle or have a home station arming requirement. **(T-2)** When a unit scheduler (e.g., UDM, UTM, training section) uploads a student in ARIS, they must validate the individual is in the “Certify” phase of their AFFORGEN cycle or have a home station arming requirement prior to scheduling an individual for qualification training. **(T-2)**

5.16.6. **(ADDED)** If an individual does not have live weapons firing or range duties excluded on an AF Form 469, *Duty Limiting Condition Report*, they are permitted to participate in training. Personnel who report for weapons training must be able to operate in an environment of hazardous materials, noise, vibration, airborne and chemical irritants, and toxins as well as perform all physical requirements, to include assuming all firing positions, unassisted. Personnel are not permitted to cover their non-shooting eye with patches, cloth, or other material to control eye dominance problems. Personnel on a temporary physical profile (e.g., wearing a cast or leg brace) may be permitted to live-fire if the injury does not prevent them from meeting course objectives, assuming proper firing positions or does not detract from safe weapons handling.

5.16.7. **(ADDED)** Only task certified CATM personnel (3P0X1B or DoD civilian equivalent) or others identified in this instruction are authorized to conduct qualification and/or orientation training. **(T-1)**

5.16.8. **(ADDED)** If live-fire cannot be accomplished the same day, students must complete qualification training evaluations (live-fire) within 30-days of completion of mechanical and pre-marksanship training (ARC members have two UTAs to meet this requirement). **(T-3)** This timeframe also applies to remedial training. If more than 30-days (two UTAs for ARC). have passed since the original class date, the individual re-accomplishes the entire training program, including live-fire on all required tables and phases.

5.16.9. **(ADDED)** All qualifications expire on the last day of the month.

5.16.10. **(ADDED)** The DAF CATM SharePoint® site is the official site for current guidance, training materials, approved commercial-off-the-shelf (COTS) clearing barrels, and authorized SA/LW accessories.

5.16.11. **(ADDED)** AFOSI Agents reporting for qualification training may be in agent or casual civilian attire.

5.16.12. **(ADDED)** Changes to the BAT Course are authorized when requested by HQ AFOSI, *Directorate of Strategic Programs and Requirements (AFOSI/XR)*. Changes are then coordinated and approved by AF/A4S. AFOSI makes any specialized/specific targets (not already used for normal qualification courses), special equipment required for their course and SA/LW available to CATM to conduct instructor training, maintenance, and qualification training.

5.16.13. **(ADDED)** Agents authorized by the AFOSI commander (or designee) to carry a privately owned pistol for duty will qualify annually on the BAT Course with the AFOSI government issued handgun(s) as outlined in this instruction. **(T-0)**.

5.16.13.1.1. **(ADDED)** Once qualified with the AFOSI issued pistol, agents who choose to carry an authorized privately owned pistol will complete the mandatory live-fire sustainment training (i.e., proficiency firing) on the BAT Course with the privately owned pistol before being authorized to carry the privately owned pistol on duty. **(T-1)**

5.16.13.1.2. **(ADDED)** An AFOSI range safety officer trained and certified in accordance with this instruction will certify completion of live-fire sustainment training. **(T-1)** This training is documented within the AFOSI Form 173, *Privately Owned Weapon Authorization and Registration*, as prescribed by AFOSIMAN 71-113.

5.16.14. **(ADDED)** Personnel who are not AFOSI agents but have a mission requirement to carry a concealed handgun (e.g., credentialed Security Forces investigators, Armed Transfer Agents, etc.) are assigned the current service handgun as their primary duty weapon. They must qualify on the Handgun AFQC with standard law enforcement issue gear before qualifying on any other handgun course. **(T-1)** They will then qualify on the Handgun Basic Arms Training (BAT) Course using the approved concealed carry holster. **(T-1)** Once they have completed initial BAT Course qualification and with their commander's approval, they continue to qualify using this course until they are no longer performing this duty. When tasked to deploy, they qualify on the handgun AFQC. **Exception:** If mission requirements dictate an immediate need for an authorization for concealed carry, these individuals fire the BAT Course prior to carrying the pistol concealed without regard to the previous AFQC qualification.

5.16.15. **(ADDED)** Staff personnel assigned at the Group level and above, who would normally maintain firearms qualification by virtue of their AFSC, are not required to complete qualification training unless designated for armed duty or deployment tasking. However, the staff agency director may establish qualification training requirements.

5.16.16. **(ADDED)** Personnel with individually assigned SA/LW (e.g., rifles/carbines/handguns with adjustable sights) or replaced or having major repairs affecting the sight setting of the weapon (e.g., replaced barrel, slide, upper receiver, sights) are to be provided the opportunity to zero their assigned weapon prior to being armed with it. **Note:** Security Forces personnel will not be armed in home station with personally assigned SA/LW with adjustable sites, without completing zeroing on that specific weapon. **(T-2)** This is highly recommended for deployed locations, at the discretion of the deployed commander.

5.16.16.1. **(ADDED)** CATM forecasts for these munitions in accordance with DAFMAN 21-209 Volume 1 and the GMAT and ensures the range and needed RSO certified unit personnel are available to conduct this operation.

5.16.16.2. **(ADDED)** If live-fire is not possible, commanders may authorize the use of an approved bore sighting device to accomplish zero of individually assigned SA/LW. However, this should be used as a last resort when live-fire is impossible.

5.16.17. **(ADDED)** Where applicable, the DAF has adopted US Army Field Manuals as instructor guides and references for conducting training. However, DAF publications and policies take precedence when there are conflicts in guidance or procedures.

5.16.18. **(ADDED)** Personnel are not authorized to fire government procured ammunition, including COTS procured items, using privately owned weapons. **Exception:** When authorized as outlined in DoDD 5210.56, personnel may use government procured ammunition in authorized privately owned weapons when performing official duties.

5.16.18.1. **(ADDED)** The DAF procures ground ammunition to support specific military training and operational missions. DAF ground munitions must meet specific performance and quality control requirements to ensure they will function safely.

5.16.18.2. **(ADDED)** Personnel are not authorized to fire non-government procured (privately owned) ammunition using government SA/LW. Non-government procured ammunition may not meet military specifications and their use could result in injury or death to personnel or damage to government equipment.

5.16.19. **(ADDED)** Instructors may determine the number of zero or practice rounds (if any) to expend before the student attempts to qualify.

5.16.20. **(ADDED)** Should an individual initially fail to meet standards, the individual's unit determines if the person will be rescheduled for remedial training or if the person's arming requirement is revoked. CATM may provide one same day refire attempt on the evaluation portion the individual failed, resources permitting (this is not considered remedial training). **Exception:** CATM will immediately schedule personnel who arm daily for remedial training if they fail any second attempt of the evaluation portion. **(T-3)**

5.16.21. **(ADDED)** When squadrons earn CATM manning, other than the installation CATM section, they are authorized to perform CATM duties for their respective organization/squadron only. **Note:** An MOA/MOU may need to be established to document issues of general understanding between two or more parties that do or do not involve reimbursement. The host CATM section retains overall program management for the installation.

## **5.17. (ADDED) General Individual Equipment Requirements.**

5.17.1. **(ADDED)** The *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories List* identifies additional equipment items approved for use not identified in the applicable TO and are the only authorized items for use on SA/LW. **(T-1)**

5.17.2. **(ADDED)** SA/LW accessories, such as aiming devices, require the individual to complete academic instruction, zero and live-fire qualification using the device, before they are

authorized to use it operationally. Refer to the applicable qualification training program for each weapon in DAFMAN 36-2655 for more information. If an individual is currently qualified on the weapon/course and gets a requirement for a new accessory, they are only required to complete CATM academic training/evaluation, zero and live fire on the portion of the qualification course that is applicable to the device. An example is an individual who is currently qualified on the Rifle/Carbine AFQC and receives a new requirement to use a laser-aiming device such as the AN/PEQ-15, *Advanced Target Pointer Illuminator Aiming Light*. The original qualification expiration date for the Rifle/Carbine AFQC remains unchanged, but CATM annotates the remarks section of the DAF Form 522 in ARIS to indicate that the individual is qualified to use the AN/PEQ-15.

5.17.3. **(ADDED)** The *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories List* includes approved holsters for use within DAF. Personnel will only train, qualify and use a unit issued holster from the list, whether the holster is part of their field gear or concealed wear. When unit commanders authorize individuals to use more than one type of holster from the approved listing (e.g., concealed carry), CATM uses the procedures in the next paragraph to qualify them. Document qualification and holster type(s) in the remarks section of the DAF Form 522. Individuals will live fire with their primary holster, unless prohibited in **paragraph 5.17.3.1. (T-1) Exception:** AFOSI/XR directs holster types for AFOSI personnel for operational use; however, AFOSI personnel will use a strong side hip mounted holster during qualification training. Agents receiving training provide CATM personnel the opportunity to become familiar with the holsters they will use for live fire. Instructors should accomplish this during classroom training. This ensures range officials are familiar with the agents' equipment and can provide appropriate range commands. AFOSI units are not required to purchase holsters for CATM or loan them for an extended time.

5.17.3.1. **(ADDED)** When commanders authorize concealed carry (handgun/holster concealed under clothing) using a holster from the USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories listing, CATM uses the following procedures to certify individuals to use them. Other than the exceptions in **paragraph 5.17.3.2**, individuals will not complete live fire using shoulder, cross draw, or concealed holsters (drawing from the concealed carry). CATM will include a combination of classroom and range dry-fire training on the proper techniques for drawing the weapon from these type holsters (personnel will be performance tested on their ability to draw from a cross draw/concealed holster safely and correctly). **(T-1)** CATM has individuals practice drawing in the classroom and satisfactorily complete performance evaluations on the range, without ammunition in the weapon. Once this training has been completed, personnel use the standard belt and holster or their primary holster, including those used for concealed carry (if not shoulder or cross draw), to qualify on the appropriate course of fire.

5.17.3.2. **(ADDED)** If an individual is authorized multiple holsters, CATM will use the classroom, dry fire, and performance evaluation method to certify them on each type of holster. **Exception:** AFOSI agents, Security Forces investigators and Security Forces Armed Transfer Agents utilize their standard concealed duty holster and are authorized to live-fire using a cross draw/concealed weapon on the firing line. CATM is authorized to live fire using a cross draw/concealed weapon only while qualifying on the BAT course of fire. Personnel reporting for

CATM training who are authorized concealed carry must present documentation from the authorizing official to CATM personnel to receive concealed carry training (a properly completed and current AF Form 523, *USAF Authorization to Bear Firearms*, indicating concealed carry meets this requirement). **(T-3)**

5.17.4. **(ADDED)** Personnel will bring a protective (gas) mask to qualification training when a protective mask is required. **(T-2)** CATM sections do not maintain protective masks and they are issued through the installation readiness section.

**5.18. (ADDED) Competitions/Courses.** Commanders may approve the use of government SA/LW and authorized munitions for personnel to participate in military and/or civilian shooting competitions and courses. DAFMAN 21-209 Volume 1 and the GMAT provides allowances for matches conducted as outlined in DAFI 34-114, *Fitness, Sports, and World Class Athlete Program*, and other competitions.

6.1.4. **(CHANGED)** On a case-by-case basis, non-DAF military and commercial weapons parts, accessories and ammunition may be approved and procured for use. The Air Force Global Ammunition Control Point (AFLCMC/EBHM), at Hill AFB UT, approves procurement of non-DAF military and commercial ammunition requests and units must follow the guidance in DAFMAN 21-201 and DAFI 91-205, *Nonnuclear Munitions Safety Board* (for use in the weapon), for the request and approval of COTS ammunition. **(T-1)** All non-DAF military and commercial weapons and ammunition being procured by the DAF must be legally reviewed prior to their acquisition, as outlined in AFI 51-401, *The Law of War*. AFLCMC/EBRMW, at Robins AFB GA, approves procurement of commercial weapons parts and accessories after approval by AF/A4S, through the DAF SA/LW – Enterprise Governance (DAF SA/LW - EG) process. **(T-1)** If approved, certified CATM personnel must install and inspect all non-standard commercially purchased items regardless of the owning organization. **(T-1)** Air Force units/agencies procure SA/LW, accessories and ground munitions through approved Air Force logistics channels/processes only. Organizations are not authorized to use government credit cards to purchase firearms or ammunition per DAFI 64-117, *Government Purchase Card Program*.

6.1.5. **(CHANGED) Accessories and Associated Equipment.** Users or organizations are not authorized to obtain or use any SA/LW accessories or associated equipment that are not approved on the USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories listing maintained on the DAF CATM SharePoint site. Most items on the listing are obtained through the Air Force supply system. Units must request approval to commercially purchase any SA/LW accessories or associated equipment from the DAF SA/LW – EG, through the DAF SA/LW - Capabilities Working Group (DAF SA/LW – CWG). **(T-1)** Examples of accessories include scopes, aiming devices, adapters, mounts, sights, and similar items. To request accessories not included on the listing, use the procedures in **paragraph 6.1.6.** through **6.1.6.2.** Modified SA/LW parts also fall into this category. Units/individuals are not authorized to procure or install commercial parts, either standard or modified, for DAF SA/LW or to otherwise modify SA/LW in any manner. Examples include modified controls (e.g., triggers, magazine catch buttons, safeties, selector levers, trigger kits), stocks, handguards, optics, springs, magazines, or similar items. If a unit has a capability requirement for a modified part, use the procedures in **paragraphs 6.1.4.** to identify the capability gap and request/recommend a solution.



**6.1.6. (CHANGED) DAF SA/LW and Associated Equipment Requirements, Procurement, Modification, and Improvement Process.** A verified capability requirement or gap coupled with senior leadership involvement is essential when establishing a requirement, acquiring a new weapon system, accessory, or identifying a needed modification or improvement. Needs or capability gaps should be identified by the MAJCOMs and pushed forward to the appropriate Air Staff functional agency, so a coherent picture is presented when working acquisition strategies. The Air Staff Functional evaluates the shortfall and/or validates the need following the guidance in AFI 10-601, *Operational Capability Requirements Documentation and Validation*. If the Air Staff Functional believes a new weapon/ammunition or improvement/accessory to an existing system may be required, they use the guidance in AFI 10-601 to identify the need and initiate the requirements process through the DAF SA/LW – CWG. This will track requirements/requirements management, JCIDS, modification proposals, configuration control, funding, and approval for items affected/required for acquisition and sustainment, even if the capability is described in a previously approved capability requirements document.

**6.1.6.1. (DELETED)**

**6.1.6.2. (DELETED)**

**6.2. (CHANGED) SA/LW Modifications.** For logistic support, SA/LW systems are categorized and defined as support equipment items. A modification is defined as an alteration to a configuration item that, as a minimum, changes the form, fit, function or interface of the item. Modification of any kind is not authorized without approval from AF/A4S, through the DAF SA/LW – Enterprise Governance (DAF SA/LW – EG). (T-1) This includes any changes to the weapon from the “As Issued” configuration. The “As Issued” configuration is how the weapon is configured when issued to units as a new item. Proposed modifications to DAF weapons or weapon systems, including ammunition, must be legally reviewed prior to their acquisition, as outlined in AFI 51-401.

**6.7.3. (CHANGED) Inspection of In-Use SA/LW.** In-use SA/LW are those not in extended storage packaging in accordance with Specialized Packing Instructions (SPI). As a minimum, CATM personnel will perform this inspection on active in-use SA/LW semi-annually (every six months) and on inactive in-use SA/LW annually (every 12 months). (T-2) CATM will inspect active in-use SA/LW not used for operational purposes and used exclusively for training (except for CATM training SA/LW) annually (every 12 months). (T-2) CATM will complete these semi-annual and annual inspections within 60 days of the subsequent required inspection date. (T-2) All in-use SA/LW inspected will have a complete serviceability inspection to include cleanliness, lubrication, authorized parts/accessories, and complete function check. (T-2) Weapons found to have been painted or coated with a substance other than that authorized in the applicable TO should be removed from service immediately. At least 25 percent of the SA/LW are to receive full gauging in accordance with maintenance TOs. AF/A4SO may increase this percentage. However, under no circumstances may this percentage be reduced to less than 25-percent. CATM will develop a local method of tracking SA/LW that have been gauged by serial number to ensure the same weapons are not gauged on subsequent inspections, until all

weapons have been gauged. **(T-2)** This is not required if CATM gauges 100 percent of in-use SA/LW during all in-use inspections. This inspection may be accomplished at the time the SA/LW are used for firearms training or staggered throughout the year to meet requirements. At the time of inspection, CATM will ensure all quadrant sights, magazines, spare barrels, tripods, traversing and elevating mechanisms, and other subassemblies of crew-served SA/LW are inspected for serviceability. **(T-2)** CATM will add a statement to the inspection report describing the quantity and type of items inspected, the condition in which they were found, and whether corrective actions are needed or were accomplished. **(T-2)** All items with a serial number and open discrepancies should be reflected in the report to assist in accountability and tracking of corrective actions. CATM must inspect weapons not available for the inspection (temporary duty [TDY], issued, etc.) within 15 duty days upon return from TDY or issued status. **(T-2)** CATM personnel will enter “Semi-Annual Inspection” or “Annual Inspection” (for inactive in-use SA/LW) on the weapon’s AFTO Form 105 in ARIS and “Semi-Annual Inspection/Gauged” or “Annual Inspection/Gauged” (for inactive in-use SA/LW) on those receiving full gauging. **(T-2)** Pre-deployment inspections and/or post-deployment inspections satisfy the requirements of this paragraph if they are accomplished within the required inspection period.

6.7.10. **(ADDED)** Deliberate or Negligent Discharge Inspection. In the event of an alleged deliberate or negligent discharge with a government-issued SA/LW, CATM will accomplish the following: **(T-1)**

6.7.10.1. **(ADDED)** A certified CATM instructor (AFSC 3P0X1B, or DoD civilian equivalent) will complete a full serviceability inspection, to include gauging, and perform a function check of the weapon involved per applicable technical order. **(T-1)**

6.7.10.2. **(ADDED)** If the discharge was determined to be deliberate by the investigating authority, CATM is not required to conduct any further inspection of the weapon. If the discharge is alleged to be caused by negligence or the person who discharged the weapon claims it was caused by a weapon malfunction, CATM will complete a test fire with the weapon to determine operational function, if it is safe to do so. **(T-1)** CATM should conduct the test fire on the installation’s range.

6.7.10.2.1. **(ADDED)** If the technical order includes test fire procedures, CATM will follow the procedures outlined in the technical order. **(T-1)**

6.7.10.2.2. **(ADDED)** If the technical order does not include test fire procedures, CATM will test fire each mode of fire (safe, semi-automatic and automatic/burst, as applicable), with a minimum of five rounds in each mode. **(T-1)** The inspector will use the loading/clearing procedures in DAFMAN 31-129. **(T-1)** CATM should use the same ammunition (caliber, type, and lot number) used when the incident occurred, if possible.

6.7.10.3. **(ADDED)** CATM will provide the results of the inspection or test fire or both to the commander of the person who discharged the firearm, the investigating authority, and the Security Forces/CATM organizational commander. **(T-2)**

6.7.10.4. **(ADDED)** If CATM identifies any deficiencies with the weapon they will submit a PQDR as required in **paragraph 1.9.7.10. (T-1)** For broken or missing parts that are repairable at the Field Maintenance level (**paragraph 6.5.2.**), CATM will repair the weapon when the investigating authority releases it. **(T-1) Note:** If a PQDR is initiated or in progress, CATM will not repair the weapon until the PQDR is complete.

6.7.10.5. **(ADDED)** CATM will enter “Negligent Discharge Inspection” on the weapon AFTO Form 105 in ARIS, along with any maintenance accomplished and test fires conducted. **(T-1)**

*References:*

**(ADDED)** AFI 51-401, *The Law of War*, 3 August 2018

*Abbreviations and Acronyms:*

**(ADDED)** AFFORGEN — Air Force Force Generation

**(ADDED)** BDQC – Basic Defender Qualification Course

**(ADDED)** DAFI – Department of the Air Force Instruction

**(ADDED)** DAFMAN – Department of the Air Force Manual

**(ADDED)** DQC – Defender Qualification Course

**(ADDED)** DWT – Defender Weapons Trainer

**(ADDED)** JCIG – Joint Coordination and Integration Group

**(ADDED)** JIFCO – Joint Intermediate Force Capabilities Office’s

**(ADDED)** JIPT – Joint Integrated Product Team

**(ADDED)** JSSAP – Joint Service Small Arms Program

**(ADDED)** JSSARI – Joint Service Small Arms Requirements Integration

**(ADDED)** TCCC – Tactical Casualty Combat Care

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

**AIR FORCE INSTRUCTION 36-2654**



**16 APRIL 2020**  
**Corrective Actions Applied on**  
**26 October 2020**

**Personnel**

**COMBAT ARMS PROGRAM**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements AFD 36-26, *Total Force Development and Management*. It supports Air Force Instruction (AFI) 31-117, *Arming and Use of Force by Air Force Personnel*. This instruction describes how to plan, conduct, administer, evaluate and manage the USAF Combat Arms Program. The program develops individual and crew-served ground-weapons skills. Use this instruction with AFMAN 36-2655, *USAF Small Arms and Light Weapons Qualification Programs*. In collaboration with the Chief of Air Force Reserve (AF/RE) and the Director of the Air National Guard (NGB/CF), the Deputy Chief of Staff for Logistics, Engineering and Force Protection (AF/A4S) develops policy for the Air Force Combat Arms Program. This publication requires the collection and or maintenance of information protected by the Privacy Act of 1974. The authorities to collect and or maintain the records prescribed in this publication are Title 10 U.S.C. 9013, *Secretary of the Air Force*; delegation by; Department of Defense Instruction (DoDI) 5200.02, *DoD Personnel Security Program (PSP)*; 10 U.S.C. 9831, *Custody of Departmental Records and Property*; AFI 33-332, *Air Force Privacy and Civil Liberties Program*; and Executive Order 9397 (SSN), as amended, *Numbering System For Federal Accounts Relating To Individual Persons*. Forms affected by the Privacy Act have an appropriate Privacy Act statement. The applicable Privacy Act System Notice is F032 AF CE G, *Automated Civil Engineer System Records* (June 23, 2011, 76, FR, 36903) available at <https://dpcl.d.defense.gov/privacy/SORNS.aspx>. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with the Air Force Records Disposition Schedule located in the Air Force Records Information Management System. This publication may be supplemented at any level; all major

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## SUMMARY OF CHANGES

**This document is substantially revised and needs to be completely reviewed.** Major changes include, the addition of a requirement for arming group B personnel postured against a deployable (DW-coded) Unit Type Code position to complete small arms qualification training every 36 months, creation of a new arming group C and qualification training on the M4 Carbine for Air Force accessions. It also includes new guidance for applicability of the policies in this instruction to the Air Force Small Arms Depot in [Chapter 8](#). This revision also adds guidance for weapons qualification extensions. **Note:** All references to the Security Forces Management Information System have been replaced with the Automated Readiness Information System (ARIS).

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## Chapter 1

### ROLES AND RESPONSIBILITIES.

#### **1.1. Headquarters United States Air Force (USAF), Deputy Chief of Staff (DCS) for Logistics, Engineering and Force Protection, Director of Security Forces (AF/A4S) will:**

1.1.1. Serve as lead for the USAF Combat Arms Program, AF Small Arms and Light Weapons (SA/LW) and ground munitions Portfolio. This includes budget formalization and submittal, strategic planning, modernization, requirements, adoption, development, fielding, training, maintenance and employment.

1.1.2. Maintain overall responsibilities for management and oversight of all projects and programs associated with sustainment, funding, modernization and strategic direction to enable and provide lethal and non-lethal weapons enterprise-wide.

1.1.3. Serve as Program Director/ Executive Office/Air Staff lead for the development, management, approval authority and facilitator of lethal and non-lethal effects provided by or operated by AF ground combatant personnel in all mission sets.

1.1.4. Establish, review and approve policies related to the USAF Combat Arms Program, to include, weapons training and maintenance requirements of all AF personnel and missions (e.g. Special Warfare Airmen, AFOSI, and ground combatants). Also training associated with and required for firing range management, ground munitions, remote weapons, grenades, associated enablers and equipment among other sub-sets which affect the portfolio's intent.

1.1.5. Develop, review and approve field and organizational-level maintenance and repair policies, procedures and range safety criteria for Air Force small arms and light weapons (SA/LW).

1.1.6. Serve as the Air Staff representative for engagements with industry, other Services and internal or external agencies for all SA/LW and Combat Arms Program processes, programs and issues.

1.1.7. Manage waiver authority for the USAF Combat Arms Program.

1.1.8. Manage Air Force Specialty Code (AFSC) 3P0X1B, Special Experience Identifier (SEI) 312 and Department of Defense (DoD) civilian equivalent personnel to ensure sufficient numbers of personnel to support the USAF Combat Arms Program.

1.1.9. Assist and coordinate with appropriate functional area managers to submit programming initiatives and obtain funding for developing, modernizing or procuring legacy and new SA/LW and their support along with associated enablers and related equipment, targets, simulators and facilities use for training and maintenance.

1.1.10. Review and coordinate on all MAJCOM supplements to this publication.

1.1.11. Develop, review and approve field and organizational-level maintenance and repair policies, procedures and range safety criteria for Air Force small arms and light weapons (SA/LW).

1.1.12. Provide co-approval authority with AF/A4C for base/MAJCOM requests for deviation/waiver from Combat Arms facility criteria, after MAJCOM and Air Force Security Forces Center (AFSFC) review and concurrence.

1.1.13. Ensure command Combat Arms Programs adhere to the intent of Air Force policies and instructions by developing Air Force core checklists to facilitate standardization in the Combat Arms function Air Force-wide.

1.1.14. Review and approve all SA/LW qualification programs, qualification training criteria/standards, courses of fire and lesson plans before they are implemented.

1.1.15. Have overall responsibility for SA/LW and ground munitions requirements development and approvals.

1.1.16. Validate Air Force SA/LW and ground munitions requirements.

1.1.17. Serve as the Air Force representative on the Joint Service Small Arms Program (JSSAP), Joint Service Small Arms Synchronization Team and the Joint Non-Lethal Weapons Directorate (JNLWD), Joint Coordination and Integration Group (JCIG). Participate in Joint Service SA/LW training, S&T/R&D, coordination, informational meetings and equipment activities. Appoint other AF representatives as needed for DoD, other government agencies, JSSAP, JNLWD and other required events and boards or technology evaluation and selection events. AF/A4S will approve all AF positions and decisions associated with the SA/LW community.

**1.2. Headquarters USAF, DCS for Logistics, Engineering and Force Protection, Director of Civil Engineers (AF/A4C) will:** Provide co-approval authority with AF/A4S for base/MAJCOM requests for deviation/waiver from Combat Arms facility criteria, after MAJCOM and Air Force Security Forces Center (AFSFC) review and concurrence.

**1.3. Headquarters USAF, DCS for Logistics, Engineering and Force Protection, Director of Logistics (AF/A4L) will:**

1.3.1. Develop policies for logistical support of the USAF Combat Arms Program.

1.3.2. Provide overall management of the Air Force SA/LW and ground munitions inventories.

1.3.3. Manage the Air Force General Officer Personal Defense Weapon Program.

**1.4. Air Force Installation and Mission Support Center (AFIMSC).**

**1.4.1. Air Force Security Forces Center (AFSFC) will:**

1.4.1.1. Develop USAF SA/LW training and qualification programs, establish qualification training criteria/standards and review/approves SA/LW training programs conducted at formal training courses and readiness training centers.

1.4.1.2. Coordinate and submit programming recommendations for sufficient numbers of SA/LW and ground munitions to support the Air Force and Air Force Combat Arms Program to AF/A4S for approval and further coordination. Manage Air Force ground munitions authorizations, forecasting, allocation and programming. Provide guidance on the distribution of munitions to support Combat Arms mission requirements. Coordinate

and update AF/A4S on status of Ground Munitions inventory, requirements, modernization and future needs and path.

1.4.1.3. Assist career field managers with training development to support career field SA/LW proficiency/sustainment training programs.

1.4.1.4. Review facility criteria (e.g., firing ranges, offices, classrooms, maintenance rooms, storage areas and etc.) to ensure they support academic/live-fire training requirements and meet range safety needs. Provide guidance to MAJCOMs on firing range rehabilitation, renovation and new construction. Coordinate with MAJCOM Security Forces staff on range projects. Recommend for approval all new range designs and major renovations (changes to the type or function of the range) to AF/A4S and AF/A4C. This approval also applies to modular, portable, container or trailer type ranges.

1.4.1.5. Review base requests for deviations/waivers from Combat Arms facility criteria, after MAJCOM review, to determine if they create safety risks and will support qualification/sustainment training needs. Coordinate deviation/waiver requests between the AFSFC, Air Force Civil Engineer Center (AFCEC). Inform AF/A4S of any major impacts to training and sustainment due to issues in range maintenance or facility management.

1.4.1.6. Provide technical solutions and recommendations to AF/A4S for Security Forces' and all USAF missions/users' SA/LW related requirements. After approval by AF/A4S Combat Arms Program Director office, coordinate technical solutions and recommendations with the Air Force Life Cycle Management Center/Small Arms Program Office, AFLCMC/EBRMW, Robins Air Force Base (AFB) for adoption, fielding and authorization. This includes enablers, accessories and associated equipment for Air Force use. Include new accessories and equipment in Air Force SA/LW qualification programs.

1.4.1.7. Research and recommend innovative SA/LW, accessories, munitions and range solutions using existing and emerging technology for AF requirements. Coordinate requirements with AF/A4S for approval. Ensure no SA/LW, associated and related enablers or equipment are adopted, procured or fielded without approval by AF/A4S.

1.4.1.8. Serve as the Air Force representative on the Joint Service Small Arms Requirements Integration Working Group (JSSARI) when required. Participate in joint service SA/LW training and equipment activities as needed. Work with other agencies and Services to determine if they have potential solutions and improvements for Air Force missions and requirements.

1.4.1.9. Provide technical assistance and guidance to unit Combat Arms sections Air Force-wide and ensure only properly approved and fully supported SA/LW with associated and related enablers and equipment is being utilized and being trained with as required.

1.4.1.10. Advise appropriate AFIMSC offices and AF/A4S on range status, training facilities, equipment and munitions capability and availability needed to support the MAJCOM force protection and expeditionary programs and USAF world-wide.

**1.4.2. Air Force Civil Engineer Center (AFCEC) will:**

1.4.2.1. Provide design, construction and environmental expertise for construction and maintenance of small arms ranges and support facilities.

1.4.2.2. Support USAF Combat Arms Training and SA/LW use by developing small arms range design requirements for implementation in applicable guidance or a master range plan.

**1.5. Air Force Materiel Command (AFMC), Small Arms Program Office, Air Force Life Cycle Management Center (AFLCMC)/EBRMW will:**

1.5.1. Serve as the worldwide inventory manager for Air Force SA/LW.

1.5.2. Centrally procure SA/LW, associated enablers and accessories, tools and test measurement diagnostic equipment for existing and future items per required Life Cycle Management procedures and the requirements of AF/A4S approved SA/LW processes, projects and programs.

1.5.3. Manage the United States Air Force Small Arms Depot and provide depot maintenance for SA/LW.

1.5.4. Publish and revise SA/LW and test measurement diagnostic equipment technical orders (TO) in coordination with AFSFC.

1.5.5. Advise AFSFC and AF/A4S by providing Life Cycle Management data and recommendations such as engineering risk assessment and cost analysis for legacy and proposed SA/LW and associated enablers and equipment when required.

**1.5.6. AFMC, Air Force Small Arms Depot (AFSAD), AFLCMC/EBW (formerly Air Force Gunsmith Shop):**

1.5.6.1. The AFSAD is a non-standard organization for Combat Arms functions. The AFSAD does not provide any SA/LW training or maintenance support for the installation, as a typical Combat Arms organization. The portions of this AFI that apply to the AFSAD are identified in [Table 4.1](#). The AFSAD is aligned under AFLCMC/EBW.

1.5.6.2. For the AFSAD, all references to the Security Forces/Combat Arms Organizational Commander in this publication refer to the AFSAD Section Chief, unless otherwise indicated in [Table 4.1](#).

1.5.6.3. For the AFSAD, all references to the Combat Arms Non-Commissioned Officer in Charge (NCOIC) in this publication refer to the AFSAD NCOIC, unless otherwise indicated in [Table 4.1](#).

1.5.6.4. The mission of the AFSAD is to provide SA/LW Depot maintenance capability to the Air Force. The AFSAD employs Combat Arms personnel to perform part of this mission and may employ civilian certified gunsmiths. In this capacity, the AFSAD will:

1.5.6.4.1. Repair, refurbish and modify SA/LW to fulfill mission requirements to address gaps in the procurement system where rifles, handguns or other SA/LW are not purchased.

1.5.6.4.2. Accomplish upgrades or reconfiguration of SA/LW to enhance capabilities, increase reliability or improve safety.

1.5.6.4.3. Maintain a supply of parts no longer manufactured and parts requiring tooling to manufacture.

1.5.6.4.4. Manufacture tools, fixtures and other miscellaneous items not available through the Standard Base Supply System necessary to support the Air Force small arms program.

1.5.6.4.5. Perform gunsmith services for USAF Teams and team shooters to include and not limited to for inter-service and national competitions, tryouts for international competitions and for Security Forces shooting competitions (such as Defender and Atlantic Challenges). Services provided both at AFSAD and at events as required by Shooting Teams or leadership.

1.5.6.4.6. Provide technical assistance for maintenance and repair of SA/LW, maintain a limited capability for testing and evaluating SA/LW, ammunition and other related equipment.

**1.6. Air Education and Training Command (AETC) will:**

1.6.1. Ensure technical training capabilities in support of initial and follow-on skills development for the Combat Arms skill sets (AFSC 3P0X1B/SEI 312 and civilian equivalent).

1.6.2. Manage Combat Arms training and SA/LW maintenance in support of Basic Military Training, Officer Training School, Reserve Officer Training Corps (ROTC) and technical training courses.

1.6.3. Provide oversight for Combat Arms operations performed at the 37th Training Support Squadron (37 TRSS) and the 343d Training Squadron (343 TRS), with assistance from AETC/A4S and the AFSFC. **Note:** For SA/LW qualification training programs, range operations, weapon maintenance and training management of assigned Combat Arms personnel, these organizations use the guidance in this instruction.

1.6.4. Ensure the 37th Training Group (37 TRSS Weapons Maintenance/Storage and Marksmanship Flights) provides Combat Arms training and SA/LW maintenance support to 2nd Air Force formal courses and provides base Combat Arms functions for Joint Base San Antonio-Lackland, TX. This includes all the responsibilities normally performed by the Security Forces Squadron Combat Arms Section for base support.

**1.7. MAJCOM Security Forces (MAJCOM SF) Division Chief will:**

1.7.1. Review deviations and waivers applicable to Combat Arms organizations within the MAJCOM.

1.7.2. Forward recommendations for changes to SA/LW qualification and/or orientation courses of fire to AFSFC for review. The AFSFC submits recommended changes to the Security Forces Training Working Group for consideration.

1.7.3. For the Air Reserve Component (Air Force Reserve Command and National Guard Bureau), appoint a Combat Arms program manager and if necessary, an assistant program manager to oversee the component's small arms training and maintenance, range modernization and ground munitions programs. This individual must be a noncommissioned officer (NCO) or civilian equivalent and possess SEI 312.

**1.8. Installation Commander will:**

- 1.8.1. Ensure funds, manpower and modernized combat arms training facilities are available to meet the installation's integrated defense and contingency missions. **(T-2).**
- 1.8.2. Enforce health and safety standards by ensuring Combat Arms facilities and personnel are periodically evaluated for health and safety risks. **(T-2).**
- 1.8.3. Ensure the combat arms training complex complies with the environmental requirements in Unified Facilities Criteria (UFC) 4-179-02, *Small Arms Ranges*. **(T-0).**

**1.9. Installation Support Agencies:****1.9.1. Medical Treatment Facility Commander (or Local Equivalent) will:**

- 1.9.1.1. Provide occupational and environmental health support according to AFI 48-101, *Aerospace Medicine Enterprise*; AFMAN 48-154, *Occupational and Environmental Health Site Assessment*; AFMAN 48-146, *Occupational & Environmental Health Program Management*; AFI 91-202, *The US Air Force Mishap Prevention Program*; AFI 48-127, *Occupational Noise and Hearing Conservation Program* and AFMAN 48-146, *Occupational & Environmental Health Program Management*. **(T-3).**
- 1.9.1.2. Bioenvironmental Engineering (BE) will conduct comprehensive health risk assessment (HRA) in accordance with AFI 48-145. **(T-3).**
- 1.9.1.3. Provide medical surveillance examinations and input to fitness for duty determinations for workers as determined by physical condition (e.g., hearing loss, pregnancy) or work environment (e.g., ventilation change/correction) and approved by the Installation Occupational & Environmental Medicine Consultant and the Occupational & Environmental Health Working Group in accordance with AFMAN 48-146. Continuous and daily exposure to hazards must be taken into consideration in health programs. **(T-3).**

**1.9.2. Civil Engineer (CE) Squadron will:**

- 1.9.2.1. Provide design, construction, repair, environmental cleanup and soil remediation as applicable and maintenance to range facilities according to installation SA/LW training requirements. **(T-3).** Use UFC 4-179-02, *Small Arms Ranges*, guidance for design of all new small arms range/Combat Arms support facility projects. **(T-2).** Provide oversight regarding the environmental condition of the firing range complex. **Note:** Major range rehabilitation projects, such as new bullet traps, are reviewed and approved by MAJCOM and AFIMSC proponents for safety, engineering, environmental protection and security forces, prior to construction.
- 1.9.2.2. Ensure the installation master plan accurately depicts the firing range boundaries. **(T-3).** Plot the range surface danger zones (SDZ) on base maps to ensure there is no encroachment of the SDZ. **(T-3).** Plot the vertical danger zone (VDZ) to ensure aircraft operations (flight path/approach patterns) are not at risk. **(T-3).** Update the plan to reflect an adjusted danger zone whenever aircraft operations change (e.g., new aircraft approach angle) or new types of ammunition, which change the VDZ, are used on the range. **(T-3).**

1.9.2.3. Review the SDZ and VDZ boundaries before site selection of any new base construction project. **(T-2). Note:** As new ammunition and weapons require larger SDZs, consider siting new facilities away from range boundaries to allow for future weapons and ammunition. In addition, due to the high decibel levels associated with firing ranges, ranges should be sited among facilities with combatable use.

1.9.2.4. Ensure all major range projects, as defined in [paragraph 2.9](#), are coordinated through MAJCOM and AFIMSC CE, SF, BE and Safety FAMs during the 95 percent design review, providing complete plans and job specifications for range repairs/renovations. **(T-2).**

1.9.2.5. Assist with annual inspections of all ranges and facilities used by Air Force personnel, including non-Air Force ranges and facilities off-base. **(T-3).**

1.9.2.6. Will route range design deviation requests through AFCEC/CF workflow. AFCEC/CF will coordinate with AFCEC/COS, AFSFC/S3T and if the deviation affects occupational health, the Air Force Medical Support Agency. The unit requesting the deviation will courtesy copy AF/A4SF, AFSFC/S3T and the MAJCOM Security Forces. **(T-2).** For Air Reserve Component units, courtesy copy the Air Force Reserve Command Security Forces or National Guard Bureau Security Forces, as applicable. **(T-2).**

1.9.3. **Communications Squadron will:** Install and maintain communication systems to support range facilities, i.e., public address systems, computer network connections, emergency communications systems, etc. **(T-3).**

1.9.4. **Safety Office will:** Assist the Combat Arms Noncommissioned Officer in Charge (NCOIC) in conducting annual inspections of all ranges and small arms training facilities used by Air Force personnel. If unsafe conditions exist, provide guidance and assistance to the Combat Arms NCOIC to develop appropriate corrective/mitigating actions. **(T-3).**

1.9.5. **Logistics Readiness Unit/Squadron will:**

1.9.5.1. Notify Combat Arms personnel when any SA/LW are initially received (either as initial issue from depot, transfer from another location or return from deployment) or prior to shipment off the installation for any reason (e.g., turn-in, transfer, deployment). **(T-3).**

1.9.5.2. Process unserviceable SA/LW and/or their parts for turn-in to Defense Reutilization and Marketing Offices (DRMO) or other process in accordance with logistics guidance and DoDM 4160.21, Volume 1, *Defense Materiel Disposition: Disposal Guidance and Procedures*. **(T-0).**

1.9.5.3. Provide assistance for processing Product Quality Deficiency Reports (PQDRs). **(T-3).**

1.9.5.4. Provide transportation for trainees to and from distant training facilities, as required and approved. **(T-3).**

1.9.5.5. Provide vehicles for Combat Arms personnel to transport range equipment, munitions and SA/LW, as well as tactical vehicles required to accomplish vehicle firing training, such as the High Mobility Multipurpose Wheeled Vehicles, the Mine-Resistant Ambush Protected or the Joint Light Tactical Vehicle. **(T-3).**



1.9.5.6. Jointly, with the Security Forces Squadron, develop a process that will accommodate one stop shop for the customer to comply with equipping and training requirements of training with individual combat equipment (ICE) during qualification firing. **(T-3).**

1.9.5.7. Coordinate with Combat Arms to ensure serialized inventories of extended storage SA/LW are synchronized with Combat Arms inspections so inventories and inspections are conducted simultaneously. **(T-3).** This prevents unnecessary removal of extended storage SA/LW from packaging and ensures accountability of SA/LW when Combat Arms conducts inspections.

**1.9.6. Security Forces/Combat Arms Organizational Commander will:**

1.9.6.1. Rely on the Combat Arms section for analysis and input on weapons and tactics decisions, such as weapon/munitions capabilities, placement and selection to enhance integrated defense. Include Combat Arms in planning weapons and tactics solutions to support all missions. **(T-3).**

1.9.6.2. Plan for new Combat Arms range facility construction, range modification/rehabilitation and facility maintenance. **(T-3).**

1.9.6.2.1. Ensure facility requirements are identified to the base facility review board. If necessary, conduct periodic follow-ups to ensure range construction projects maintain work order priority commensurate to the force protection mission. Establish milestones to ensure projects and work orders are tracked until completed. Delays in this process can result in range closure, hamper SA/LW maintenance and have a negative impact on readiness. Notify senior installation leadership whenever delays disrupt work order/construction accomplishment. **(T-3).**

1.9.6.2.2. Submit small arms range and support facility requirements to the base CE using an AF Form 332, *Base Civil Engineer Work Request*. **(T-3).** The Work Request Review Board reviews/ coordinates range requirements with applicable wing agencies, such as Security Forces, BE, Safety and CE (Structural Design and Environmental Engineering). When a range requirement is identified for design, these wing agencies participate in the design review process. Ensure the design for new facilities and major renovations (defined in [paragraph 2.9](#)) conforms to UFC 4-179-02 guidance. **(T-2).** Users may obtain UFC 4-179-02 via the USAF Combat Arms, AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>).

1.9.6.3. Determine if on base ranges will be made available for non-Air Force and non-military use, military Air Force use always has priority. **(T-3).** This determination is based on command and local range instructions, safety restrictions and consideration of legal issues following consultation with the office of the installation Staff Judge Advocate. **Note:** Air Force and other military use always has priority.

1.9.6.4. Ensure the Combat Arms section submits budget forecasts for equipment and supplies to meet the installation SA/LW training and maintenance program. **(T-3).**

1.9.6.5. Review and approve all Security Forces-unit munitions forecasts and complete reviews required by AFMAN 21-209, Volume 1, *Ground Munitions*. **(T-3).**

1.9.6.6. Ensure Combat Arms is adequately funded to support all required installation SA/LW qualification training and repair/maintenance of all military SA/LW assigned to the installation. **(T-3)**. Ensure Combat Arms is adequately funded to support the enhanced contracted cleaning services required to limit the exposure of Combat Arms personnel and trainees to ammunition residue and occupational hazards. **(T-3)**.

1.9.6.7. Ensure Combat Arms personnel are available to conduct required SA/LW inspections. **(T-3)**. **Note:** This service is dependent upon owner/user notification to Combat Arms and minimum lead-time. This requirement must be included in the wing mobility plan. **(T-3)**.

1.9.6.8. Establish written guidelines to address procedures to postpone/cancel training during adverse weather conditions. **(T-3)**. As a minimum, these procedures cover severe cold, extreme heat, heavy rain and lightning. **(T-3)**.

1.9.6.9. When appropriate, and after consulting with the office of the installation Staff Judge Advocate, enter into local agreements with other agencies/Services (military, host nation, civilian police departments, etc.) to use their firearms training facilities (or to allow other agencies/Services to use Air Force firearms training facilities). **(T-3)**.

1.9.6.10. Ensure the Combat Arms NCOIC is AFSC 3P051B, SEI 312 or DoD civilian equivalent (graduate of the Air Force Combat Arms Apprentice Course) and is a graduate of the Combat Arms Supervisor Course. Ensure lead instructors, tower operators and SA/LW repair personnel are AFSC 3P0X1B, SEI 312 or DoD civilian equivalent or others identified in this instruction and task certified to perform Combat Arms activities. **(T-1)**. Appoint a Combat Arms SSgt (minimum), AFSC 3P051B, SEI 312 or DoD civilian equivalent, as the NCOIC of the Security Forces/organizational armory. **(T-1)**. **Note:** This position is not counted against Combat Arms section manpower authorizations.

1.9.6.11. Require the Combat Arms NCOIC to review proposed host tenant support agreements in coordination with the office of the installation Staff Judge Advocate when tenant units request SA/LW maintenance, SA/LW qualification training or range use from the host wing. **(T-3)**.

1.9.6.12. Ensure the Combat Arms task priority meets the installation training and maintenance requirements for integrated defense, contingency plans and deployments including during range closures, instructor shortages or instructor deployments. **(T-3)**.

1.9.6.13. Provide firearms training for Air Force personnel using the priorities outlined in [paragraph 2.2.14.3](#) of this instruction. **(T-3)**.

1.9.6.14. Provide SA/LW inspection and repair support for all weapons assigned to the installation and other supported units per agreement. **(T-3)**.

1.9.6.15. Ensure adequate quantities of trained and certified non-Combat Arms Group A personnel are available to perform block officer and assistant instructor duties during live fire and classroom training when numbers of Combat Arms personnel are not sufficient to meet mission requirements. **(T-3)**. Group A personnel require a 5-skill level and can only be used when insufficient numbers of Combat Arms personnel are assigned to the Combat Arms parent organization. **(T-2)**. Combat Arms will provide training and

guidance to Security Forces leader-led trainers on firearms coaching, sustainment and proficiency training. **(T-3).**

1.9.6.16. Ensure the Combat Arms section uses Automated Readiness Information System (ARIS) to enter and maintain Combat Arms Program records. **(T-2).**

1.9.6.17. Provide assigned Combat Arms instructors opportunities to attend advanced SA/LW training courses/programs conducted by other DoD agencies and civilian schools when possible. **(T-3).**

**1.9.7. Combat Arms NCOIC or Civilian Equivalent (Combat Arms Manager) will:**

1.9.7.1. Manage the installation Combat Arms Program and serve as the weapons and tactics subject matter expert for the Security Forces commander. **(T-3).**

1.9.7.2. Ensure Combat Arms adheres to all safety precautions during operations. **(T-3).**

1.9.7.3. Serve as the facility manager for the Combat Arms base range complex. **(T-3).**

1.9.7.4. Ensure assigned SA/LW and ammunition are properly safeguarded in accordance with AFI 31-101, *Integrated Defense*.

1.9.7.5. Work with local CE environmental function to develop joint hazardous waste disposal procedures according to AFI 32-7042, *Waste Management*, to ensure compliance with environmental regulations for disposal of hazardous waste, to include lead/heavy-metals, and to ensure the proper assessment, abatement and removal of soil contamination. **(T-3).**

1.9.7.6. Supervise the base SA/LW maintenance and inspection program. **(T-3).**

1.9.7.7. Coordinate with CE, Safety officials and BE on technical issues pertaining to range facility maintenance, safety, occupational health and design. Advise on plans for new range construction, modifications and/or rehabilitation to ensure the planned facilities meet mission requirements and range criteria directives. **(T-3).**

1.9.7.8. Maintain a current copy of the base map indicating the plotted SDZ and VDZ for Air Force-owned or controlled non-contained and partially contained ranges. **(T-3).**

1.9.7.9. Administer and track Instructor and Weapons Maintenance Evaluation Programs. **(T-2).** Ensure assigned instructors are trained, evaluated and certified to perform Combat Arms duties. **(T-2).**

1.9.7.10. Submit a Product Quality Deficiency Report (PQDR) in accordance with the guidance in AFI 21-115 (Interservice), *Product Quality Deficiency Report Program* and TO 00-35D-54, *USAF Deficiency Reporting, Investigation, and Resolution*, for SA/LW and replacement parts as necessary. **(T-0).** In addition, submit PQDR's (within 30 days upon failure notification) on new inspection gauges failing initial calibration. **(T-0).** Send electronic (e-mail) copies of the PQDR to the AFSFC for information.

1.9.7.11. Appoint custodians and monitors as required. If the commander delegates the duties of munitions custodian, appoint custodian(s) according to AFMAN 21-201, *Munitions Management*, using AF Form 68, *Munitions Authorization Record*. **(T-3).** If appointing an account custodian to maintain and account for all SA/LW, equipment,

supplies and SA/LW repair parts, do so according to AFI 23-101, *Air Force Materiel Management*. (T-3). Additionally, appoint a TO monitor for Combat Arms TOs. (T-3).

1.9.7.12. Ensure budget/resource requirements are submitted to applicable authority for consideration into the annual unit budget and maintain a list of unfunded requirements identified for the installation Combat Arms program. (T-3).

1.9.7.13. Forecast for munitions requirements and validate allocations provided by the AFSFC in accordance with AFMAN 21-209, Volume 1, AFMAN 21-209, Volume 2, *Demolition Munitions* and the Ground Munitions Authorization Tables (GMAT). (T-2).

1.9.7.14. Develop and publish operating instructions (OI). (T-3).

1.9.7.15. Establish and maintain a reference library for the Combat Arms section, as outlined in [paragraph 2.2.3](#) (T-3).

1.9.7.16. Obtain annual training forecasts from each supported organization and provide guidance to unit scheduling personnel for obtaining and managing training quotas. (T-3). This guidance is to include individual or group briefings and a scheduling handbook outlining requirements and procedures. Briefings and training are to include proper use of ARIS to accomplish unit scheduling responsibilities.

1.9.7.17. Develop and publish a Combat Arms training schedule for base organizations. (T-3). Use of ARIS for scheduling satisfies this requirement.

1.9.7.18. Maintain training statistics for all Combat Arms training scheduled and accomplished. Combat Arms will use ARIS to maintain records of all training scheduled and conducted. (T-2). ARIS should be located at the base range complex for immediate updates and changes but is only required to be located somewhere in the Combat Arms organization.

1.9.7.19. Submit requests for deviations to range criteria through the owning unit commander to the installation CE as outlined in [paragraph 1.9](#)

1.9.7.20. Ensure test-fire and trial operation of base firing range after construction or rehabilitation. (T-2). Document results and receive approval from the installation commander or their deputy if delegated. (T-2). Maintain records of these actions at the Combat Arms facility for the life of the range. (T-2).

1.9.7.21. Contact BE when changes occur which may alter work practices or when conditions exist that indicate the potential to cause a health risk. (T-2).

1.9.7.22. Ensure Combat Arms personnel are aware of the hazards (e.g., airborne lead, noise, solvents, weather exposure) associated with their duties as outlined in AFI 91-202 and coordinate with appropriate support agencies to ensure personnel are aware of range-unique health hazards. (T-3).

1.9.7.23. Ensure assigned personnel receive explosive safety training. (T-3).

1.9.7.24. Maintain Combat Arms section management information in ARIS in accordance with this publication and ARIS guidance (see [paragraph 2.2.2](#)). (T-2).

1.9.7.25. Review all proposed and updated support agreements with tenant organizations and agencies requesting Combat Arms support. (T-3).

1.9.7.26. Establish procedures, in accordance with Precision Measurement Equipment Laboratory (PMEL) guidelines, to ensure required SA/LW gauges receive calibration inspections within required time-lines. **(T-0)**. Complete PQDRs for any new gauges that do not pass PMEL calibration inspections. Maintain three sets of calibrated gauges for each type SA/LW supported (primary set, secondary set and spare set). **(T-3)**. Required tools and gauges are listed in the applicable SA/LW TO. **Note:** For ceremonial SA/LW (e.g., M14 Rifles for Honor Guard), Combat Arms is only required to maintain one set of calibrated gauges.

1.9.7.27. Brief unit weapon custodians and provide guidance on procedures for issue, maintenance, inspection and turn-in of all assigned SA/LW (see [Chapter 6](#)). **(T-3)**. This guidance includes individual or group briefings and a handbook outlining requirements and procedures. Briefings, training and handbooks will include proper use of ARIS to accomplish unit weapon custodian responsibilities. **(T-3)**.

1.9.7.28. Ensure a sufficient number of personnel are trained and certified to perform block officer duties during live fire when adequate numbers of 3P0X1B or SEI 312 personnel are not available. Document training and certification on AF Form 1098, *Special Task Certification and Recurring Training*. **(T-3)**.

1.9.7.29. Certify non-Combat Arms personnel to operate the base small arms range in support of approved unit proficiency or sustainment training programs (see [paragraphs 2.3.2.2 – 2.3.2.7](#)), recreational programs and non-Air Force range use (see [paragraphs 2.3.3.1 – 2.3.3.3](#)). **(T-2)**. Certified personnel must possess an AF Form 483, *Certificate of Competency* and personnel must complete refresher training annually to maintain their certification. **(T-2)**. Document training of Air Force members on AF Form 1098 and maintain a locally developed training log of all personnel certified to operate the range(s), indicating when their certification expires (refresher training is due). **(T-2)**. Retain this log as outlined in [paragraph 2.3.2.5](#) **Exception:** This requirement does not apply to certified Air Force Combat Arms personnel.

1.9.7.30. Plan and conduct Excellence-In-Competition matches with approval from AFSFC (for ammunition expenditure) and the Air Force Services Activity, Air Force Shooting Program Manager (AFSVA/SVORF). **(T-3)**. Only currently certified Air Force Combat Arms personnel may conduct Excellence-In-Competition matches. **(T-1)**. Group A personnel may assist Combat Arms in conducting matches as assistant instructors and firing line officials as outlined in [Table 4.2](#)

1.9.7.31. Establish and administer a Combat Arms firearms proficiency training program to ensure instructors develop and maintain expertise with all SA/LW they train. **(T-2)**.

1.9.7.32. Assist base units in developing unit-level sustainment/proficiency training programs by helping them develop courses of fire, approving courses for use on the base firing range, certifying unit personnel as range officials and providing guidance on approved Air Force weapon handling procedures. **(T-3)**. Combat Arms personnel are not required to conduct the unit level training, as unit personnel handle this.

1.9.7.33. With the assistance of the base Safety office, conduct annual inspections of all ranges and SA/LW training facilities used by Air Force personnel using risk management (RM) techniques and report findings in writing to the installation commander. This

includes range certification of non-USAF/non-DoD and off-base firing ranges used for Air Force SA/LW training. **(T-1)**. This ensures all ranges meet the intent of published Air Force safety standards. Inspections will ensure Air Force personnel are not exposed to unsafe conditions. The Combat Arms NCOIC will:

1.9.7.33.1. Document the results of the inspection and corrective action(s) necessary to resolve the unsafe condition(s). Coordinate the report through the base Safety office and other appropriate base agencies. **(T-3)**.

1.9.7.33.2. Notify the Security Forces/Combat Arms organizational commander of the findings and provide recommendations for corrective action. **(T-3)**.

1.9.7.34. Maintain and validate Combat Arms lesson plans as outlined in **paragraph 4.6**

1.9.7.35. Establish a membership on the USAF Combat Arms, Air Force Network (AFNet), Enterprise Information Services (EIS) website (<https://cs2.eis.af.mil/sites/12150>) to obtain the most current guidance and training materials to conduct the base Combat Arms program. **(T-3)**.

1.9.7.36. Work with base Local Area Network administrators to establish classified and unclassified organizational e-mail accounts for the Combat Arms section. **(T-3)**. This will help to ensure the Combat Arms section receives official communications from higher headquarters, especially when personnel changes or absences occur. **Note:** If classified and/or unclassified organizational e-mail accounts already exist to which members of the Combat Arms section can be added, this will satisfy this requirement.

1.9.7.37. Ensure assigned Combat Arms personnel obtain and maintain the knowledge and skills necessary to provide subject matter expertise on weapons and tactics issues, such as weapon/munitions capabilities, weapon mix/placement and employment methods to ensure maximum effectiveness. Advise the Defense Force Commander on these issues and participate in planning to support integrated defense, contingency plans and deployments.

#### **1.9.8. Combat Arms Instructor will:**

1.9.8.1. Be an Air Force military member awarded AFSC 3P0X1B, SEI 312 or a DoD civilian with equivalent qualification (defined as a graduate of the Air Force Combat Arms Apprentice Course). **(T-1)**. Only personnel currently task certified/qualified as outlined in this instruction and working Combat Arms duties, such as conducting qualification training, inspecting/repairing SA/LW or other duties identified in this instruction may perform Combat Arms functions. **(T-1)**.

1.9.8.2. Train, qualify and certify personnel on Air Force SA/LW and courses. **(T-1)**. Obtain and maintain the knowledge and skills necessary to provide subject matter expertise on weapons and tactics issues, such as weapon/munitions capabilities, weapon mix/placement and employment methods to ensure maximum effectiveness.

1.9.8.3. Conduct firing range operations and courses of fire in accordance with this instruction and AFMAN 36-2655. **(T-1)**. **Note:** The guidance in this instruction and AFMAN 36-2655 takes precedence over local guidance.

1.9.8.4. Evaluate and correct student performance during SA/LW training. **(T-3)**.

1.9.8.5. Maintain qualifications on all SA/LW and courses, for which they are required to instruct or for which they have an arming requirement. **(T-2).**

1.9.8.6. Maintain and personalize approved Air Force lesson plans with emphasis on enhancing student learning effectiveness. **(T-3).**

1.9.8.7. Continuously improve teaching and SA/LW training skills through practice and study. **(T-3).**

1.9.8.8. Participate regularly in a proficiency training program to enhance coaching and SA/LW training techniques. **(T-3).**

1.9.8.9. Maintain proficiency on SA/LW inspection and maintenance procedures. **(T-3).**

1.9.8.10. Performs inspections and maintenance (repair) of SA/LW. **(T-1).**

1.9.8.11. Through formal/on the job training, experience and self-study, obtain and maintain the knowledge and skills needed to function as a subject matter expert and weapons and tactics. Attain the ability to advise leadership on United States and foreign military SA/LW capabilities, including weapon/munitions capabilities, weapon mix/placement and employment methods to ensure maximum effectiveness, as well as measures to defend against enemy weapon capabilities.

**1.10. Waiver Requests for This Publication (AFI 36-2654).** The waiver approval authority for non-tiered requirements and compliance items in this publication is the first general officer in the requesting unit's chain of command. The requesting unit must provide AF/A4SF a copy of all approved waivers or deviations as required by AFI 33-360. The publication OPR must include a copy of any waivers or exceptions issued regarding the publications and forms management requirements found in this publication to the Air Force Departmental Publishing Office for publishing. Units submit waiver requests using AF Form 679, *Air Force Publication Compliance Item Waiver Request/Approval*, following the guidance in AFI 33-360.



## Chapter 2

### COMBAT ARMS SECTION MANAGEMENT AND USAF RANGE OPERATIONS

**2.1. Purpose:** Provides guidance for efficient management of the base Combat Arms program and administration/safe operation of Air Force SA/LW training and maintenance complexes/facilities.

**2.2. Combat Arms Section Management:** The Combat Arms section implements SA/LW training through the Air Force SA/LW qualification training program and executes the SA/LW inspection and maintenance program. The following paragraphs aid in operation and administration of the Combat Arms section. In some cases, this is an expansion of responsibilities listed for the Combat Arms section organizational commander and the Combat Arms NCOIC.

2.2.1. Administration. Combat Arms sections should enforce accurate and timely management of their administrative functions to accomplish their mission.

2.2.2. Combat Arms Program Measurement. AF/A4SF and the AFSFC measure training, manpower, ammunition expenditure, range facilities and firearm types/quantities on a recurring basis. They obtain this data through ARIS using the Combat Arms module. These reports cover the fiscal year period 1 October through 30 September.

2.2.3. Reference Library. Combat Arms sections will establish and maintain an up-to-date reference library (may be electronic or a combination of electronic and hard copy) containing applicable DoD and Air Force publications, TOs, US Army manuals, commercial manuals, copies of MAJCOM and locally produced supplements/operating instructions (OIs), as well as other guidance required to perform the Combat Arms function. **(T-3).** Combat Arms will conduct monthly checks of Air Force indexes for changes to publications and TO indexes for new or changed manuals covering tools (e.g., hand and power), equipment and accessories (e.g., binoculars, optics, night vision devices, machinery), gauges, ammunition, SA/LW, mounts, etc. to ensure current guidance on maintenance, repair, and handling is available. **(T-3).** Document monthly checks on a locally developed form. **(T-3).** **Attachment 1** contains a listing of references relating to the Combat Arms function. Combat Arms unit type codes (UTC) may use an electronic reference library.

2.2.4. Forms and Records Management. Manage records and files as outlined in the opening paragraph to this instruction.

2.2.5. Operating Instructions. The Combat Arms NCOIC will develop and maintain OIs to provide guidance for local policies/procedures required to manage the base SA/LW training, range operations and SA/LW maintenance programs in accordance with squadron/base policy. **(T-3).** Review OIs annually and update as necessary. Document reviews electronically or on a general-purpose form. As a minimum, the following items are to be included in Combat Arms section OIs.

2.2.5.1. Specific Range Rules. This portion of the document sets the standards for the specific range(s) in question (rifle range, handgun range, shoot house or shotgun range). This also includes other ranges the section may use periodically. Explain unique requirements for range operations, including special circumstances such as specialized



firing or events. Include limitations and prohibitions for range activities as well as emergency notification procedures.

2.2.5.2. Required Personnel Protective Equipment. Identify the operations and the protective gear needed. This includes all Combat Arms activities and operations involving hazards and personnel. In addition, describe the care of this equipment.

2.2.5.3. Approved Weapons. Identify the permitted and prohibited SA/LW types for each individual range. For example, “rifles, handguns and shotguns are permitted; machine guns and automatic rifles are prohibited.”

2.2.5.4. Approved Ammunition. Identify the permitted and prohibited munitions types and the maximum caliber for each individual range. For example, “.308 (7.62mm) maximum caliber allowed, lead free rounds only and armor piercing/penetrator rounds prohibited.”

2.2.5.5. Approved Laser Devices. Identify approved laser devices that may be used on the range(s), as well as laser safety procedures and equipment required.

2.2.5.6. Approved Targets and Barricades. Develop standards for the safe use and placement of targets based on range type or configuration, and the types of firearms and ammunition used on the range. In addition, intermediate barriers may be set up to shoot through that create hazards of their own (glass, wallboard, car doors). The Combat Arms NCOIC must develop standards for their safe use. **(T-2)**.

2.2.5.6.1. Use of Steel Targets. Air Force personnel using steel targets for live-fire on any range will follow the guidance in Security Forces Training Reference Guide (SFTRG) 6, *Use of Steel Reactive Targets*. **(T-1)**. Personnel may obtain this guide at [https://cs2.eis.af.mil/sites/10139/images/S3T/Docs/SFTRG6\\_Volume2\\_20190729.pdf](https://cs2.eis.af.mil/sites/10139/images/S3T/Docs/SFTRG6_Volume2_20190729.pdf).

2.2.5.6.2. The Combat Arms NCOIC will ensure compliance with the guidance in *Security Forces Training Reference Guide (SFTRG) 6, Use of Steel Reactive Targets* on Air Force ranges and provide advice to users for non-Air Force ranges. **(T-2)**.

2.2.5.7. Daily Range Opening and Closing Procedures. Identify all activities necessary for range opening and closing, including checks of facilities, equipment and communications, and checks of the classroom facility and SA/LW cleaning area.

2.2.5.8. Lead Management. Explain lead management procedures such as remediation. In addition, this area could be used to define precautions for airborne and bulk lead hazards. Combat Arms personnel will not attempt to perform de-leading or lead decontamination projects. **(T-3)**. Specific hazards are associated with exposure to lead and bullet residue.

2.2.5.9. Explosive Safety/Munitions Operations. Define safety procedures including mishap and reporting procedures for handling, transporting and storing of munitions and explosives following the guidance in AFMAN 91-201, *Explosives Safety Standards*.

2.2.5.10. Range Closure and Cancellation Procedures. Identify procedures for range closures due to hazardous conditions. Define training cancellation procedures for inclement weather as defined by the Combat Arms section organizational commander. The final decision to conduct or cancel training on any given day rests with the senior

ranking Combat Arms official. Conditions to consider include severe cold, extreme heat, local lightning, heavy fog, heavy rain, etc.

2.2.5.11. Hazardous Material (HAZMAT) Procedures. The Combat Arms NCOIC will identify HAZMAT associated with local range operations and necessary safety precautions when dealing with these substances, as well as procedures for storing and handling HAZMAT. **(T-0)**.

2.2.5.12. General Safety/Hazards. Identify potential hazards and mitigation procedures to abate each hazard including all operations regardless of frequency. Outline hazard abatement processes, procedures and responsibilities as directed in AFI 91-202.

2.2.5.13. Weapons and Munitions Transport (if applicable). Explain in detail the procedures for transporting SA/LW and munitions. Include vehicle preparation, securing the load, routes (both primary and alternate), coordinated safe havens, communication requirements, notification procedures, personnel and arming requirements and incident procedures as a minimum.

2.2.5.14. Annual Range Inspection Procedures. Identify procedures for conducting annual range safety and health inspections; include required tools, base agencies needed/requested, and report contents/routing.

2.2.5.15. Resource Protection. Identify procedures for protecting sensitive assets during all Combat Arms operations such as: storage, range, classroom and transportation.

2.2.5.16. Weapon Maintenance Procedures. Define procedures for all SA/LW maintenance, scheduling, repairs, documentation, parts accountability/inventory and safety. Most parts are coded as pilferable items and are subject to Air Force audit review. This audit trail should accurately track the requisition of parts (from Combat Arms), accountability and disposition of the end item. At a minimum, Combat Arms will conduct an inventory of all SA/LW parts annually (every 12 months). **(T-3)**. A non-Combat Arms, disinterested NCO will observe and validate this inventory. **(T-3)**. Combat Arms personnel must ensure all SA/LW parts are properly secured when not in use. **(T-2)**.

2.2.5.17. Scheduling. Explain all necessary procedures and activities for scheduling training and range operations; including dealing with unit schedulers. Define all elements, which facilitate scheduling of classes, timeframes, cancellations, rescheduling and no shows.

2.2.5.18. Instructor Proficiency Training Procedures. Define requirements for instructor proficiency training, frequency, purpose and documentation.

2.2.5.19. Military Use of Ranges by Non-Combat Arms Personnel/Units. Specify the procedures and practices for non-Combat Arms military personnel/units to use Combat Arms facilities for official military training other than qualification training provided by Combat Arms (unit-level sustainment training and proficiency). Describe scheduling, course of fire approval, range official certification process, identify personnel limitations, range restrictions, conduct, authorized and prohibited firing operations, mishap and hazard reporting procedures, opening and closing procedures and emergency notification procedures.

2.2.5.20. Non-Military/Civilian Use of Ranges. Define the procedures and practices for personnel to use Combat Arms facilities for other than official military training. Describe range official certification process, identify personnel limitations, range restrictions, conduct, authorized and prohibited firing operations, mishap and hazard reporting procedures, opening and closing procedures and emergency notification procedures.

2.2.5.21. Certification of non-Combat Arms Personnel. Identify the criteria and process for certifying personnel to operate the firing range. Include duration of certification and recertification procedures.

2.2.6. Support Agreements. Combat Arms support of tenant units and other organizations will only be provided pursuant to an approved support agreement. The Combat Arms NCOIC will work with the Logistics Readiness Squadron Support Agreements manager and the installation Staff Judge Advocate to create and maintain any such support agreements. **(T-3)**. Combat Arms maintains approved copies of all in-force Support Agreements in which they are involved.

2.2.7. Budget Requirements. The Combat Arms NCOIC will prepare and submit annual budget inputs for all resources necessary to accomplish the mission. **(T-3)**. The Combat Arms section is responsible for the SA/LW maintenance and training of the entire installation including tenant units with approved support agreements (SA) and geographically separated units assigned to the wing or with approved SAs and budgets accordingly.

2.2.8. Evaluations. All instructors who perform SA/LW training and/or maintenance will have current evaluations (instructor and/or maintenance) as required in [paragraphs 3.3](#) and [3.4](#) dependent on their duties. **(T-2)**. Commanders should consider requiring the Combat Arms Armory NCOIC to maintain current instructor and weapon maintenance evaluations to provide a force multiplier for the Combat Arms section during surges in SA/LW training or maintenance requirements or manning shortages.

2.2.9. Munitions.

2.2.9.1. The Combat Arms NCOIC will maintain ammunition accountability records for expenditures, issues and turn-ins in accordance with AFMAN 21-201. **(T-2)**.

2.2.9.2. Ammunition Authorizations and Forecasting. AFMAN 21-201 outlines standard forecasting procedures. Use AFMAN 21-209, Volume 1, AFMAN 21-209, Volume 2 and the GMAT, to develop appropriate requirements forecasts. Commands and/or units will prepare and submit a Peacetime Conventional Ammunition Requirements forecast using the Forecast and Allocation Module of the Agile Munitions Support Tool. **(T-2)**.

2.2.9.3. Handling of Material Potentially Presenting an Explosive Hazard. Combat Arms will store, handle and process expended munitions residue in accordance with DoDI 4140.62, *Material Potentially Presenting an Explosive Hazard (MPPEH)*, and AFMAN 21-201. **(T-0)**.

2.2.10. Weapons Maintenance Log. Combat Arms will maintain a permanent SA/LW maintenance log (may be electronic) of all maintenance performed and parts replaced on each SA/LW repaired (Combat Arms records all maintenance performed, even if parts are not used). **(T-2)**. The weapons maintenance log provides a historical record of parts used and maintenance performed. The maintenance log includes the model, type, serial number,

owning organization, maintenance accomplished, stock number/nomenclature of parts replaced, and total man-hours used to complete the repair for each weapon repaired. This log is separate from ARIS and should support data entered into ARIS. Weapons maintenance actions are also documented on the weapon's Air Force Technical Order (AFTO) Form 105, *Inspection Maintenance Firing Data for Ground Weapons*, in accordance with TO 11W-1-10, *Historical Data Recording of Inspection, Maintenance, and Firing Data for Ground Weapons*, using ARIS.

2.2.11. At least annually, obtain a serialized listing from the base Logistics Readiness Squadron/Unit of all SA/LW assigned to the installation, identified by unit. If automated, this listing can be used in a spreadsheet format as an individualized weapon status report, which provides a working resource for individual SA/LW actions such as inspections.

2.2.12. Maintain PMEL documentation provided by the PMEL office for all SA/LW inspection gauges in use by the Combat Arms section.

2.2.13. SA/LW Inspection Reports. Combat Arms will complete a SA/LW inspection report for every field-level serviceability inspection they conduct, regardless of the type of or reason for the inspection. **(T-3)**. Describe the type of inspection (e.g., Semi-Annual, Pre-Embarkation, Pre-Issue, Turn-In), total number of SA/LW inspected, identified by type and status of SA/LW (extended storage, in-use or deployed). List all SA/LW with uncorrected discrepancies and include the SA/LW model, caliber, serial number, discrepancy, and required corrective action. Document discrepancies corrected at the time of inspection by the type and number of SA/LW and a brief description of the discrepancies. For example: "Three M4 carbines found with firing pins installed incorrectly--Corrected at time of inspection."

2.2.13.1. The Combat Arms NCOIC will prepare the initial report within five duty days of completing the inspection. Address the report to the weapon custodian of the unit possessing the SA/LW, with a realistic suspense date to correct the discrepancies (not to exceed 30 calendar days). **(T-3)**. Ensure the cover memo or report instructs the custodian to obtain their unit commander's endorsement on the report after all discrepancies are corrected and before returning it to the Combat Arms NCOIC. If owner/user maintenance or corrective action is required, Combat Arms must complete a follow-up inspection within 30 calendar days of the initial report date. **(T-2)**. The Combat Arms NCOIC must complete a report (if open discrepancies continue to exist) or memorandum to the inspected unit weapon custodian (if all discrepancies are corrected) for all follow-up inspections, using the previous guidance for initial inspection reports. **(T-3)**. Refer to the USAF Combat Arms, AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>) for an example of a SA/LW inspection report and memo.

2.2.13.2. If no discrepancies are noted, the Combat Arms NCOIC will prepare a memo to the unit weapon custodian indicating the date and type of inspection, as well as listing the quantity (by model), model, and storage status of SA/LW inspected. **(T-3)**. The memo includes a statement informing the unit that no further action is needed.

2.2.13.3. The Combat Arms section will maintain copies of the last two unit inspection reports for each type of inspection and maintain pre-embarkation inspections until

deployed SA/LW return to home station. **(T-3)**. The Combat Arms NCOIC will maintain statistics on inspections conducted in ARIS. **(T-3)**.

2.2.14. Combat Arms Scheduling. The Combat Arms NCOIC will maintain records of unit annual training requirements, requests for training, SA/LW qualification training statistics, class/range schedules and range utilization data. **(T-3)**. Combat Arms will develop a scheduling handbook for unit scheduling officials that explains the process and identifies local requirements for obtaining Combat Arms training quotas, as well as briefing unit representatives on these items. **(T-3)**.

2.2.14.1. Training Schedules. Develop SA/LW training schedules to ensure maximum use of Combat Arms facilities and resources. Instructor availability is a key consideration when developing schedules. Schedules also consider and include time for SA/LW inspections, weapon and equipment maintenance, range maintenance, instructor training/evaluation, instructor proficiency firing, and unit sustainment/proficiency training programs.

2.2.14.2. The Combat Arms section will receive an annual training forecast from each supported unit. **(T-3)**. This forecast identifies the number of personnel requiring SA/LW qualification training each year by weapon and course, and includes the commander's rationale or justification for the training (in-garrison/peace time arming requirement, permanent change of station [PCS] overseas or deployment to a combat zone/designated hostile fire area). Refer to AFI 31-117 for additional guidance on arming plans. Unit annual training forecasts provide the basis for the Combat Arms training schedule. Combat Arms schedules a sufficient number of classes for each weapon and course throughout the year to ensure unit training requirements are supported.

2.2.14.3. Combat Arms uses the following priorities for scheduling individuals for training. The Combat Arms organizational commander may modify these priorities when base mission requirements dictate.

2.2.14.3.1. Qualification training of individuals identified by name by their commander to fill a deployment tasking to a combat zone in time of war or a designated hostile fire area (actually deploying, not merely subject to deployment), including zeroing of weapons for deployment.

2.2.14.3.2. Qualification training of individuals being permanently reassigned overseas with a personnel processing code requiring SA/LW qualification.

2.2.14.3.3. Qualification training of individuals defined as Arming Group A in AFI 31-117, including zeroing of weapons for in-garrison arming.

2.2.14.3.4. Qualification training of any other individuals requiring arming to support operational missions.

2.2.14.3.5. Mandatory unit sustainment training.

2.2.14.3.6. Unit proficiency training, other than mandatory sustainment training.

2.2.14.4. Unit scheduling officials schedule personnel for training through the Combat Arms section using ARIS. Although other systems may exist that perform similar functions, ARIS is the only official database for MAJCOM and Air Staff agencies to access SA/LW qualification training and range utilization data. **Note:** If ARIS is not

available Combat Arms may implement temporary methods of conducting scheduling with supported units, such as the use of email.

2.2.14.5. If no-shows or poor range utilization become a concern, the Combat Arms NCOIC establishes an effective “no-show” program, at the discretion of the Combat Arms organizational commander. The program may include no-show letters, attendance statistics or unit range utilization data, at the commander’s discretion. The key to this program is ensuring maximum use of available facilities and personnel to provide support for all base SA/LW training needs.

2.2.15. Trespass Notices. Annually, the Combat Arms NCOIC will place legal notices to the public in the base bulletin and base newspapers. Place similar notices in local area newspapers if the base is considered an open installation, or all, or part of the range impact area lies outside secured base perimeters. **(T-2)**. In such notices, give the location of the range or ranges, and state trespassing is not only illegal but also dangerous because of gunfire. Include in the notice: the office address, personnel to contact, and phone numbers to call in case there is a valid need for entry. Notices are not required at overseas locations where tensions are high and the local threat could cause such notices to bring undue attention to the base or for fully contained ranges.

2.2.16. Firearms and Ammunition Protection and Control. Use established standards for protecting sensitive conventional arms, major SA/LW parts and assemblies, ammunition, and explosives in the custody of any component of DoD. **(T-0)**. DoD 5100.76-M, *Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives (AA&E)* and AFI 31-101 outline protection standards. Combat Arms also must refer to the base integrated defensive plan to ensure all local policies are followed. **(T-3)**.

2.2.17. Annual Range Safety Inspection Reports. The Combat Arms NCOIC will prepare a report of the annual range safety inspection and forward the report to the Combat Arms organizational commander, after coordination with the base safety office and all other agencies who participated in the inspection. **(T-3)**. The report includes any discrepancies/safety items noted during the inspection and corrective action needed. If discrepancies are identified, the Combat Arms NCOIC must also include a completed AF Form 4437, *Deliberate Risk Assessment Worksheet*, following the RM guidance outlined in [Attachment 2](#) of this publication. **(T-2)**.

**2.3. USAF Range Use:** Safety is paramount when operating Air Force firing ranges. At least two personnel must be present when conducting any live-fire operation. **(T-1)**. The host base Combat Arms section is responsible for the military combat arms range program. Combat Arms sections will develop a “range book” for use on the firing range during all live-fire operations. It will include all items necessary to operate the range safely; this book will remain on the range while the range is in operation. **(T-3)**.

2.3.1. Air Force units/personnel will not conduct any live-fire training on a range unless it is certified by the Combat Arms organizational commander as safe for Air Force use. **(T-2)**. Combat Arms must initially certify all firing ranges before the first use and then annually (every 12 months) thereafter. For Air Force ranges, Combat Arms follows the guidance for safety inspections in [paragraph 2.6](#) and guidance for facility certification in [paragraph 2.10](#). Combat Arms will document all range certifications and inspections for all ranges used by



Air Force personnel. (T-2). Document certifications using the standard Air Force official memorandum format. (T-3).

2.3.1.1. For non-Air Force DoD ranges, the Combat Arms NCOIC, with assistance from other base agencies, will ensure ranges are in good condition and do not have any safety or health hazards before allowing Air Force personnel to use the range. (T-2). If possible, the Combat Arms NCOIC should follow the guidance in [paragraph 2.3.1.2](#). A test fire and trial operation is not required for DoD ranges that are approved by the host agency.

2.3.1.2. If required to use non-DoD firing ranges (host nation, DOE, FBI, local civilian, etc.), the Combat Arms NCOIC and the local base safety representative will conduct a range certification inspection per the Risk Management (RM) Evaluation of Existing Range Facilities guidance at [Attachment 2](#) to this instruction and the Small Arms Range Inspection Checklist at [Attachment 3](#). (T-1). Combat Arms uses this guidance, along with UFC 4-179-02 and this instruction to accomplish this inspection. The Combat Arms NCOIC must develop a localized version of the Small Arms Range Inspection Checklist and consider unique items that are not included in the example. (T-3). This inspection, at a minimum, covers basic range safety and Air Force training requirements. The range certification inspection ensures the facilities meet the intent of USAF training programs and do not expose Air Force personnel to unmitigated conditions or endanger others. A test fire and trial operation should be conducted for non-DoD ranges if possible following the guidance in [paragraph 2.10](#) Document the certification and provide a copy to the MAJCOM Security Forces and AFSFC/S3T. **Exception:** Air Force Office of Special Investigations (AFOSI), Strategic Programs and Requirements (AFOSI/XR) may approve use of civilian, civilian law enforcement agency or other non-DoD federal agency ranges by AFOSI personnel for sustainment/proficiency training. These ranges should be certified safe for use by federal, state or local governments. **Note:** The AFOSI detachment should contact the Combat Arms NCOIC and the local base safety representative to help conduct a range certification inspection as outlined above.

2.3.2. Military Use. Combat Arms live-fire qualification training and operational preparation of military/DoD civilian and contract personnel has priority over any other use of the range. This includes test firing of repaired SA/LW and zeroing firearms for operational use or deployment.

2.3.2.1. Support Agreements - Training Support. The host Combat Arms section will provide SA/LW qualification training to those Air Force Reserve Command (AFRC) tenant units without their own AFSC 3P0X1B, SEI 312 or DoD civilian equivalent personnel assigned. (T-3). Tenant AFRC units without sufficient numbers of their own AFSC 3P0X1B, SEI 312, or civilian equivalent personnel assigned and present during a Unit Training Assembly (UTA), request host Combat Arms support to augment their personnel during qualification training through the host-base Security Forces/Combat Arms organizational commander. If host Combat Arms manpower support is required, it is provided if manpower permits. For AFRC units, this support includes complete access to all items necessary to conduct SA/LW qualification training. Unless specified in the SA, and agreed upon by the host Security Forces/Combat Arms organizational commander, this support does not include ammunition. Formalize this training and/or support through an agreement according to AFI 25-201, *Intra-Service, Intra-Agency, and*

*Inter-Agency Support Agreements Procedures.* Tenant AFRC units have range and facility priority on scheduled UTA weekends over non-Air Force users and non-mission essential training.

2.3.2.2. Unit Sustainment and Proficiency Training. Organizations with approved sustainment and/or proficiency training munitions in accordance with AFMAN 21-209, Volume 1 and the GMAT are permitted to use the range on an “as available” basis. Combat Arms sections promote this program and should facilitate flexible scheduling as long as this training does not interfere with qualification training. The Combat Arms NCOIC must approve all live-fire courses that units use on the base range to ensure they are safe and within the limitations of the range. **(T-3).** Units with courses approved by the Combat Arms NCOIC and certified range safety officials as outlined in the following paragraphs may use the range without Combat Arms supervision, at the discretion of the Combat Arms organizational commander.

2.3.2.3. All units using the range will have personnel task certified by the Combat Arms NCOIC. **(T-1).** Units require the following range safety officials, a chief range officer (CRO), in the grade of E-6 or above, and range safety officers (RSO) in the grade of E-5 or above or DoD civilians of equivalent grades in those positions. **(T-2).** The CRO has overall responsibility for all range operations and safety. The RSO(s) supervise shooters on the firing line and maintain shooter safety during firing. The ratio of RSOs to shooters will be 1:3 for non-combat arms personnel conducting unit sustainment and/or proficiency training for rifle, handgun and shotgun. **(T-1).** Combat Arms will ensure that during range operations, at least one range officer (CRO or RSO) is present at the range that has received and can administer Self-Aid and Buddy Care (SABC) or equivalent first aid training. **(T-2).** Personnel performing CRO and RSO duties will not perform any other responsibilities during range use. **(T-1).** Air Force personnel performing CRO or RSO duties must be qualified on the Air Force Qualification Course (AFQC) on the weapons for which they conduct training. **(T-1).**

2.3.2.4. Combat Arms sections will develop a comprehensive training and certification program through a range operations certification training course or similar program. **(T-3).** At a minimum, the Combat Arms NCOIC will include opening and closing procedures, weapon safety, RSO ratios, firing line procedures, tower operator duties, SA/LW-clearing procedures, range limitations and emergency notification procedures in range certification. **(T-3).** This certification must include evaluation during live-fire. **(T-3).** Combat Arms personnel must periodically spot check units during range use to ensure they follow proper procedures. **(T-3).** Combat Arms should conduct these spot checks at least once per quarter for each unit and maintain a locally developed log of these checks. The Combat Arms organizational commander will approve all range safety official training plans. **(T-3).**

2.3.2.5. Document task certification of Air Force members on AF Form 1098 and AF Form 483. **(T-3).** Document non-Air Force member certification on AF Form 483. **(T-3).** Range safety officials must have an AF Form 483, signed by the Combat Arms NCOIC, on their person while operating the range. **(T-3).** Maintain a locally developed training log of all personnel certified to operate the range(s) and indicate when their certification expires (refresher training is due) at the Combat Arms section. Retain this



log for 2 years after the last certification date or as directed by the Air Force Records Disposition Schedule.

2.3.2.6. The Combat Arms organizational commander and individual's unit commander must both appoint range safety officials in writing. **(T-3)**. Combat Arms will maintain a copy of the appointment letter at the Combat Arms section. **(T-3)**. This certification is valid for one year and only pertains to the host Combat Arms ranges. Personnel must complete refresher training annually to maintain their certification. **(T-2)**. The Combat Arms NCOIC will revoke certifications if individuals fail to follow established guidance or operate the range in an unsafe manner. **(T-3)**.

2.3.2.7. Range safety officials are responsible for safe range operations and will remain on the firing range until all SA/LW and ammunition have been cleared and removed from the range. **(T-1)**. Units/individuals using the range without Combat Arms oversight are liable for damage caused during their use. **(T-3)**.

2.3.2.8. The requirements in [paragraphs 2.3.2.2](#) through [2.3.2.7](#) also apply to non-Air Force/off-base ranges. Individuals must follow the guidance in these paragraphs, in addition to host agency range requirements, for Air Force personnel to be authorized to use any non-Air Force range. **(T-1)**.

2.3.3. Recreational and Nonmilitary Use. The Combat Arms organizational commander may authorize range use for recreational shooting activities including the firing of privately owned firearms. This activity cannot interfere with the completion of military training to meet mission requirements. Before granting approval, local Security Forces and the staff judge advocate office (liability reasons) must coordinate on official nonmilitary range user's requests to fire privately owned weapons on base firing ranges. **(T-3)**. Use a support agreement or memorandum of agreement/understanding with organizations to identify roles and responsibilities, establish internal controls and provide for liability for damage to range facilities and equipment. Recreational shooters provide their own targets, first aid kit and other associated supplies/equipment.

2.3.3.1. The Combat Arms NCOIC must ensure that when firing is conducted on Air Force ranges for recreational purposes, no less than two adult personnel are present. **(T-2)**. Combat Arms personnel, as a minimum, will brief the CRO on range safety, operation policies and procedures, and provide them written certification. **(T-1)**. The CRO will ensure that they and the other person are a minimum of 18 years old and capable of summoning assistance, if needed. **(T-1)**. Firearms and ammunition fired on Air Force ranges cannot exceed range limitations. Combat Arms will approve weapons to be fired on the range and the owner ensures the weapons are serviceable. **(T-2)**. When shooting competitions are conducted on Air Force ranges, the CRO will brief instructors, safety personnel, and those managing the event on operating procedures, methods and commands used. **(T-2)**. All personnel, including spectators, are under the control of the tower operator while on the range complex. Combat Arms personnel are not required to be safety officials or tower operators for non-military purposes.

2.3.3.2. Authorized civilian shooting groups may use Air Force ranges during those times when they are not required for Air Force or other military purposes. These organizations will ensure sufficient personnel receive certification training outlined in [paragraphs 2.3.2.2](#) through [2.3.2.7](#) from the Combat Arms NCOIC to safely operate the range. (T-2).

2.3.3.3. The Combat Arms NCOIC will ensure civilian police agencies using Air Force small arms firing ranges comply with the requirements of [paragraphs 2.3.2.2](#) through [2.3.2.7](#) (T-2).

2.3.3.4. Recreational Use of Range Property. Base agencies such as CE real property, CE environmental flight, base safety and Security Forces, in coordination with the staff judge advocate, are responsible for safe implementation of this authorization.

2.3.3.5. Recreational activities on range complexes cannot be allowed to conflict with SA/LW qualification or sustainment training requirements. The installation Combat Arms section will control and schedule range areas in case of changes in training or emergencies. (T-3).

2.3.3.6. Personnel, both military and civilian, must first demonstrate their firearm safety and proficiency to designated officials before they are allowed to use the range area for hunting. (T-2). Local requirements dictate the course content and scope of examinations for hunters.

2.3.3.7. If the range area is used for recreational purposes, post the date and hours recreational use is permitted and the range point of contact in the installation base bulletin and/or other news sources once a week. After the recreational season is over, return the range area to a no-trespass basis and place this information in the base bulletin for at least three consecutive weeks.

2.3.3.8. The Combat Arms NCOIC will ensure Non-DoD civilian shooters and range safety officials sign a hold harmless agreement relieving the Air Force and DoD from any liability resulting from injuries or death of these personnel while utilizing the base range(s). (T-2). Combat Arms will obtain approval of this hold harmless agreement from the installation Judge Advocate office and maintain completed agreements in the Combat Arms section. (T-2). Non-DoD civilians are not authorized to use the range or supervise range operations without this agreement. If the range is shared with the Morale, Welfare and Recreation Rod and Gun Club, then utilization of the range by members of the public must be approved in accordance with AFI 34-101, *Air Force Morale, Welfare and Recreation (MWR) Programs and Use Eligibility*. (T-3).

**2.4. Range Safety:** Combat Arms and units using the range must apply the RM process before conducting live-fire training. (T-2). Combat Arms or using units apply the RM process initially for first time use of the range and validate that conditions have not changed before each subsequent use. If new weapons, courses of fire or munitions are used that can change the original assessment conduct another RM. Use the information in the following paragraphs as a basis for this process. Local conditions may require additional safety precautions.

2.4.1. Range Facility. Range conditions could constitute safety hazards and cause bounce backs or ricochets. Excessive rains may erode berms and bullet catches so they do not contain bullets; overhead baffles rot or become damaged and no longer stop bullets. Backstops (earth or metal) can develop a build-up of residue and pose ricochet hazards. If unsafe conditions are detected, report the safety hazards to the appropriate CE section and base safety official(s). Inspect ranges for safety deficiencies before firing each day. If unsafe conditions are discovered, correct them before the start of firing. On impact ranges, check entry points for unauthorized entry and, where possible, inspect the impact area before the start of firing to make sure personnel or equipment are not in the impact area. Ensure barriers and fences are in place. Post a range safety plan in every range tower/control booth.

2.4.2. Range Safety Plan. A detailed plan of those predetermined hazards that could result in death or injury to any person at the facility and preventive measures. Include by hazard all preventive measures, first aid, emergency contact information and reporting instructions. A checklist format is permitted. Use RM principles to develop the plan.

2.4.3. Range Safety Rules. Prominently display range safety rules on the firing range. The Combat Arms NCOIC will ensure the sign includes, but is not limited to, the following rules:

- 2.4.3.1. Treat all weapons as if they are loaded. **(T-2).**
- 2.4.3.2. Holster, clear, or secure all weapons when they are not in use. **(T-2).**
- 2.4.3.3. Keep the muzzle of the weapon under control at all times. **(T-2).**
- 2.4.3.4. Never point the weapon at anything you do not intend to shoot. **(T-2).**
- 2.4.3.5. No horseplay while on the range or while handling weapons. **(T-2).**
- 2.4.3.6. Do not handle weapons while personnel are down range. **(T-2).**
- 2.4.3.7. Do not handle weapons until instructed to do so by the range official. **(T-2).**
- 2.4.3.8. No smoking within 50 feet of the firing line. **(T-2).**

2.4.4. Road Guards. Post road guards along frequently traveled trails or footpaths, at places where anyone might enter into range danger areas, and where adequate fences or barriers do not exist.

2.4.5. Range Communications. Firing ranges will have effective communications equipment for emergency notification and communicating with students and instructors. **(T-3).** Ensure the systems are checked before live-fire operations. Do not operate any firing range without the ability to contact emergency services.

2.4.6. Display of Flag and Streamers. Display a red streamer and/or a rotating red beacon at each range complex entry point. A rotating red beacon is used during night firing. This streamer or beacon indicates the range complex is in operation and firing is scheduled. Place a sign near the range complex entry point, which reads "DANGER, FIRING IN PROGRESS WHEN RED FLAG IS FLYING (OR RED BEACON IS FLASHING)." Streamers may be ordered or locally manufactured. Flagstaffs used to display the streamer can be no less than 20 feet in height. Flagstaffs used to display a rotating red beacon are at a height (depending on local conditions) allowing it to be visible to all personnel approaching the range complex. If multiple ranges exist, each individual range displays an additional red flag (at least 2 feet by 3 feet) and/or a rotating red beacon while the range is in operation. Fully contained

ranges, with controlled access through secured doors, do not require streamers or beacons. Instead, place a removable sign at the facility entrance to alert personnel firing is in progress.

2.4.7. Emergency Equipment. Ensure serviceable fire extinguishers are readily available during range operations and munitions movements. Ensure a serviceable first aid kit and a serviceable vehicle (military or civilian) is immediately available (on the range) any time the range is in operation. Provide an approved eyewash station for students and instructors in locations where chemicals or airborne particles are commonly experienced in the firing and maintenance of SA/LW. Combat Arms will ensure that during range operations, at least one individual is present at the range that has received, is current in and can administer SABC. **(T-2)**. All Combat Arms personnel will receive SABC or equivalent first aid training as a minimum; this does not prevent an individual from working the firing line while awaiting training. **(T-2)**.

2.4.8. Unsafe Acts and Conditions. Range personnel have the responsibility to enforce proper safety procedures on firing ranges. They have the prerogative, authority and duty to remove any person(s) from the firing line or the range whom they deem unsafe. Using appropriate military bearing and behavior, immediately remove any person(s) from the firing line who disregards instructions, or violates safety practices. In the event an individual refuses to leave the range, contact on-duty Security Forces for assistance. If a person is removed, the Combat Arms NCOIC will provide a written summary to the individual's commander with a courtesy copy to the commander of the Combat Arms section. Accomplish this within five duty days and before the individual is allowed to return for training. **(T-3)**.

2.4.9. Safety Equipment. Units/sections will budget and forecast for the procurement of mandated personal safety equipment. **(T-3)**.

2.4.9.1. Issued to Combat Arms Instructors:

2.4.9.1.1. Combat Arms personnel will receive and wear a red baseball type cap with the words COMBAT ARMS embossed or embroidered with 1-inch black letters while performing duties on the range complex. **(T-3)**. This allows students, visitors and shooters to rapidly identify Combat Arms personnel for assistance and to report safety issues. It is only to be worn while performing duties on the range complex and may not be worn outside the range complex.

2.4.9.1.2. Eye protection with side protection, or wrap around in design and meeting ANSI Z87.1, standards, is mandatory for all instructors working or observing live-fire operations. **(T-0)**. Combat Arms personnel are authorized to be issued two pair of high-quality non-prescription and or prescription shooting glasses in accordance with Allowance Source Code (ASC) 538, Section J. Prescription shooting glasses are authorized in accordance with AFMAN 23-122, *Materiel Management Procedures*.

2.4.9.1.3. To decrease the risk of permanent hearing damage, Combat Arms personnel must be issued quality-hearing protection, meeting the level of protection determined by BE. **(T-0)**. Electronic, noise cancelling hearing protection should be considered, as well as hearing protection that provides two-way communication between range personnel.

2.4.9.1.4. Firing line officials are authorized and will receive heat resistant gloves to wear during live-fire operations for safety and protection from the conditions. Thin gloves are critical as they protect the hands and allow work on SA/LW during immediate action procedures, clearing and repairing jammed SA/LW.

2.4.9.2. Provide to the students:

2.4.9.2.1. During live-fire training, all personnel will wear hearing protection. **(T-0)**. Dual hearing protection may be necessary (for students and instructors) depending on decibel levels and exposure time. BE officials will determine the protection level needed based on the noise levels and exposure time. **(T-2)**.

2.4.9.2.2. All personnel occupying the range, must wear eye protection meeting ANSI Z87.1 standards (maintain adequate quantities for all firing positions and observers) during live-fire. **(T-0)**.

2.4.9.2.3. Brass deflectors for rifles, if available and approved, are used to help reduce the possibility of students being burned by hot brass.

2.4.10. Use of Enhanced Performance Round Ammunition. Enhanced Performance Round ammunition is not authorized for use on any Air Force indoor, baffled (partially or fully contained) or small arms range with a bullet trap of any type. This includes the M855A1, M80A1, M856A1 and M62A1 rounds. These rounds are only authorized for training on non-contained (impact) ranges with the required SDZ and VDZ.

2.4.11. The preferred ammunition for use on Air Force indoor, baffled (partially or fully contained) and ranges with a bullet trap of any type is frangible. Frangible ammunition, such as DoD Identification Code AA16, Cartridge, 9mm Frangible and AA40, Cartridge, 5.56mm Jacketed Frangible Single Round reduce ricochet/splash back hazards, environmental/health lead hazards and significantly reduce wear and tear of range structures (walls, baffles and bullet traps). This dramatically extends the life of the range and reduces repair costs and frequencies. Commanders should consider these factors when contemplating the use of standard, lead core ammunition. On indoor, baffled (partially or fully contained) and ranges with any type of bullet trap, lead core ammunition may only be used when frangible ammunition is not available, there is a mission need or the commander provides other justification for not using it. **(T-2)**. Inform BE if lead core ammunition is used so they can ensure proper health protection measures are in place.

**2.5. Live-Fire Procedures:** Students and instructors will clear all SA/LW transported to and from the firing range. **(T-1)**. Pistols may be transported to the range cleared, holstered and secured. Weapons may be transported to the range by each shooter once cleared by Combat Arms personnel. Before firing begins, the tower operator or certified CRO will give a range safety briefing to all personnel scheduled to fire. **(T-2)**.

2.5.1. Prefire Briefing. Brief all students on each order of fire. The Tower Operator or CRO will include, but is not limited to briefing, emergency procedures, each phase of fire, positions to be used, time limits, number of rounds, rounds per magazine and number of magazines used. **(T-2)**.

2.5.2. Ready Line. The ready line is normally a yellow line placed to the rear of the firing line. Shooters will remain behind the ready line and at assigned firing positions until they are

given further instructions. **(T-1)**. The tower operator will notify the shooters when to proceed from the ready line to the firing line. **(T-1)**.

2.5.3. Firing Line. The firing line on most ranges is a red line where the shooter occupies a predetermined position and fires a course or order of fire. Firing line officials must observe all personnel approaching, occupying, or departing the firing line as this is one of the times when a breach of safety is likely to occur. Ground SA/LW at the firing positions with the actions open, safety on, and muzzles pointed downrange. Shooters will handle the SA/LW only on the tower operator's command. **(T-1)**. Do not permit anyone forward of the firing line until the line is declared "safe." "Safe" means SA/LW are visually inspected for safe conditions by range personnel, grounded with actions open, safety on, or holstered and secured. Pistols may be holstered under the "hot range" (SA/LW loaded with a round in the chamber) concept providing line officials ensure pistols remain secured in place in between orders of fire. During orders of fire, range personnel must ensure no one assumes a firing position in front of the firing line and all shooters are aligned. **(T-1)**. Firing is only permitted from the firing platform when using a partially contained baffled range. Authorization may be given to coaches to occupy the firing line during special events or training, as required. Once firing has been completed, range officials will clear all SA/LW prior to the SA/LW being removed from the firing line. **(T-1)**.

2.5.4. Target Scoring. Range officials score and record student targets for qualification evaluation phases. Each shot not fired for any reason, other than ammunition or weapon malfunction, is counted as a miss. In the case of re-fires for malfunctions, the time allowed is prorated for the number of rounds remaining and the orders of fire. Return all serviceable rounds not fired for any reason (example: shooter does not fire all rounds within the time limit) to ammunition stocks for future use. Annotate this in the remarks block of the AF Form 710, *Combat Arms Training Record*. If a score is questioned, the highest-ranking Combat Arms individual on the range makes the final decision.

2.5.5. Range Policing. When practical, students police the range for spent brass, litter, and other materials. Range officials make sure the students in their area police the range. The tower operator or a designated instructor makes sure other range facilities, such as classrooms and cleaning areas (used by students during the training day), are cleaned and policed. Ensure students receive a briefing on all health hazards and protective measures before performing range policing operations.

2.5.6. Range Commands. The range commands listed in [Figure 2.1](#) are the typical commands for conducting rifle, handgun and shotgun courses of fire. Additional or substitute commands may be given when they do not violate safety rules or cause safety hazards.

**Figure 2.1. Range Commands.**

Examples of typical range commands.	
CLEAR THE RANGE!	
IS THE RANGE CLEAR?	
THE RANGE IS CLEAR!	
SHOOTERS MOVE FORWARD TO THE _____ POSITION!	
YOU MAY HANDLE YOUR WEAPONS!	
SHOOTERS, THIS ORDER OF FIRE IS _____, YOU WILL FIRE _____ ROUNDS IN _____ SECONDS (or MINUTES)!	
WITH _____ ROUNDS LOAD!	
(Note: It may be necessary to repeat orders of fire, positions, number of rounds and time limits to ensure all shooters understand the order/phase of fire.)	
IS THE LINE READY?	
THE LINE IS READY! (or THE LINE IS NOT READY)!	
FIRE!	
CEASE-FIRE! (see paragraph 2.5.7.)	
ARE THERE ANY ROUNDS REMAINING?	
INSTRUCTORS, TAKE CARE OF YOUR ALIBI SHOOTERS!	
CLEAR, GROUND, OR HOLSTER AND SECURE ALL WEAPONS!	
MAKE THE LINE SAFE!	
IS THE LINE SAFE?	
THE LINE IS SAFE!	
GO FORWARD FOR TARGET ANALYSIS or (TO SCORE/REPAIR/CHANGE TARGETS).	
Examples of additional or substitute commands:	
IS THE BAY CLEAR?	
THE BAY IS CLEAR!	
SHOOTERS, YOU MAY SAFELY HANDLE YOUR WEAPON AND MAKE ANY SIGHT ADJUSTMENTS.	

2.5.7. Cease Fire Commands. The tower operator gives cease-fire commands with the use of a distinctive loud whistle, buzzer, horn, verbally over a public address system or the disappearance of the target through a turning or dropping of the target by a target control system. If there is an emergency, such as an accident, unsafe condition or aircraft within the range airspace, anyone who sees it, whether it is range personnel, shooter, or spectator, immediately yells, "cease fire!" in a loud, clear voice. The tower operator repeats the cease-fire command and then commands, "make the line safe!" Regardless of who gives the cease-fire command, all shooters cease firing immediately. After range personnel correct the condition causing the emergency, firing may resume.

**2.6. Range Safety Inspections:** The Combat Arms section will inspect ranges and other facilities using a locally developed guide and checklist following the RM Evaluation of Existing Range Facilities guidance at [Attachment 2](#) to this instruction and the Small Arms Range Inspection Checklist at [Attachment 3](#). **(T-2)**. During range inspections, ensure all potential problem areas are identified for maintenance. Minor shot damage, erosion, peeling paint, etc., may become serious problems if not repaired early.

2.6.1. The Combat Arms section will visually inspect the range(s) each day before the start of firing and when firing is completed. **(T-2)**. Look for obvious indicators of potential safety problems (e.g., exposed rocks exceeding the size permitted on the range, loose boards on overhead baffles, debris in the backstop/bullet trap, insect nests, walkways). Combat Arms should develop a simplified checklist using the Small Arms Range Inspection Checklist at [Attachment 3](#) for daily use, focusing on the most critical items. This is not the same type inspection as the annual range inspection outlined in [paragraph 2.6.3](#). The Combat Arms NCOIC will postpone firing until unsafe conditions are corrected. **(T-1)**.

2.6.2. Schedule other inspections to coincide with programmed range inspections, such as quarterly self-inspections. Document range condition and list maintenance needed. Submit work requests through coordination channels to CE.

2.6.3. Annually between 1 August and 31 October, the Combat Arms NCOIC will conduct a formal range inspection, as outlined in [paragraph 2.6](#) **(T-2)**. If conditions prevent the NCOIC from conducting the inspection during this period, the AFSFC may approve extensions or adjustments to the inspection period. The Combat Arms NCOIC should request assistance from base safety, CE environmental, CE maintenance and BE, as required. Use the RM processes outlined in AFI 90-802, *Risk Management* and AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*. The Combat Arms NCOIC prepares a report of the inspection as outlined in [paragraph 2.2.17](#). The Combat Arms NCOIC ensures corrective actions are taken to ensure safe range operation. The Combat Arms NCOIC along with CE personnel ensures all corrective actions and repairs comply with UFC 4-179-02 and this instruction. AFSFC and local Combat Arms officials may add inspection requirements as necessary to meet their particular situation. The Combat Arms NCOIC maintains the last two inspection reports. As a minimum, inspect the items listed below. **Note:** All Air Force range criteria has been moved to UFC 4-179-02, which replaced Facilities Criteria 4-179-03F and Engineering Technical Letter 11-18. Units may not deviate from minimum design criteria items directed by UFC 4-179-02 without an approved waiver. **(T-0)**.



2.6.3.1. Backstop Condition. Dirt backstops should be regularly checked for erosion. If installed, check the bullet deflector/bullet catch for bullet holes and ensure the structure is firmly attached to the backstop. Check for erosion both behind the targets and at all points facing the shooters. Heavy lead buildup could cause ricochets. To test for excessive leading of the dirt backstop, tap a 3/8-inch rod at least 4-feet long into the earthen backstop using a 4-pound (maximum) hammer. Repeat this test on impact area from all firing points. The rod must pass unimpeded through the 3-foot layer of topsoil. **(T-3)**. If the rod will not pass, the Combat Arms NCOIC will coordinate required maintenance (removal of built-up lead or addition of earth) before continued use of the range. **(T-3)**. The Combat Arms NCOIC will ensure this inspection is accomplished and documented. **(T-3)**. The Combat Arms NCOIC will coordinate with the local CE environmental engineers to ensure compliance with federal, state and local requirements for disposal of hazardous material. **(T-2)**.

2.6.3.2. Deterioration of Baffles and Supports. Overhead and canopy baffles must completely stop all direct-fired rounds of the caliber/type with the greatest penetration authorized for use on the range. **(T-2)**. Visually check each baffle to make sure rounds are not passing through them. The Combat Arms NCOIC will ensure that baffles that are not stopping fired rounds are modified to stop the rounds or firing is postponed until the base CE can repair or upgrade them. **(T-2)**.

2.6.3.3. Exposed Rocks. On baffled ranges, remove rocks larger than 3/8-inch in diameter from the range floor, backstop, side berms (from the range floor to the top of the berm). Closely inspect these areas after severe weather as topsoil may erode and expose rocks. For impact ranges, remove large rocks and boulders creating hazards to shooters on the range or people on adjacent ranges.

2.6.3.4. Bullet Traps (Baffled Ranges with Metal Backstops). Check for excessive bullet residue and/or lead build-up in trap area. The cleaning schedule depends on the amount of use and the design of the trap. Periodically, maintenance personnel will remove bullet residue (lead, jacket and other residual material) from the bullet trap. **(T-2)**. Coordinate with the local CE environmental engineers to ensure compliance with requirements for disposal of hazardous material as outlined in AFI 32-7042. Unless certified to handle hazardous material, Combat Arms will not remove or handle bullet residue from the bullet trap or filtration system. **(T-2)**. Use of contractors for these actions is preferred. Inspect and maintain commercial backstops in accordance with manufacturer guidance. Bullet traps will also be inspected for warping of plates, closing/restriction of bullet entrance areas (trap mouth), exposed hardware or misaligned plates (causing ricochet hazards) or openings in any area allowing rounds/fragments of rounds to escape from the trap. **(T-2)**.

2.6.3.4.1. Combat Arms must ensure that targets are positioned to ensure that projectiles enter the bullet trap at the intended angle and impact the trap at the designed location from all firing points, target distances and firing positions used on the range. **(T-2)**. **Note:** Follow bullet trap manufacturer's guidance, if available.

2.6.3.4.2. Combat Arms must regularly inspect the area of the bullet trap where projectiles impact and adjust target positions (move aiming point up, down, left and right) to avoid excessive wear in one area of the trap. **(T-2).**

2.6.3.5. Cracks in Metal Bullet Traps and Support Brackets. If cracks are detected in metal bullet traps or their supports, contact installation CE to repair the area in question as soon as possible. If there are dimpled areas in the steel, fired bullets could return toward the shooter or be deflected out of the bullet trap.

2.6.3.6. Impact ranges must possess an adequate SDZ from any location that shooters fire to ensure rounds fired remain within range boundaries. **(T-1).** The SDZs listed in UFC 4-179-02 are the minimum requirements for Air Force ranges or ranges used by Air Force personnel. **(T-1).** Additionally, the ranges SDZ and VDZ are to be plotted on base maps to prevent encroachment.

**2.7. Range Maintenance:** The Combat Arms section and CE organization are responsible for upkeep and maintenance of ranges and range facilities. All ranges require comprehensive regular and routine maintenance. A proactive maintenance and self-help program benefit the Combat Arms section in maintaining safe, professional and long-standing facilities. The Combat Arms NCOIC is responsible for ensuring range facilities are maintained in a safe condition and necessary repairs or upgrades are identified to the appropriate agencies in a timely manner. The Combat Arms NCOIC should coordinate with the local CE organization to determine what agencies are responsible for specific maintenance tasks.

2.7.1. Combat Arms is typically responsible for minor maintenance, upkeep and the specialized cleaning required inside the ranges for ammunition residue. This may include items such as routine contractor performed cleaning of range and commercial steel trap residue, repairing damaged facing material on baffles, rebuilding target frames/holders, maintaining shooting barricades, repainting target numbers, close in mowing/weed removal, general clean-up and other maintenance/repair activities. The Combat Arms NCOIC will coordinate all range maintenance operations with base safety, environmental engineering and BE to ensure all safety, environmental and health hazards are identified and adequate preventive measures are implemented. **(T-3).**

2.7.2. The Combat Arms NCOIC will ensure that all assigned personnel receive required training and that this training is documented as required by Air Force and local directives for operations they perform that may expose them health hazards such as lead dust, heavy metal dust and other contaminates/hazards that collect on range surfaces. **(T-2).** Some operations performed by Combat Arms personnel may require special personal protective equipment and associated training, such as protective suits and respirators. Because these activities require specialized training and personal protective equipment, performance by trained professional contract services is highly encouraged. If contract services are not available the Combat Arms NCOIC must obtain guidance and support from base BE personnel. The Combat Arms NCOIC coordinates these operations and training with the base BE flight/element.

2.7.3. The Combat Arms NCOIC will include time for this maintenance in the monthly schedule. **(T-3)**. CE provides materials to the Combat Arms section for approved minor maintenance and self-help projects. Deteriorated wooden material removed from the firing range may contain lead projectile residue. Check with the CE environmental function and/or ensure compliance with AFI 32-7042, before disposing of such material, as it may be potential hazardous waste. Combat Arms personnel will not perform range maintenance if a risk of exposure to hazardous materials exists without obtaining guidance from BE. **(T-3)**. Contracting this function to a company that specializes in this type work, may be more cost effective and safe.

2.7.4. The CE organization provides maintenance to ensure continued operation of the range and range facilities. This maintenance includes, but is not limited to, the replacement of eroding earth, mowing/weed eating of large grass areas on the range complex, repair or replacement of baffles and baffle supports, and emergency maintenance. The CE scheduling office and the Combat Arms section jointly schedule required range maintenance. The requirement de-lead or resurface backstops/ bullet traps, replace or overhaul baffles, surface and repair range roads, parking lots, and range floors, paint range and range facilities, and repair or replace facilities is to be identified for scheduled maintenance. **(T-2)**.

2.7.5. Bullet Residue Removal from Bullet Traps. The CE environmental flight advises on environmental protection requirements for the disposal of hazardous range residue. BE advises government personnel on health risk management/health hazard exposure controls, for range and commercial steel bullet traps cleaning. Because these activities require specialized training and PPE, performance by trained professional contract services is highly encouraged. The frequency of routine cleaning and residue removal depends upon the amount of lead accumulated and the size and type of the spent lead collection system.

2.7.6. De-leading or Mining of Backstops. De-leading or mining of the range backstop is a CE maintenance responsibility. The CE environmental flight advises on environmental protection requirements for de-leading and/or mining backstops. Backstops consisting of earth or synthetic media that captures and retains bullets must be de-leaded or replaced periodically when the earth or synthetic media reaches capacity. BE advises government personnel on health risk management/health hazard exposure controls, for de-leading or mining backstops. The frequency of de-leading or replacement depends upon the amount of lead accumulated and the potential for unsafe conditions due to excessive lead build up. Combat Arms personnel will not attempt to perform de-leading projects. **(T-3)**.

**2.8. Range Closures:** When a range is to be closed for more than 120 days, the Combat Arms organizational commander must notify the MAJCOM Security Forces and AFSFC/S3T by memorandum or e-mail. **(T-2)**. The AFSFC will provide a courtesy copy of the notification to AF/A4SF. At a minimum, coordinate with base safety, CE, BE and other applicable base/wing agencies. **(T-2)**. Include the following information as well as updating the range status in ARIS:

2.8.1. Date closed or planned closure date. **(T-3)**.

2.8.2. Estimated length of closure. **(T-3)**.

2.8.3. Projected reopening date. **(T-3)**.

2.8.4. Reason for closure (if possible include costs of repairs) . **(T-3)**.

2.8.5. Type of training and number of people due training during period of closure. (T-3).

2.8.6. Nearest military and civilian installation with available range facilities. (T-3).

2.8.7. Actions taken to continue training. (T-3).

2.8.8. Date and length of time the range was last closed and reason. (T-3).

**2.9. Range Design and Support Facilities Criteria:** Use UFC 4-179-02 when planning, constructing and rehabilitating any type of range or range complex. The UFC includes facilities criteria for standardized small arms ranges and Combat Arms support facilities. The UFC is directive in nature. Range construction should take into account the need to fire tracers (impact ranges only), target positions/distances (e.g., 10 meters for machine gun, 7, 15, 25 meters for others), target width (e.g., machine gun 10-meter target) and shooter positions (e.g., prone, kneeling, standing, barricades) used to engage the targets at varying distances. If the range will use firing stalls or divided firing points, design them to allow firing line officials (RSO) and the tower operator (CRO) an unobstructed view of the firing line and shooters. AF/A4SF, AFSFC/S3T and the Engineer and Programs Support Division, Engineer Support Branch, AFCEC/COSC, must approve all new range designs and major renovations (including changes to the type or function of the range). (T-2). For example, changing a partially contained range to a fully contained range or changing from an earthen backstop to a bullet trap constitute major renovations. MAJCOMs/Units should contact AFSFC for clarification on individual renovation projects to determine if they require AFSFC review. This approval also applies to modular, portable, trailer type ranges as well as community partnership ranges. (T-2). AF/A4C-2 and AF/A4S are the approval authorities for range deviations or waivers from unified facility design criteria. Route requests for deviations or waivers as outlined in [paragraph 1.9.2.6](#)

2.9.1. To provide effective management of the planning and resourcing of Air Force small arms ranges and support facilities, AFIMSC, through the AFSFC and AFCEC will manage this program. The Secretary of the Air Force Community Partnership office (SAF/IEI) will support AFIMSC with community partnership initiatives and AFIMSC will include this office in community partnership activities. AFIMSC will create a Small Arms Range Master Plan to manage and outline the future of Air Force small arms ranges. This document should be in line with the USAF Strategic Master Plan and Air Force Future Operating Concept. The Security Forces Effects Working Group will review the Small Arms Range Master Plan annually.

2.9.1.1. AFIMSC will consider the following small arms range delivery options: on base Air Force-owned ranges, DoD/Federal ranges, off-base community partnership ranges, directing the base to send personnel to Air Force-owned ranges within the local area or directing temporary duty (TDY) to another location for small arms training. In addition to other concerns, AFIMSC will weigh lifecycle costs, quality/effectiveness of training, student throughput, days available to train, life span of range options, firing lane requirements, utilization, age, condition and mission supported. AFIMSC will then consult with AF/A4SF and the MAJCOM SF on the delivery solution they identify as best meeting mission requirements in the most cost-effective manner. AF/A4SF will update the Security Forces Effects Working Group on solutions when selected and AFIMSC will include these in the Small Arms Range Master Plan outlined in [paragraph 2.9.1](#)

2.9.1.2. Annually, AFIMSC will evaluate small arms range delivery options as identified above and will appraise all existing ranges across the Air Force to determine if individual installations are operating ranges in excess of training requirements. Installations with excess ranges (not needed or used to support the base mission) shall discontinue use of the excess range(s) and initiate project requests to demolish or place these ranges in caretaker status. **(T-2).**

2.9.1.3. When a community partner shows interest in supporting Air Force small arms range needs, the owning installation commander shall ensure they disseminate this interest to AFIMSC. **(T-2).**

2.9.1.4. AF/A4S shall provide support to AFIMSC as needed as well as when strategic decisions affect which missions may change the management and resourcing of firing ranges. MAJCOMs should coordinate mission and firing range requirement changes with AF/A4SF.

2.9.1.5. The Air Force Reserve Command Directorate of Logistics, AFRC/A4, shall consult with AFIMSC and AF/A4S using the AFIMSC analysis to select the appropriate solution for their installations.

2.9.1.6. The National Guard Bureau Directorate of Logistics, NGB/A4, should consult AFIMSC and AF/A4S using the AFIMSC analysis to assist in their selection of the appropriate solution for their installations. The National Guard Bureau Security Forces, NGB/A4S, should notify AFIMSC of any decisions on the execution of funds for ANG small arms ranges. ANG Wing Commanders will coordinate small arms range issues through NGB/A4. **(T-2).**

**2.9.2. Community Partnership Ranges and Facilities.** When planning for a new small arms range or a replacement for a closed or nonexistent base range, installation commanders may consider a partnership with local community law enforcement agencies or other activities to jointly construct and/or operate ranges and/or support facilities to support base training needs. This may result in cost savings to the Air Force and the other agency by sharing the costs of construction, maintenance and operation. Installation commanders considering this option must coordinate with AFIMSC as outlined in the previous paragraph. **(T-2).** **Note:** All requirements for design, construction, inspection, health protection, maintenance and operation of Air Force small arms ranges in this instruction also apply to community partnership ranges. **(T-1).**

2.9.2.1. To ensure compatibility with Air Force SA/LW training needs, installations should consider the following items before pursuing a community partnership range to replace a base range or in lieu of constructing a base range.

2.9.2.1.1. The existing or planned partnership range has enough firing points to support the required training throughput (number of personnel requiring training) of the base.

2.9.2.1.2. The configuration or type of existing (already built) partnership range is non-contained (impact), indoor fully contained (preferred), outdoor fully contained or outdoor partially contained and the configuration or type of new construction partnership range is either non-contained or indoor fully contained.

2.9.2.1.3. The total cost of renovating, maintaining and operating the existing base range is more than all Air Force costs associated with the partnership range over the life of the agreement.

2.9.2.1.4. Air Force agencies should consider operations security when planning to use a partnership range to support unconventional forces (Special Warfare Airmen or Special Operations personnel).

2.9.2.1.5. Unless an existing classroom is available that meets space requirements, the partnership range complex should include a classroom(s) meeting Air Force requirements and that are adequate to support base SA/LW qualification training requirements.

2.9.2.1.6. Air Force qualification training has priority over other users or receives an acceptable priority to meet installation mission requirements.

2.9.2.1.7. The partnership range provides Air Force Combat Arms access to the range at all times necessary to accomplish installation SA/LW training requirements.

2.9.2.1.8. The partnership range allows for full execution of the Air Force qualification training courses contained in AFMAN 36-2655 without waiver or deviation and allows use of all required types of ammunition to accomplish these courses.

2.9.2.1.9. The partnership range presents like capability in regard to the length of the training day for both Combat Arms personnel and students. Accessing the range must not add more than 2 hours to the training day, including academic and live-fire training, as well as travel time to obtain/return weapons, ammunition or needed range equipment from the Air Force installation. Lengthy training days greatly reduce the effectiveness of both instructors and shooters, resulting in an increased risk to personnel during live-fire weapons training.

2.9.2.1.10. If community partnership range facilities are intended to include unattended storage of SA/LW or ground munitions, planners ensure compliance with DoDM 5100.76 and AFI 31-101 during planning and operation of the facility.

**2.10. Facility Certification:** Certify new and rehabilitated range facilities as meeting required specifications. This requirement also applies to community partnership ranges. **Note:** DoD ranges are covered in [paragraph 2.3.1](#) Conduct and document the test fire and trial operation following the guidance in the following paragraphs. Certification documentation consists of the facility acceptance inspection, test fire report and trial operation report. Combat Arms sections maintain this certification for the life of the range or until a new certification is accomplished. **(T-3).** The Combat Arms section loads all certified ranges, including non-Air Force firing ranges, into the Status of Ranges Dashboard as outlined in [paragraph 2.11](#) If the base cannot accomplish this, contact AFSFC/S3T for assistance.

**2.10.1. Test Fire Requirements.** After construction or rehabilitation, and before conducting training and qualification operations, Combat Arms personnel must accomplish a controlled test-firing using tracer ammunition. **(T-1).** If tracer ammunition cannot be safely fired on the range, Combat Arms personnel will fire ball ammunition with witness screens to conduct the test fire. **(T-1).** Representatives from base Safety and CE will act as observers.

(T-3). A Combat Arms instructor will use the most powerful ammunition authorized for use on the range for the test fire. (T-1). Remove all fire hazards from the range and areas surrounding the range. (T-1). Make sure firefighting equipment is immediately available when conducting range tests using tracer ammunition. (T-1). Provide sandbags or other protection for the shooter during test firing. (T-1). Hang witness screens of paper when firing non-tracer rounds to see if splash back or ricochets are occurring at the bullet trap. (T-1). Document the procedures used and the results of the test fire using the standard Air Force official memorandum format. (T-3).

2.10.1.1. Non-Contained Ranges (Impact). A test-fire is not required for a non-contained range. After the construction inspection confirms that the full SDZ land area is available and all barriers, fences and signs are erected, proceed to trial operations in [paragraph 2.10.2](#)

2.10.1.2. Fully Contained Ranges. Do not test baffles with direct fire. (T-3). Test baffles for direct-fired round containment before construction, as described in [paragraph 2.10.1.3](#) (T-1). To test for ricochet containment, the shooter must first fire service ammunition (non-tracer) from the prone position into the backstop and then at the floor. (T-1). Combat Arms will use a test (witness) screen to check the ricochet potential of the range floor. (T-1). The test screen may be constructed from Celotex<sup>®</sup> (National Stock Number 5640-00-073-2803) or cardboard material, fashioned into a 1.2-meter by 1.2-meter (3.9-foot by 3.9-foot) four-sided cube. Place the test screen at different locations on the range floor. (T-1). Fire into the range floor in front of the test screen at various angles from the firing line. (T-1). To determine if ricochets would have left the range, sight along a small-diameter dowel placed through ricochet holes in the screen material. (T-1). Take corrective measures if the angle of departure and the sighting verifies that the bullet left the range. (T-1). To determine ricochet patterns, conduct tracer tests (if possible) using the same caliber of ammunition to be used on the range. If tracer rounds cannot be used, fire multiple rounds using the test witness screen to verify the path of the rounds. (T-1). Using tracer ammunition is the fastest and most efficient method of determining ricochet patterns and hazard potential.

2.10.1.3. Baffle Test Before Construction. For baffles that differ from the construction criteria mandated in UFC 4-179-02, construct baffle test blocks/cells using the baffle materials and construction details specified in the design documents. (T-1). Completion of this test is required before construction and installation of the overhead baffles. (T-1). From a protected position, a shooter will engage the test block/cell with direct fire from the most powerful round authorized for the range. (T-1). The baffle test should have secondary containment to stop the round if it penetrates the test baffle. Do not test the baffle blocks/cells using tracers. (T-1). Do not test baffles after they are installed in their overhead position. (T-3). Conducting direct-fire tests following construction could be very unsafe and costly if the baffles fail to stop the round. Machine gun range tubes do not have to be tested if they meet the material requirements listed in UFC 4-179-02. Add the procedures and results of this test to the range test fire report. (T-2).

**2.10.2. Trial Operations.** Trial operation of a new or rehabilitated range is mandatory. **(T-1).** The Combat Arms NCOIC and an installation Safety representative will be present during trial operations. **(T-2).** Document the results of the trial operations in a range trial operation report using the standard Air Force official memorandum format. **(T-3).** One copy of the trial operations report must be included in the construction acceptance documentation. **(T-2).** The Combat Arms section will retain an additional copy on file for the life of the range. **(T-3).** Include the following items in the report:

2.10.2.1. Date of construction completion. **(T-3).**

2.10.2.2. Date of trial operation. **(T-3).**

2.10.2.3. Course of fire. **(T-3).**

2.10.2.4. Type of weapon, caliber and ammunition used for the trial (This must be the most powerful ammunition intended for use on the range). **(T-3).**

2.10.2.5. Target system functioning (may be mechanical or fixed). **(T-3).**

2.10.2.6. Number of shooters who fired. **(T-3).**

2.10.2.7. Firing points used. **(T-3).**

2.10.2.8. Damage incurred or improperly functioning items. **(T-3).**

2.10.2.9. Initial hazardous noise survey report. **(T-3).**

**2.11. Range Status Reporting Requirements:** The Combat Arms NCOIC must update the Status of Ranges Dashboard located on the USAF Combat Arms AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>) within five duty days after any changes occur to the small arms range(s) used by the base and annually between 1 August and 31 October. **(T-2).**



## Chapter 3

### TRAINING MANAGEMENT OF COMBAT ARMS PERSONNEL

**3.1. Purpose:** This chapter explains requirements for all Combat Arms instructors. Refer to the Air Force Enlisted Classification Directory (AFECD) for AFSC qualifications.

**3.2. Combat Arms Training Requirements:** Combat Arms personnel assigned to perform Combat Arms duties either at home station or deployed must meet criteria for training and qualification identified in the AFECD. **(T-1).** The Combat Arms NCOIC ensures all assigned Combat Arms personnel are trained, evaluated, maintain skill proficiency and participate in continuation training. For upgrade training, unit-training managers enter newly assigned 3P031B personnel into the appropriate upgrade training status code in accordance with AFI 36-2651, *Air Force Training Program*. AFSC 3P031B personnel should be utilized in their new specialty at the Combat Arms section, rather than in other duty positions, to ensure effective and timely on-the-job training (OJT) and advancement to the 5-skill level.

3.2.1. Civilian personnel as Combat Arms Instructors. In order to perform Combat Arms duties, traditionally performed by 3P0X1B or SEI 312 personnel, civilian instructors must be graduates of the Combat Arms Apprentice Course (or previous/future versions of the course). **(T-2).** If not a prior 3P0X1B/SEI 312, they must attend the Combat Arms Apprentice Course once hired, regardless of previous experience. **(T-2).**

3.2.2. AF/A4S manages the Combat Arms civilian force as part of the Security Forces civilian police job series 083. HQ Air Force Personnel Center provides core position descriptions including medical requirements to accommodate the unique health risks associated with Combat Arms duties.

**3.3. Instructor Evaluations:** Combat Arms personnel who perform lead instructor duties must successfully complete a lead instructor evaluation on each SA/LW for which they provide training before being task certified to instruct the weapon without supervision. **(T-2).** Thereafter they receive regular evaluations to maintain training standards. Use the instructor evaluation checklist posted on the USAF Combat Arms, AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>). Modifications to the checklist are not allowed without approval of AF/A4SF. **(T-1).** **Exception:** Combat Arms personnel assigned to AF/A4SF and the AFSFC are exempt from the requirements to maintain instructor (**paragraph 3.3**) and weapons maintenance evaluations (**paragraph 3.4**) for training, weapons handling procedure and maintenance procedure development. AF/A4SF and AFSFC personnel with AFSC 3P10X1B or 3P0X1 with SEI 312 may train Air Force personnel, including live-fire, on SA/LW as part of training and weapons handling procedure development, including qualification training on new weapons/courses. They must be qualified on the current Air Force qualification course (for weapons with a current course) for the weapon to take advantage of this exemption. This exemption does not apply to performing lead instructor duties for qualifying Air Force personnel for armed duty (normal initial and/or recurring qualification) and they must meet all the requirements in this publication to perform this function.

3.3.1. Lead Instructor Evaluations. The Combat Arms NCOIC will evaluate lead instructors once the individual has successfully completed two training evaluations. **(T-3).** Satisfactory completion of this evaluation authorizes an individual to perform lead instructor duties

without supervision. The evaluator must be present for the entire program of instruction, including live-fire and preventive maintenance evaluation. **(T-1).**

3.3.2. Once an instructor is lead instructor task certified on one weapon, they need only satisfactorily complete a lead instructor evaluation for additional SA/LW on which they conduct training. The trainer or Combat Arms NCOIC may conduct training evaluations for additional SA/LW; however, they are not required. Newly assigned instructors who were previously task certified on a weapon and completed a lead instructor evaluation do not require another lead instructor evaluation on the same weapon, but must satisfactorily complete a lead instructor evaluation for SA/LW they are not certified to instruct. **(T-2).**

3.3.2.1. For lead instructor evaluations, the evaluation by the Combat Arms NCOIC must cover the complete Air Force qualification course training program to include performance of tower operator duties and evaluating preventive maintenance. **(T-2).**

3.3.2.2. All tasks performed for lead instructor evaluations are rated on the evaluation checklist for certification. The instructor being evaluated must achieve at least a satisfactory rating on all areas to receive task certification. **(T-2).**

3.3.3. Once lead instructor certified, each Combat Arms instructor that performs instruction duties will receive an annual evaluation each calendar year to ensure continued quality of instruction and training. **(T-2).** This evaluation occurs randomly within 60 days of the anniversary date of the previous annual evaluation or lead instructor evaluation if there was no annual evaluation. The Combat Arms NCOIC does not notify the instructor being evaluated until the day of the evaluation. The Combat Arms NCOIC must conduct this annual evaluation on a different SA/LW each year (evaluations cannot be on the same type SA/LW for consecutive years). **(T-3).** This evaluation follows the same requirements as lead instructor evaluation. In addition to this annual evaluation, additional “No-Notice” evaluations are encouraged throughout the year. Lead instructor evaluations should not be used as a substitute for annual evaluations, in the event the instructor requires certification on a new weapon system.

3.3.4. Conducting evaluations. The Combat Arms NCOIC conducts lead instructor and annual evaluations. **Note:** At large Combat Arms organizations with multiple teams/crews, the Combat Arms organizational commander may allow the highest-ranking Combat Arms member of the team/crew to conduct these evaluations, although they must meet all other requirements. The individual’s trainer conducts training evaluations. The immediate supervisor or someone higher in the chain of command conducts evaluations on the Combat Arms NCOIC when they perform lead instructor duties. Instructors subordinate to the NCOIC do not normally conduct official evaluations on the NCOIC; however, task certified lead instructors subordinate to the NCOIC may conduct official evaluations on the NCOIC with AF/A4S approval when necessary to meet mission needs. Other instructors may perform informal evaluations on any instructor to provide additional feedback on their performance. Higher headquarters Combat Arms officials may also accomplish lead instructor and “no notice” evaluations. The evaluator critiques each instructor evaluated. The evaluator must provide feedback within 2 workdays following the evaluation. **(T-3).** The instructor, supervisor and evaluator should be present during the feedback session. If instructor performance was unsatisfactory, include the NCOIC in the feedback session.

3.3.5. Remedial Training. Provide additional training for an instructor rated unsatisfactory for any area. Give a follow-up evaluation within 30 days (Air Reserve Component members have two UTAs to meet this requirement). Instructors must satisfactorily accomplish the follow-up evaluation before they are permitted to perform lead instructor or tower operator duties. **(T-2)**.

3.3.6. If an instructor receives an unsatisfactory rating on both formal evaluation and the follow-up evaluation, the Combat Arms NCOIC will make a recommendation to the commander whether the individual should receive further training or have their instructor status (B-shred or SEI) revoked. **(T-2)**. These individuals are not allowed to instruct classes or perform tower operator duties until the commander reaches a decision. Ensure the supervisor completes thorough documentation of remedial training in the member's Air Force Training Record.

**3.4. Weapons Maintenance Evaluations:** The Combat Arms NCOIC also establishes a system to ensure initial and annual weapons maintenance evaluations are conducted on their personnel who perform SA/LW inspections and maintenance. These evaluations may be conducted during actual inspections. Use the "GO/NO-GO" scale to rate each item. Combat Arms personnel must satisfactorily complete a weapons maintenance evaluation on each SA/LW before being task certified to perform inspections or maintenance without supervision. **(T-2)**. The individual's trainer or any Combat Arms member who is task certified to perform maintenance on the SA/LW may conduct the evaluation. The Combat Arms NCOIC will use the same procedures as those used for instructor evaluations in [paragraph 3.3.3](#) for accomplishing annual weapons maintenance evaluations on assigned instructors. **(T-3)**.

3.4.1. Use the weapons maintenance checklist posted on the USAF Combat Arms AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>). **(T-2)**. Modifications to the checklist are not allowed without approval from AF/A4SF.

3.4.2. Weapons maintenance evaluations include, but are not limited to, accomplishing and identifying procedures for:

3.4.2.1. Scheduling SA/LW inspections and maintenance.

3.4.2.2. Use of TOs, proper sequence, required gauges, fixtures, tools, etc.

3.4.2.3. Troubleshooting suspected SA/LW malfunctions.

3.4.2.4. Function firing of repaired SA/LW, when applicable.

3.4.2.5. Completing required documentation, such as annotating weapons maintenance log, SA/LW parts accountability documents, entering AFTO Form 105 information into ARIS and completing appropriate Department of Defense and local forms.

**3.5. Documentation of Evaluations:** Document all instructor and weapons maintenance evaluation results on the individual's AF Form 1098 in Air Force Training Record. Combat Arms sections may use ARIS to record and track when evaluations are accomplished. The Combat Arms NCOIC must file completed evaluation forms in the Combat Arms section. **(T-3).** The completed evaluation forms may be printed or electronic. Maintain completed evaluation checklists for one year from completion date, then dispose of them or return them to the individual. Retain the evaluation checklists for one year after unsatisfactory areas are upgraded to satisfactory. Dispose of completed evaluation checklists or return to the individual upon their reassignment or separation.

3.5.1. Combat Arms evaluators will use the fillable instructor and weapons maintenance evaluation forms prepared by AF/A4S and posted on the USAF Combat Arms AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>). **(T-2).** Modifications to the checklists are not allowed without approval from AF/A4SF. In Security Forces squadrons, the Combat Arms NCOIC provides required evaluation data to the Standardization Evaluation section to incorporate into trend analysis reports as outlined in AFI 36-2646, *Security Forces Training and Standardization Evaluation Programs*. **(T-2).**

3.5.2. Establish instructor proficiency folders to maintain evaluations for senior noncommissioned officers who require evaluations but do not require an AF Form 623, *Individual Training Record Folder*.

**3.6. Firearms Qualification:** The NCOIC is responsible for SA/LW qualification training of assigned Combat Arms personnel. Combat Arms instructors will maintain live-fire qualifications on all SA/LW and courses of fire on which they are lead instructor certified, for which they perform lead instructor duties and for which they perform firing line official (block officer) duties. **(T-2).** They will also maintain qualification on any weapon for which they have an armed duty/UTC requirement. **(T-0).**

3.6.1. Instructors performing Combat Arms duties who are lead instructor certified or who qualify strictly to maintain instructional skills are not required to attend classroom training or participate in the semi-annual recurring training (classroom/performance evaluation) sessions for SA/LW with this requirement. If they qualify solely for teaching certification, they are also exempt from semi-annual live-fire qualification for weapons/courses with this requirement. Additionally, Combat Arms instructors who qualify merely to provide training and who do not have an arming requirement with a weapon are not required to complete sustainment training and are only required to qualify once per year, regardless of the course requirements. **Note:** If tasked for in-garrison arming or deployment, Combat Arms personnel must complete the entire course of fire for the applicable weapon and tasking/duty. **(T-0).**

3.6.2. Personnel assigned to a QFEBL will accomplish task certification on all SA/LW designated by the QFEBL Mission Capability Statement. **(T-2).** Training for unique SA/LW not provided/available at home station and maintenance training certification can be accomplished at AETC formal schools or at regional training centers. Live fire qualification is not required for Combat Arms assigned to the QFEBL as the UTC is designated for maintenance support and not training. When practical, it is highly recommended proficiency ammunition be used to increase instructor SA/LW skills and knowledge of all SA/LW supported by the QFEBL.

**3.7. Combat Arms Proficiency Training:** The Combat Arms NCOIC will establish policies and schedule use of authorized Combat Arms proficiency ammunition for assigned Combat Arms personnel (See AFMAN 21-209, Volume 1 and the GMAT.). **(T-3).** These policies should permit and encourage assigned Combat Arms personnel to gain additional firearm proficiency and become a more skilled instructor. Proficiency rounds are to be expended throughout the fiscal year. Proficiency firing is conducted quarterly. Instructors do not wait until the last month of the fiscal year to expend the annual allotment authorized. Combat Arms proficiency ammunition is authorized for Combat Arms proficiency only. Ensure SA/LW proficiency and in-house training times for Combat Arms are included in monthly schedules.

**3.8. Safety and Health Training:** Combat Arms personnel will be trained to use all authorized equipment and know the potential hazards of the workplace, review occupational safety and health guidance, and be familiar with the Material Safety Data Sheets (MSDS) or Safety Data Sheets (SDS) for all hazardous products used in the section. **(T-0).** Such hazards include exposure to noise, airborne lead, cleaning solvents, various chemicals and improper range or cleaning room ventilation. The squadron training section ensures all Combat Arms personnel receive periodic training in ground/weapons safety, use of force, and self-aid/buddy care. Annotate all completed training as directed in AFI 91-202, AFI 36-2646 and MAJCOM/local directives.

## Chapter 4

### FIREARMS TRAINING PROCEDURES AND PROGRAM MANAGEMENT

**4.1. Purpose:** This chapter provides information to assist Combat Arms personnel in preparing for classroom and range activities. Security Forces Combat Arms personnel are charged with providing the Air Force with trained personnel who are confident and capable of effectively employing Air Force SA/LW. The significance of this responsibility cannot be overstated. As such, Combat Arms operations are to be executed with the utmost professionalism and consciousness, with emphasis on continued improvement. Weapons' training requires individual mental and physical skills. Personnel must pass all course objectives by demonstrating their ability to safely employ and maintain the weapon(s) as well as effectively engage targets prior to being certified. **(T-0).**

**4.2. Classroom Procedures:** Good classroom procedures enhance student learning. Remove or reduce controllable distractions within the classroom. Ensure all material is adequately covered; shortcuts are not authorized. Every class is to include all objectives outlined in AFMAN 36-2655. Ensure assistance is provided to students especially those having difficulty with the material.

4.2.1. Instruction Procedures. Instructors may only use Air Force approved lesson plans (approved by AF/A4SF) when conducting training. They will make sure all information in the lesson plan (both left and right columns if preprinted on Air Force approved lesson plan) is presented so students will acquire intended knowledge and skills. It is the responsibility of Combat Arms instructors to ensure learning is achieved. Additional information that does not conflict with Air Force policy or procedure and is approved by the Combat Arms NCOIC, above what is contained in the lesson plan, is highly encouraged.

4.2.2. Breaks. Provide breaks in the presentation at regular intervals (typically every 50 minutes).

4.2.3. Instructors should ensure all necessary preparations are accomplished prior to starting the class. Failure to do so demonstrates a lack of professionalism and detracts from the learning process.

4.2.4. Continually evaluate all elements and materials to support training and ensure effectiveness.

4.2.5. Primary Instructors. The lead instructor must possess either a Primary AFSC 3P051B, be a task certified 3P031B, SEI 312 or DoD civilian equivalent, be qualified on the weapon and course of fire on which they are providing training and be assigned to a Combat Arms duty position. **(T-1).** For OJT purposes, a 3P031B may perform as lead instructor under the direct supervision of a 3P051B, SEI 312, or DoD civilian equivalent until task certified.

4.2.6. Tower operators must possess either a Primary AFSC of 3P051B, be a task certified 3P031B, SEI 312, or DoD civilian equivalent. **(T-1).**

**4.3. Assistant Instructors:** Assistant instructors perform key duties during SA/LW qualification training, to include safety, resource protection, and coaching trainees. In the classroom, they augment the primary instructor during portions of training requiring physical handling of SA/LW and during performance evaluation sessions. They assist trainees by reinforcing correct techniques and helping to promote a positive learning environment. On the firing line, they help maintain a safe training environment for trainees and fellow instructors. They are responsible for coaching and assisting shooters as necessary during the practice phases of qualification training. Clear communication between the tower operator and firing line officials is key to effective firing line operations. **Table 4.1** outlines student to assistant instructor ratios for classroom and range activities.

4.3.1. Assistant instructors are 3P0X1B/SEI 312, DoD civilian equivalent, or task certified Group A personnel qualified on the weapon and course of fire for which they are providing training. **(T-1).** Group A personnel must have a 5-skill level and can only be used when insufficient numbers of Combat Arms personnel are assigned to the Combat Arms parent organization.

4.3.2. As a standard, firing line officials (block officers) are 3P0X1B, SEI 312 or DoD civilian equivalent personnel. However, Group A personnel with a 5-skill level, task certified on firing line official duties by the Combat Arms NCOIC and qualified on the weapon and course of fire may perform as a firing line official for rifle, carbine, handgun, shotgun, and sub-machine gun training. Leadership should not overuse this option and should not allow it to become standard practice. The preferred method is to use Combat Arms instructors for this duty. These individuals perform a critical role in training and coaching shooters and these skills take experience and significant time to develop.

4.3.2.1. Combat Arms sections will develop a comprehensive training and certification program to certify individuals as firing line officials. **(T-2).** At a minimum, Combat Arms will include weapon safety, range safety, role of the tower operator, role of firing line officials, range operations, range commands, course of fire requirements/procedures, firing line official duties/responsibilities, coaching techniques, firing line evaluation techniques, shooter errors, target analysis and emergency notification procedures in firing line official training/certification. **(T-2).** This certification must include evaluation during live-fire. **(T-2).** The Combat Arms organizational commander will approve all firing line official training plans. **(T-3).** **Note:** AF/A4SF maintains a Firing Line Official lesson plan on the USAF Combat Arms AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>) that units should use to develop local lesson plans for this training.

4.3.2.2. Document task certification of firing line officials on AF Form 1098. Maintain a locally developed training log of all personnel certified as firing line officials and indicate when their certification expires (refresher training is due) at the Combat Arms section.

4.3.2.3. The Combat Arms organizational commander and the member's commander must approve firing line officials in writing. **(T-3).** Combat Arms will maintain a copy of approval letters at the Combat Arms section. **(T-3).** This certification is valid for one year and only pertains to host Combat Arms ranges and ranges operated by the host Combat Arms organization. Personnel must complete refresher training annually to maintain their certification. **(T-2).** The Combat Arms NCOIC revokes certifications if

individuals fail to follow established guidance or if they perform duties in an unsafe manner.

4.3.2.4. United States Air Force Academy (USAFA) cadets may perform firing line official duties during Basic Cadet Training on the M16A2 rifle orientation course at the USAFA, after they complete all required training and certification for these individuals as outlined in [paragraph 4.3.2.1](#).

**Table 4.1. Minimum Instructor to Student Requirements/Ratios (T-1).**

<b>R U L E</b>	<b>If the weapon is</b>	<b>Then one classroom assistant instructor per:</b>	<b>With the exception of paragraph 4.3.3., one tower operator per firing line is required. In addition, one firing line official per:</b>
1	Rifles, sub-machine guns, carbines, pistols, revolvers, shotguns	28 students (see notes)	3 students during day automatic/burst phases, when students are using automatic or burst capable SA/LW, and during all night fire phases
			7 students during all semi-automatic day fire phases.
			1 student during any training involving shooter movement with loaded SA/LW (shoot, move, & communicate)
2	Grenade launchers and anti-armor weapons	14 students (see notes)	Weapon
3	Machine guns and automatic rifles	14 students (see notes)	Weapon
4	Heavy machine guns (e.g., M2/MK19)	7 students	Weapon
5	Long Range Precision Rifles (e.g., M24/M107)	7 students	Weapon
<b>Notes:</b> A minimum of one assistant instructor is required for all classroom instruction. If class size dictates a need for multiple assistant instructors, additional assistant instructors are only required during the weapon performance/evaluation portions of the class. The requirement for one firing line official per student during any training involving shooter movement with loaded SA/LW does not apply to shooter movement within the firing position, such as in the Rifle/Carbine Air Force Qualification Course (AFQC).			





**4.5. Weapons Safety:** Combat Arms personnel will ensure a safe SA/LW handling environment at all times. **(T-1).** Refer to AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures*, for additional guidance.

4.5.1. Primary instructors are not permitted to have live ammunition while performing lead-instructor duties. Only instructors performing resource protection duties are permitted to be armed in the classroom or SA/LW cleaning area. Combat Arms should avoid arming assistant instructors and if necessary due to limited manpower, assistant instructors should be armed with a different type weapon than that being instructed. Negligent discharge incidents can be avoided when sound safety precautions are observed. Students with their assigned duty weapon or bringing a non-Combat Arms weapon to training will clear their weapons (no live ammunition present) before entering the classroom and Combat Arms instructors will verify that all SA/LW are cleared before allowing them in the classroom. **(T-1).** Combat Arms instructors will ensure the bores of all weapons used for training are checked for obstructions by running a cleaning rod the full length of the bore and chamber (if weapon design permits) and will not allow live-fire with any SA/LW that have not been cleared using this method. **(T-1).** Instructors will ask students if they have live ammunition, dummy rounds, or blank rounds on their person before allowing the weapon to be brought into classroom. **(T-1).** Other than rounds carried by resource protection personnel, no live ammunition is ever allowed in the classroom. Combat Arms personnel will inspect the classroom daily, before training, to ensure there is no live ammunition present. **(T-1).**

4.5.2. Use only authorized dummy ammunition for instructional purposes. Combat Arms instructors will inspect all dummy ammunition, including boxes/containers, for live rounds before daily classroom use, including rounds in student desks or other locations. **(T-2).**

4.5.3. Combat Arms sections should maintain two sets of training web gear for rifle and pistol classes. Training gear used in the classroom should not be intermingled with the live-fire gear used on the range. Combat Arms officials must ensure the gear is purged of live ammunition before returning the gear to the classroom environment, including magazines and pouches. **(T-1).**

4.5.4. Trainees are to use their issued duty gear, providing no ammunition is introduced into the classroom. Personnel completing SA/LW qualification training are encouraged to fire the applicable course(s) of fire wearing ICE every time they fire. This is a requirement for pre-deployment and all handgun training covered in **Chapter 5**. Combat Arms personnel will check all gear brought into the classroom to ensure no live rounds are present. **(T-2).**

4.5.5. In addition to standard loading and clearing procedures, Combat Arms will provide instruction on clearing barrel procedures during classroom training for every weapon/course, using the procedures outlined in AFMAN 31-129. **(T-2).**

**4.6. Lesson Plans:** Maintain a hard or electronic master copy of all AF/A4SF approved lesson plans in the Combat Arms office for SA/LW and/or courses where training is provided. The NCOIC will review/update the master whenever changes (TO or Field Manuals) are required. **(T-2).** Instructors will maintain their own updated personalized lesson plans to use during instruction. **(T-3).** A personalized lesson plan has questions, transitions, examples, training aid correlation, personal notes and anything else necessary to assist or enhance training. The NCOIC will certify each master and personalized lesson plan for accuracy by reviewing all lesson plans every 12 months or whenever changes to policy, procedures or training courses

occur. (T-2). Document proof of lesson plan review on a form letter, general-purpose worksheet or locally developed lesson plan review form. The NCOIC will place a copy of the lesson plan review form in the master and each personalized copy. (T-3).

**4.7. Training Aids:** Many types of training aids (including firearms training simulators) are available to Combat Arms and units. Good training aids and techniques can shorten the time needed for teaching, learning and proficiency. Training aids stimulate student interest and get them actively involved. Instructors should use them wisely and with ingenuity. The Army Training Command and most Training Support Agencies found on Army installations are possible sources for firearms related training aids. Additionally “dry-fire” practice is an excellent method of reducing the cost of training.

**4.8. SA/LW Cleaning Procedures:** Students must clean and inspect the SA/LW they use for training. (T-3). This is part of their evaluation. Combat Arms will instruct them on how to properly maintain their firearm(s) in accordance with procedures and equipment listed in the operator manuals. (T-1).

4.8.1. Students completing qualification training are not to use cleaning tanks or unapproved methods to accomplish the preventive maintenance evaluation portion of training. Personnel may use only cleaning solutions and lubricants approved in the applicable SA/LW TO. Combat Arms must ensure all use of solvents and chemicals meets Air Force and local environmental requirements and is approved according to AFI 32-7086, *Hazardous Material Management*, as well as ensuring safe handling procedures and appropriate implementation of ventilation requirements. (T-0). **Note:** Commanders may authorize use of approved cleaning tanks or ultrasonic cleaners for mass SA/LW cleaning that is not part of qualification or orientation training.

4.8.2. Combat Arms will not permit personnel to use unauthorized cleaners/solvents, such as automotive cleaners, degreasers or unauthorized equipment/procedures. (T-1).

4.8.3. Brief students about any safety precautions contained in the MSDS/SDS and inform them of the location of the MSDS/SDS for the type of solvent or lubricant used. The MSDS/SDS must be available to students upon request. (T-1).

4.8.4. Do not allow eating, drinking or tobacco use in the cleaning area. This reduces the chances of ingestion of transferred lead/heavy-metals residue or splattered cleaning solvents during cleaning operations. At a minimum, brief students to wash their hands with soap and water before eating, drinking or smoking (including smokeless tobacco).

**4.9. Student Evaluations:** Instructors will evaluate students on SA/LW safety, the course of fire, all required operator skills, preventive maintenance and function check of the firearm in accordance with the TOs and the qualification course guidance. (T-1). If an individual fails any evaluation in the training program, the individual is unqualified with the weapon until able to pass the failed portions of the evaluation(s). Reasons for failure are entered on the AF Form 522, *USAF Ground Weapons Training Data*, in ARIS. Students must perform all tasks without assistance to pass evaluations. (T-1).

**4.10. Student Critique:** Provide students the opportunity to accomplish a written critique of all phases of their training. The primary instructor informs students of this program at the beginning of training and ensures student critique forms are made available. The Combat Arms NCOIC reviews critiques and provides requested answers to any concerns noted.

**4.11. Documentation of Training:** Proper documentation is necessary to ensure accurate ammunition accountability and proof of firearm qualification. The Combat Arms section will use ARIS to document all firearms training. **(T-1)**. If ARIS is offline, all entries are made in ink or typed electronically on the most current versions of AF Form 710 and AF Form 522 obtained from the Air Force E-Publishing website. Combat Arms enters the data from manually completed documents into ARIS when it becomes available, not to exceed one duty day from when the system is back online. The example forms provided in this instruction are the ARIS versions. The electronic versions from the Air Force E-Publishing website are almost identical and will be completed using the same guidance. When AF Forms 710 and 522 information are entered into ARIS, printed copies of these forms are not required and the Combat Arms lead instructor verifies the accuracy of the information before closing out the class. Combat Arms ensures that units/agencies that require printed copies of the AF Form 522 are provided access to ARIS to produce the form.

4.11.1. AF Form 710 is a class roster, record of individual qualification, ammunition expenditure, range utilization and firearm use. Complete the form according to [Figure 4.1](#) and [Figure 4.2](#).

4.11.2. Use AF Form 522 to document training. If a hard copy is desired, the individual's unit may print the form and maintain it to provide a record of training, use as a scheduling aid or provide a crosscheck of qualification training. Organizations use ARIS for validation of qualification, previous training or pre-deployment training. A completed ARIS, AF Form 710, AF Form 522, or manually completed version from the Air Force E-Publishing website signed by Combat Arms (3P0X1B, SEI 312, DoD civilian equivalent), are the only allowable source documents for current or past qualifications. Complete AF Form 522 according to [Figure 4.2](#) The form may be initiated during the first period of training. Annotate rounds fired, score, status and both the student's and range official's signatures (student and range official signatures only required on manually prepared form) after completion of training. Instructors do not sign the ARIS generated version of the form, as the system enters "ARIS Authenticated" in the signature block. Combat Arms personnel also annotate if the student qualified wearing ICE (pre-deployment training) and/or the types of holsters and other equipment the student is qualified to use in the remarks section using the drop down menu in the equipment section of ARIS or manually adding items not in the drop down menu. The AF Form 522 reflects the qualification status, type of firearm, date of qualification, and if appropriate, the individual's qualification for the award of the Small Arms Expert Marksmanship Ribbon (SAEMR).

4.11.2.1. Combat Arms enters the course of fire from ARIS, using the standardized courses only, for qualification courses and will not use locally developed course of fire descriptions. If units need additional qualification courses added, they contact AFSFC and request them to be included in ARIS. Locally developed/modified courses for qualification training are not authorized. **(T-1)**.

4.11.2.2. Combat Arms will annotate any variances from the published course of fire in the remarks section of the AF Form 522 in ARIS and cite the authority for the variance. **(T-2)**. For example, if AF/A4S or the installation has approved any deviations, such as not firing the gas mask portion of the course, Combat Arms will indicate that these tables/phases/orders of the course were not fired and provide a reference for the

deviation. **(T-2)**. An example would be, “Member did not fire Phase VI: CWDE Firing Techniques, of the Rifle/Carbine AFQC based on AF/A4SF deviation, 25 Sep 19.”

4.11.2.3. For qualification training, Combat Arms will enter the total number of rounds fired by the student for the entire course and will only use one of the following statuses when completing firing records in ARIS: “Q” - qualified, “E” - expert, “UQ” - unqualified, “N/A” - not applicable (student did not complete training). **(T-1)**.

4.11.3. To ensure students receive the appropriate type of training (initial, recurring or remedial), student training records are obtained from ARIS or the student’s hard copy AF Form 522. If the student’s status cannot be determined, they qualify under initial training guidelines.

Figure 4.1. AF Form 710, ARIS Version.

COMBAT ARMS TRAINING RECORD											
WEAPONS MODEL and TYPE				DATE		TIME		COURSE OF FIRE			
M9 PISTOL PISTOL, 9 MILLIMETER, M9				12/13/2018		08:00:00		M-9 HANDGUN AFQC (INITIAL OR RECURRING)			
LOT NUMBERS				AMMUNITION CALIBER		TYPE		DODIC		ROUNDS FIRED BY LOT NUMBER	
Lot Number 1 LC-98D-004-2345				9 MM		FRANG		AA16		90	
NO.	PRINT NAME (Last, First, MI)	RANK	ORGANIZATION		BUTT #	TARGET NUMBER	ROUNDS USED	SCORE	STATUS	GROUP	
			REASON		SERIAL #						
1	BAMBACH, ALEXES	SRA	4 SECURITY			1	90	37	Q	A	
			DUTY		321						
ROUNDS FIRED SHOOTERS 1- 1 90											
I CERTIFY 90 ROUNDS OF 9 MM, AMMUNITION WERE EXPENDED IN TRAINING THE 1 PERSONNEL LISTED ON THIS FORM. AN ADDITIONAL 0 ROUNDS WERE EXPENDED FOR DEMONSTRATIONS, REFIRES, AND OR DUDS. THE TOTAL NUMBER OF ROUNDS FIRED FOR THE TRAINING OF THIS CLASS WAS 90 ROUNDS.											
DATE		PRINTED NAME AND RANK OF PRIMARY CLASSROOM INSTRUCTOR						SIGNATURE			
12/13/2018		KELLY, DAVID TSGT						***ARIS AUTHENTICATED***			
ORGANIZATION		SCH	TR	QUAL	ORGANIZATION		SCH	TR	QUAL	CLASS BREAKDOWN TOTALS	
4 SECURITY FORCES SQ		1	1	1						A	1
										A/AIR CREW	
										B	
										TOTAL	1
										AEF	
										DUTY	1
										MOBILITY	
										PCS	
										PROFICIENCY	
										TDY	
										TOTAL	1
COURSE WAIVERS											
OWNER: 4 FW/CC											
COURSE WAIVER: During Black Flag Conditions, ICE Gear will not be worn, 15 Jun 18.											
SPECIAL EQUIPMENT											
(1) N/A/Individual Combat Equipment (ICE): BAMBACH, ALEXES;											
REMARKS											
Black Flag Conditions											
CP Notification 0-2018											

**Notes:** Separate entries for multiple qualification phases are not required. For multiple phases, enter the total number of rounds fired, score as “—,” and status as qualified “Q” or un-qualified “UQ.” If the individual does not meet minimum qualification standards, indicate in the remarks section what phase(s) the shooter failed. Combat Arms uses only the standardized courses from ARIS and does not use any locally developed courses. Use the “remarks” section to explain any unusual annotations, mistakes or information that should be captured such as, why students did not fire the prescribed amount of ammunition, e.g., “student #2 fired 3 additional rounds to confirm zero.”

Figure 4.2. AF Form 522, ARIS Version.

USAF GROUND WEAPONS TRAINING DATA					
PRIVACY ACT STATEMENT					
AUTHORITY: 10 U.S.C. 8013, Executive Order 9397 (SSN)					
PRINCIPAL PURPOSE(S): Used to record results of small arms qualification training. Serves as the official source document for proof of firearms qualification.					
ROUTINE USE(S): None.					
DISCLOSURE: Disclosure is voluntary. SSN may be used by arming authority officials to positively identify the individual for suitability to bear firearms.					
LAST NAME	FIRST NAME	MIDDLE INITIAL	RANK	DoD ID	
BAMBACH	ALEXES		SRA	1514347308	
ORGANIZATION	OFFICE SYMBOL	BASE	DSN NUMBER	ARMING GROUP	PRIMARY DUTY WEAPON
4 SECURITY FORCES SQ	/S1	SEYMOUR JOHNSON AFB NC	722-1234	A	M4
COMBAT ARMS SECTION			DSN NUMBER	COMBAT ARMS E-MAIL ADDRESS (Optional)	
4 SECURITY FORCES SQ			722-0259	4SFS.CombatArms@us.af.mil	
DATE TRAINED	WEAPON COURSE	ROUNDS FIRED	STATUS QUALIFIED	DATE EXPIRES	PRINTED NAME AND RANK OF INSTRUCTOR
29 Nov 2018	M-4 AFQC (TABLES I - III)	266	SCORE 64	30 Nov 2019	DORTON, JOSIAH SSGT
REMARKS:					
DATE TRAINED	WEAPON COURSE	ROUNDS FIRED	STATUS QUALIFIED	DATE EXPIRES	PRINTED NAME AND RANK OF INSTRUCTOR
13 Dec 2018	M-9 HANDGUN AFQC (INITIAL OR RECURRING)	90	SCORE 37	31 Dec 2019	KELLY, DAVID TSGT
REMARKS: ICE gear not worn due to Black Flag conditions. See 4 FWCC Waiver, 15 Jun 18.					
DATE TRAINED	WEAPON COURSE	ROUNDS FIRED	STATUS QUALIFIED	DATE EXPIRES	PRINTED NAME AND RANK OF INSTRUCTOR
30 Nov 2017	M-9 HANDGUN AFQC (INITIAL OR RECURRING)	90	SCORE 40	30 Nov 2018	JOHNSON, DYLAN SSGT
REMARKS:					
DATE TRAINED	WEAPON COURSE	ROUNDS FIRED	STATUS QUALIFIED	DATE EXPIRES	PRINTED NAME AND RANK OF INSTRUCTOR
27 Nov 2017	M-4 AFQC (TABLES I - III)	266	SCORE 62	30 Nov 2018	JOHNSON, DYLAN SSGT
REMARKS:					
DATE TRAINED	WEAPON COURSE	ROUNDS FIRED	STATUS QUALIFIED	DATE EXPIRES	PRINTED NAME AND RANK OF INSTRUCTOR
			SCORE		INSTRUCTOR'S SIGNATURE
REMARKS:					
DATE TRAINED	WEAPON COURSE	ROUNDS FIRED	STATUS QUALIFIED	DATE EXPIRES	PRINTED NAME AND RANK OF INSTRUCTOR
			SCORE		INSTRUCTOR'S SIGNATURE
REMARKS:					
DATE TRAINED	WEAPON COURSE	ROUNDS FIRED	STATUS QUALIFIED	DATE EXPIRES	PRINTED NAME AND RANK OF INSTRUCTOR
			SCORE		INSTRUCTOR'S SIGNATURE
REMARKS:					

AF Form 522, 20180104, AFI 36-2654

PREVIOUS EDITIONS ARE OBSOLETE.

**Notes:** Combat Arms uses only the standardized courses from ARIS and does not use any locally developed courses. Combat Arms annotates any variances from the published course of fire in the remarks section of the AF Form 522 in ARIS and cites the authority for the variance. Separate entries for multiple qualification phases are not required. For multiple phases, enter the total number of rounds fired, score as N/A, and status as "Q" or "UQ." If the individual is unqualified, indicate in the "remarks" section what phases the shooter failed. This form may be used for multiple SA/LW qualifications. Combat Arms is to annotate if the shooter qualified wearing ICE for pre-deployment and what holsters the individual is qualified to use in the remarks section. (T-2).

## Chapter 5

### WEAPONS TRAINING

**5.1. Purpose:** This chapter defines policy and procedures for the execution of the Air Force SA/LW training program. Only task certified Combat Arms personnel (3P0X1B, SEI 312 or DoD civilian equivalent) or others identified in this instruction are authorized to conduct Air Force SA/LW qualification or orientation training programs. Personnel who receive this training (based on mission need) may be military, DoD civilian or civilian contractors in support of Air Force missions. Weapon qualification requirements are based upon in-garrison/peacetime arming requirements, SA/LW qualifications required by certain Air Force specialties, and deployments to combat zones/designated hostile fire areas. The Air Force does not conduct SA/LW familiarization training.

**5.2. General Requirements:** Completion of SA/LW qualification training does not authorize an individual to be armed. Qualification training is only one step in the process commanders use to authorize arming of their assigned personnel. Commanders follow the guidance of AFI 31-117 to ensure personnel meet all suitability and additional requirements before allowing them to be scheduled for any SA/LW training. Qualification training culminates in an evaluation by certified Combat Arms instructors that ensures students demonstrate their ability to employ the weapon safely and effectively. Commanders are responsible for ensuring their people meet all the requirements of AFI 31-117, as well as this AFI before allowing them to be armed or to have access to SA/LW.

5.2.1. Air Force SA/LW qualification courses listed in AFMAN 36-2655 provide the minimum training and evaluation requirements necessary for Air Force members to employ individual and crew-served SA/LW.

5.2.2. Due to resource limitations and limited training availability, non-essential SA/LW training is prohibited. The unit commander requesting Combat Arms qualification or other weapons training must ensure only personnel with an active arming requirement or deployment tasking requiring weapons qualification participate in training. **(T-2)**. This includes activities such as, weapons demonstrations, morale shoots, familiarization fire and allowing non-DoD personnel to fire Air Force SA/LW. **(T-3)**. Combat Arms sections establish a practice of coordinating validation of mission requirements for training with unit schedulers.

5.2.3. Personnel who report for weapons training may not complete training if they are unable to perform all physical requirements, to include assuming all firing positions, unassisted. Personnel are not permitted to cover their non-shooting eye with patches, cloth or other material to control eye dominance problems.

5.2.3.1. Members who are on a temporary physical profile (e.g., wearing a cast or leg brace) may be permitted to live-fire if their injury does not prevent them from meeting course objectives, assuming proper firing positions, or detracts from safe weapons handling.



5.2.3.2. If a pregnant member does not have live weapons firing or range duties excluded on an AF Form 469, *Duty Limiting Condition Report*, they are permitted to participate in these functions.

5.2.4. If live-fire cannot be accomplished the same day, students complete qualification training evaluations (live-fire) within 30 days of completion of mechanical and pre-marksmanship training (this also applies to remedial training).

5.2.5. Assistant machine gunners must complete the same training program and meet the same qualification standards as primary machine gunners. **(T-3).**

5.2.6. The AFSFC must approve all SA/LW training courses, such as those conducted at formal training courses and readiness training centers/expeditionary skills training courses (e.g., Common Special Warfare Airmen Training, Air and Space Basic Course). **(T-2).** Changes to expeditionary training courses must also be approved by the Expeditionary Readiness Council in accordance with AFI 10-405, *Expeditionary Readiness Training Program*. This does not include unit-level sustainment training courses, which the local Combat Arms NCOIC approves. Additionally, if AF/A4SF approves use of other Service courses for qualification of Airmen, the AFSFC approves the courses (other than training provided as outlined in [paragraph 5.15](#)). This ensures all SA/LW training provided to Airmen is consistent, based on the same common skills/techniques and meets the minimum Air Force objectives. Air Force personnel must be initially and currently qualified by Combat Arms as directed in this instruction on any SA/LW prior to participating in any other SA/LW training courses or programs. **(T-1).** This does not include training provided by certified Combat Arms personnel, such as orientation courses.

5.2.7. Unit commanders are responsible for ensuring all their unit members scheduled for any type of SA/LW training are in compliance with the Gun Control Act of 1968 (18 United States Code [USC] § 922(d)(9) and (g)(9)/Lautenberg Amendment), as outlined in AFI 31-117. **(T-0).** Combat Arms personnel do not verify compliance or complete required documentation in regard to the Gun Control Act, as this is a unit responsibility and Combat Arms personnel cannot determine the status of individuals concerning this act.

5.2.8. Combat Arms personnel will provide Use of Force and Rules of Engagement Basics training during all qualification training classes. **(T-3).** This training does not replace any other training requirements; does not meet use of force training required by AFI 31-117 and is specifically designed as additional training. The goal is to provide students with a general understanding of Use of Force and Rules of Engagement guidelines as well as the differences between the two. This training is for familiarization only and students will not be evaluated on comprehension. Combat Arms will use the slide presentation approved by AF/A4SF and available on the USAF Combat Arms, AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>) to conduct this training. **(T-2).**

5.2.9. Combat Arms personnel will also provide training on individual SA/LW accountability and security requirements during all qualification training classes. **(T-3).** This training ensures all personnel are aware of their responsibilities to properly safeguard Air Force SA/LW. Combat Arms will use the slide presentation approved by AF/A4S and available on the USAF Combat Arms AFNet, EIS website to conduct this training. **(T-2).**

### 5.3. Individual Equipment Requirements:

5.3.1. The AFSFC maintains the *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories* listing on the USAF Combat Arms AFNet, EIS website. The accessories included in this listing are the only items authorized for use on Air Force SA/LW. **(T-1)**. For information on items included in the listing or for guidance on requesting items to be added to the listing, contact the AFSFC.

5.3.1.1. Many SA/LW accessories, such as aiming devices, require the individual to complete academic instruction and live-fire qualification using the device, before they are authorized to use it operationally. These items are identified on the *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories* listing. Refer to the applicable qualification training program for each weapon in AFMAN 36-2655 for more information.

5.3.1.2. If an individual has initially qualified on the weapon/course, is currently qualified and gets a requirement for a new accessory, they are only required to complete Combat Arms academic training/evaluation and live-fire on the portion of the qualification course that is applicable to the device. An example is an individual who is currently qualified on the Rifle/Carbine AFQC and receives a new requirement to use a laser-aiming device such as the AN/PEQ-15, Advanced Target Pointer Illuminator Aiming Light. They do not need to reaccomplish the entire Rifle/Carbine AFQC training program. They complete Combat Arms academic training/evaluation on the device and then fire the zero and qualification phases for the device in the AFQC. The original qualification expiration date for the Rifle/Carbine AFQC remains unchanged, but Combat Arms annotates the remarks section of the AF Form 522 in ARIS to indicate that the individual is qualified to use the AN/PEQ-15.

5.3.1.3. If an individual is currently qualified and attains a requirement to use a device that they previously qualified with (up to two years previously), they only need to complete Combat Arms academic training/evaluation and live-fire zero (if applicable) with the new device to be qualified to use it. Combat Arms annotates the AF Form 522 in ARIS to indicate qualification on the new device and the original expiration date does not change. An example is an individual who is qualified on the Rifle/Carbine AFQC using the M68, Reflex Sight and is now required to use the M150, Rifle Combat Optic. They previously qualified on the Rifle/Carbine AFQC using the M150, so they are only required to complete Combat Arms academic training/evaluation on the M150 and then fire the zero phase for the M150 in the AFQC to again become qualified to use the M150.

5.3.2. The *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories* listing includes the holsters approved for use within the Air Force. Airmen will only train, qualify and use a unit issued holster from the list, whether the holster is part of their field gear or concealed wear. When unit commanders authorize individuals to use more than one type holster from the approved listing (concealed carry, shoulder holster, etc.), Combat Arms uses the procedures in the next paragraph to qualify them. Document qualification and holster type(s) in the remarks section of the AF Form 522. Individuals will live fire with their primary holster, unless prohibited in the next paragraph. **(T-1). Exception:** AFOSI/XR directs holster types for AFOSI personnel for operational use; however, AFOSI personnel will use a strong side hip mounted holster during qualification training. Agents receiving

training provide Combat Arms personnel the opportunity to become familiar with the holsters they will use for live-fire. Instructors should accomplish this during classroom training. AFOSI units are not required to purchase holsters for Combat Arms or loan them for an extended time. This ensures range officials are familiar with the agents' equipment and to provide appropriate range commands.

5.3.3. When commanders authorize concealed carry (handgun/holster concealed under clothing) using a holster from the *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories* listing, Combat Arms uses the following procedures to certify individuals to use them. Other than the exceptions in this paragraph, individuals will not complete live-fire using shoulder, cross draw, or concealed holsters (drawing from the concealed carry). Combat Arms will include a combination of classroom and range dry-fire training on the proper techniques for drawing the weapon from these type holsters (all personnel will be performance tested on their ability to safely and correctly draw from a cross draw/concealed holster). **(T-1).** Combat Arms has individuals practice drawing in the classroom and satisfactorily complete performance evaluations on the range, without ammunition in the weapon. Once this training has been completed, personnel use the standard belt and holster or their primary holster, including those used for concealed carry (if not shoulder or cross draw), to qualify on the appropriate course of fire. If an individual is authorized multiple holsters, Combat Arms will use this classroom, dry-fire and performance evaluation method to certify them on each type holster. **Exception:** AFOSI agents, Security Forces investigators and Security Forces Armed Transfer Agents utilize their standard concealed duty holster and are authorized to live-fire using a cross draw/concealed weapon on the firing line. Combat Arms is authorized to live fire using a cross draw/concealed weapon only while qualifying on the AFOSI courses of fire. Personnel reporting for Combat Arms training who are authorized concealed carry must present documentation from the authorizing official to Combat Arms personnel to receive concealed carry training (a properly completed and current AF Form 523, *USAF Authorization to Bear Firearms*, indicating concealed carry meets this requirement). **(T-3).**

5.3.4. Deploying personnel qualify wearing the ICE they will use at their deployed location. As a minimum, ICE must include helmet, individual body armor, load bearing apparatus, magazine pouches (if not incorporated in a vest), holster/ magazine pouches for the handgun if applicable and protective (gas) mask. If deployed commanders require other unique ICE to be worn, individuals may use it during firing, with approval from the Combat Arms NCOIC to ensure range safety is not compromised. Logistics Readiness Squadron/Unit and Security Forces Squadron/Combat Arms organizational commanders will develop a process that accommodates one stop for shooters to comply with equipping and training requirements. **(T-3).**

5.3.5. All individuals will bring a protective (gas) mask and documentation that they are certified in accordance with AFI 10-2501, *AF Emergency Management (EM) Program Planning and Operations*, to SA/LW qualification training, when a protective mask is required in the course of fire. **(T-2).** Combat Arms sections do not maintain protective masks and they are issued through the installation readiness section.

#### 5.4. Weapon Qualification:

5.4.1. Due to various limitations such as munitions and facilities it is necessary to divide the Air Force population requiring SA/LW training into groups based on their arming potential. DoDD 5210.56 identifies the minimum training requirements and frequency of qualification training needed to arm DoD personnel. This guidance governs peacetime/in-garrison arming and specifically states requirements do not apply to DoD personnel engaged in military operations subject to the standing or other rules of engagement. Air Force SA/LW qualifications do not expire during deployments to combat zones or designated hostile fire areas, regardless of the length of deployment, providing qualification training was successfully completed as required by this instruction prior to deployment.

5.4.2. Mechanical SA/LW training is a highly effective way to increase SA/LW familiarity and should be accomplished at unit level using personnel qualified on the weapon to conduct training.

**5.5. Arming Groups and Qualification Frequencies:** Air Force Career Field Managers (AFCFM) and Air Staff functional area directors establish overarching arming requirements for their personnel, which include arming groups, weapon types, and any specialized training. If an AFCFM wishes to change the arming group of personnel under their functional area, they must coordinate their request with AF/A4SF for approval. All Air Force personnel are categorized into one of the arming groups in the following paragraphs; Group A, Group B or Group C. AF/A4SF maintains a listing of arming groups by career field, function, agency and those requiring unit live-fire sustainment training on the USAF Combat Arms AFNet, EIS web site (<https://cs2.eis.af.mil/sites/12150>). If an individual changes arming groups to Group A from one of the other arming groups, they must meet all Group A requirements in the qualification training program before being armed. **(T-1)**. All SA/LW qualifications expire on the last day of the month.

**5.5.1. Arming Group A:** Air Force personnel who are armed to perform their in-garrison duties or as a requirement of their AFSC are Group A. As an example, this group includes Security Forces, Security Forces augmenters, AFOSI agents, CE personnel (directed by their AFCFM), Weather Airmen (1W0X1/15WX) providing direct support to the US Army or Special Tactics Squadrons and Special Warfare Airmen AFSCs. Special Warfare Airmen AFSCs are identified in the arming group listing discussed in [paragraph 5.5](#) Group A personnel will complete SA/LW qualification training once every 12 months on all SA/LW with which they are armed. **(T-0)**. Training consists of classroom and live-fire qualification. Special Warfare Airmen AFSCs and others directed by their AFCFM are additionally required to complete mandatory unit live-fire sustainment training 5 to 7 months after completion of qualification training on their primary weapon(s). Security Forces personnel with an arming requirement complete sustainment training as outlined in AFMAN 31-129, to meet this requirement. Mandatory sustainment training is at the option of the AFCFM. If a Group A individual who requires unit live-fire sustainment training fails to complete this training before the first day of the eighth month after qualification or as required by AFMAN 31-129 for Security Forces, they may not be armed with their primary weapon(s) until they satisfactorily complete sustainment training. The original expiration date for the qualification course does not change. The individual does not fire the qualification course to have their arming authority reinstated; they only have to complete sustainment training. If

the individual goes beyond the original qualification expiration date, they will be required to complete the qualification course to be authorized for arming. **(T-1)**.

5.5.1.1. Security Forces and Special Warfare Airmen AFSCs will qualify annually using the specialized qualification course (rifle/carbine and handgun as applicable) or advanced tables/phases/orders of the AFQC. **(T-1)**. Individuals who are only armed occasionally and are not identified by their AFCFM are exempt from completing unit sustainment training. An example is Security Forces augmenter personnel. Unless otherwise identified on the AF/A4SF listing, these individuals qualify annually using the AFQC and are not required to complete advanced phases/orders. Qualifications expire on the last day of the month, 12 months from the date of qualification (e.g., individual qualifies on 10 Mar 19, their expiration date will be 31 Mar 20).

5.5.1.2. Exceptions to the above frequencies are personnel who qualify as Designated Marksman, Advanced Designated Marksman or MK19 and M2 machine gun gunners and assistant gunners.

5.5.1.2.1. Designated Marksman personnel will complete qualification training twice each year, as directed in the Rifle/Carbine AFQC. **(T-1)**. The qualification expiration date will be the last day of the sixth month after initial qualification. For example, a Designated Marksman who qualifies on 10 Apr 14, will have an expiration date of 31 Oct 14. They are not required to complete academic instruction or performance evaluation for the second qualification training event. Additionally, Designated Marksman personnel should complete unit live-fire sustainment training during alternating quarters (between qualification training).

5.5.1.2.2. Advanced Designated Marksman personnel will qualify twice each year and complete mandatory sustainment training twice each year, alternating between qualification and sustainment each calendar year (CY) quarter as directed in the Advanced Designated Marksman AFQC. **(T-1)**. For example, if the member completes initial qualification in Feb 19 (first quarter of CY) they must complete sustainment training by 30 Jun 19 (end of second quarter of CY). The next CY quarter they must complete recurring qualification. In this example, they are required to qualify by 30 Sep 19. This cycle continues, alternating between sustainment training and recurring qualification each CY quarter. This quarterly cycle continues until an arming requirement no longer exists.

5.5.1.2.3. Live-fire qualification on the M2 and MK19 machine guns is valid for 12 months. Gunners and assistant gunners must complete mechanical training five to seven months after live-fire training. **(T-1)**. Gunners who fail to complete mechanical training before the first day of the eighth month after qualification may not be armed with the weapon until they satisfactorily complete mechanical training. The original expiration date for the qualification course does not change. The individual does not fire the qualification course to have their arming authority reinstated; they only have to complete mechanical training. If the individual goes beyond the original qualification expiration date, they are required to complete the qualification course to be authorized for arming. At the 12-month point, individuals complete the full course again including live-fire. Any other unique qualification frequencies are identified in the applicable chapter of AFMAN 36-2655.

5.5.1.3. Unless otherwise directed by mission requirements or the Security Forces/Combat Arms organizational commander, the primary duty weapon for all Security Forces personnel is the M4 carbine. Individuals should train more frequently with the particular SA/LW type they routinely carry.

5.5.1.4. Credentialed Security Forces investigators and Armed Transfer Agents are assigned, as a minimum, the current Security Forces service pistol as their primary duty weapon. Except as noted in this paragraph, these personnel must qualify on the handgun AFQC with standard law enforcement issue gear before qualifying on any other handgun course. **(T-1)**. They will then qualify on the AFOSI Basic Arms Training (BAT) Course using the approved Security Forces concealed carry holster. **(T-1)**. **Exception:** If mission requirements dictate an immediate need for an authorization for concealed carry, these individuals fire the AFOSI BAT Course prior to carrying the pistol concealed without regard to the previous AFQC qualification. Investigators and Armed Transfer Agents must qualify on the AFOSI BAT Course prior to being authorized to carry a concealed firearm. **(T-2)**. Once they have completed initial AFOSI BAT Course qualification and with their commander's approval, they continue to qualify using this course, in addition to the handgun AFQC, until they are no longer performing this duty. When tasked to deploy, they qualify on the handgun AFQC.

5.5.1.5. Graduates of the Security Forces Apprentice Course depart school qualified on the carbine and pistol, including all tables/phases. This qualification is valid for 12 months. Graduates who arrive at their first permanent duty station during the sustainment training firing cycle should be scheduled to fire the sustainment course (carbine and/or pistol) with their assigned weapon before the end of the cycle.

5.5.1.6. AFOSI agents will qualify annually with the AFOSI issue handgun. **(T-0)**. Agents fire the AFOSI BAT Course using the handgun AFQC objectives in addition to the AFOSI BAT Course objectives. Agents fire the unit sustainment training course as specified in AFOSIMAN 71-113, *Firearms, Use of Force and Apprehension Tactics*.

5.5.1.6.1. All AFOSI Regular Air Force, reserve, and civilian special agents and support personnel identified to deploy qualify on a specific M16 series weapon (M16A2 or M4 carbine). **Note:** AFOSI support personnel are considered Group B.

5.5.1.6.2. AFOSI agents are responsible for meeting other requirements as specified in AFOSIMAN 71-113.

5.5.1.6.3. Changes to the AFOSI BAT Course and special weapons courses are authorized when approved by HQ AFOSI, Directorate of Strategic Programs and Requirements (AFOSI/XR) and the United States Air Force Special Investigations Academy Commander (USAFSIA/CC). Changes are to be coordinated with AF/A4S.

5.5.1.6.4. Combat Arms units with range and maintenance capability are to provide support for specialized/specific AFOSI SA/LW and courses coordinated and approved by AF/A4S. AFOSI is to make any specialized/specific SA/LW available to Combat Arms to conduct instructor training, maintenance training and qualifications. Combat Arms units not directly assigned to AFOSI are not authorized to order these AFOSI specialized/specific SA/LW for this purpose. AFOSI is to

provide any specialized/specific targets (not already used for normal qualification courses) and any special equipment required for their courses.

5.5.1.6.5. AFOSI agents reporting for weapon qualification may be in agent or casual civilian attire or military uniform for military agents.

5.5.1.6.6. Joint Drug Enforcement Teams, while assigned to AFOSI, qualify on the AFOSI BAT Course. Joint Drug Enforcement Teams subject to recall by the Security Forces commander, or deployment on a core SF UTC, will maintain AFQC qualification on the SF service pistol. **(T-2)**. Joint Drug Enforcement Teams will only make the transition to the M11 (or AFOSI handgun) if there is no possibility of recall to their Security Forces unit.

5.5.1.6.7. Agents authorized by the AFOSI commander to carry a privately owned pistol for duty use, as prescribed in AFOSIMAN 71-113, will qualify annually on the AFOSI BAT Course with the AFOSI government issued pistol (i.e., M11 pistol or its replacement) as outlined in this instruction. **(T-0)**. Once qualified with the AFOSI issued pistol, agents who choose to carry an authorized privately owned pistol will complete the mandatory live-fire sustainment training (i.e. proficiency firing) on the AFOSI BAT Course with the privately owned pistol before being authorized to carry the privately owned pistol on duty. **(T-1)**. An AFOSI range safety officer trained and certified in accordance with this instruction will certify completion of live-fire sustainment training. **(T-1)**. This training is documented within the AFOSI Learning Management System as prescribed by AFOSIMAN 71-113. Agents will complete quarterly sustainment training with their chosen duty pistol as required by AFOSIMAN 71-113. **(T-2)**.

5.5.1.7. Newly assigned Group A personnel and Group A personnel with individually assigned SA/LW (e.g., rifles/carbines/handguns with adjustable sights) replaced or having major repairs affecting the sight setting of the weapon (e.g., replaced barrel, upper receiver, sights) are to be provided the opportunity to zero their assigned weapon prior to being armed with it. Combat Arms forecasts for these munitions in accordance with AFMAN 21-209, Volume 1 and the GMAT and ensures the range and needed RSO certified unit personnel are available to conduct this operation. If live-fire is not possible, AF/A4SF may authorize the use of an approved boresighting device to accomplish zero of individually assigned SA/LW. However, this should be used as a last resort when live-fire is impossible. Security Forces personnel will not be armed in-garrison with individual SA/LW, with adjustable sites, without completing weapon zeroing procedures as outlined above. **(T-2)**. This is also highly recommended for deployed locations, at the discretion of the deployed commander.

5.5.1.8. Aircrew members armed for anti-hijacking duties in-garrison or during peacetime operations are classified as Group A. Aircrew members who are only armed for contingency operations are classified as Group B and follow Group B qualification requirements and frequencies outlined in this publication. MAJCOMs may link Group A aircrew firearms qualification training to an aircrew ground training cycle program with a training frequency not to exceed 24 months. Management of the aircrew ground training cycle is the responsibility of the aircrew OPR. Group A aircrew SA/LW qualifications may be linked to their appropriate airframe-specific ground cycle training program. For

these aircrew members, Combat Arms personnel enter an expiration date 24 months after the month of qualification on the AF Form 522 in ARIS. This option only applies to handgun qualification and does not apply to any SA/LW used for ground combat. Aircrew personnel using this process may complete recurring qualification training during the 15th to 24th month after qualification. If firearms training is not linked to an aircrew ground training cycle program, the standard Group A qualification length of 12 months applies. These individuals qualify using the AFQC and they are not required to complete the advanced phases/orders of the course.

5.5.1.9. All personnel assigned (including support personnel) to a Tactical Air Control Party, Air Support Operations Center, or Control and Reporting Center UTC may be classified as Group A, at the discretion of the unit commander and based on mission requirements. If classified as Group A, these individuals must meet all Group A qualification requirements, including unit level sustainment training if applicable. **(T-2)**. Personnel assigned to Combat Camera squadrons are classified as Group A.

5.5.2. **Arming Group B.** Individuals/AFSCs who are not armed in-garrison or identified as Group A, but have a higher potential for armed conflict are Group B. The AFCFM or Air Staff functional area director will determine what individuals are designated as Group B.

5.5.2.1. Group B personnel postured against a deployable (DW-coded) UTC position will complete small arms qualification training every 36 months. **(T-3)**. Individuals qualify on the weapon(s) (rifle/carbine or handgun) identified by their assigned UTC position and wearing ICE as outlined in [paragraph 5.3.4](#). When tasked to deploy, these individuals will complete pre-deployment qualification training, as outlined in [paragraph 5.13](#) and sub-paragraphs, unless they have completed qualification training within 12 months of the deployment departure date. **(T-1)**. Qualifications expire on the last day of the month, 12 months from the date of qualification (e.g., individual qualifies on 10 Mar 17, their expiration date will be 31 Mar 18). The qualification is valid for deployment for 12 months from the date of qualification and qualifications do not expire during deployments. **Note:** Units track personnel to determine when 36-month training is required (36 months to the last day of the month from the last qualification date).

5.5.2.2. All other Group B personnel complete SA/LW qualification only when they are identified by name by their commander to fill a deployment tasking where SA/LW qualification is identified as a requirement on the deployment tasking (actually deploying, not merely subject to deployment). These individuals must qualify on the rifle/carbine or handgun AFQC as directed in AFMAN 36-2655 and any other SA/LW identified in their deployment tasking **(T-1)**. These individuals complete qualification training as outlined in [paragraph 5.13](#) and sub-paragraphs. These Group B qualifications are valid for 12 months or the length of the deployment, whichever is longer. If required to qualify for reasons other than a contingency deployment, such as overseas assignment or non-contingency deployment, these qualifications are valid for 12 months. Qualifications expire on the last day of the month, 12 months from the date of qualification (e.g., individual qualifies on 10 Mar 17, their expiration date will be 31 Mar 18).



5.5.3. Staff personnel assigned at the Group level and above, who would normally maintain firearms qualification by virtue of their AFSC, are not required to complete qualification training unless designated for armed duty or deployment tasking. However, the staff agency director may establish qualification training requirements. In this case, personnel meet the training requirements for Group A.

5.5.4. **Arming Group C.** Individuals/AFSCs who are not armed in-garrison or identified as Group A or Group B and have the lowest potential for armed conflict are Group C. The AFCFM or Air Staff functional area director will determine what individuals are designated as Group C. Group C includes Air Force accessions (e.g., Basic Military Training students, Officer Training School cadets and Air Force Academy cadets).

5.5.4.1. Group C personnel complete qualification training during accession training and when tasked to deploy, following the guidance in [paragraph 5.13](#) **Exception:** USAFA cadets complete orientation training on the handgun and rifle/carbine and are not qualified on the weapon based on this training.

5.5.4.2. Group C personnel complete training on the Group C Air Force Qualification Course (Group C AFQC) following the guidance in AFMAN 36-2655. Group C personnel postured against a DW-coded UTC will complete qualification training on the Group C AFQC every 36 months following the same guidance used for Group B personnel and outlined in [paragraph 5.5.2.1 \(T-3\)](#). When Group C personnel require qualification training on weapons that do not have a designated Group C qualification course, they complete the standard AFQC for the applicable weapon.

5.5.4.3. The qualification on the Group C AFQC is valid for PCS or deployment for 12 months from the qualification date. Additionally, personnel who achieve an expert score are eligible for award of the SAEMR. When accessions arrive at their first duty assignment, the qualification remains valid for 12 months. At that time, individuals must qualify on the appropriate course of fire for their arming group if it changes. The AFCFM or Air Staff functional area director will determine if their personnel will complete additional qualification training during attendance at technical training schools to meet Group A or Group B standards.

5.5.4.4. Basic Military Training accessions complete live-fire qualification using the Close Combat Optic (CCO) only and are qualified on the M4 carbine only if they meet all required objectives. Once assigned to an operational unit, if they are tasked to deploy with or have an arming requirement with the M16A2 rifle, the unit will coordinate with their base Combat Arms and Combat Arms will follow the guidance in AFMAN 36-2655 [chapter 2](#) to accomplish training and qualification with iron sights. **(T-1)**. Qualification during Basic Military Training is valid for deployment and arming with the M4 carbine for 12 months.

**5.6. Firearms Training Programs:** The Air Force courses listed in AFMAN 36-2655 provide the minimum training and evaluation necessary for Air Force members to employ individual and crew-served SA/LW. Unless specified in the course of fire, individuals must complete all academic training, as well as successfully complete all tables/phases/orders of the course of fire, including practice, to meet the minimum requirements for qualification. **(T-1)**. Should an individual initially fail to meet standards, the person's unit determines if the person will be rescheduled for remedial training or if the person's arming requirement is revoked. Combat

Arms may provide same day re-fire attempt(s) on the evaluation portion the individual failed, resources permitting (this is not considered remedial training). Combat Arms will immediately schedule Group A personnel who fail any second attempt of the evaluation portion for remedial training. **(T-3)**. The Combat Arms section will notify the appropriate commander of the option of granting a 30-day qualification extension in accordance with [paragraph 5.10.3](#) of this AFI. **(T-3)**. Instructors may determine the number of zero or practice rounds (if any) to expend before the student attempts to qualify.

5.6.1. Personnel are not authorized to fire government procured ammunition, including COTS procured items, using privately owned weapons. Personnel are not authorized to fire non-government procured (privately owned) ammunition using government SA/LW. The Air Force procures ground ammunition to support specific military training and operational missions. Additionally, Air Force ground munitions must meet specific performance and quality control requirements to ensure they will function safely in military SA/LW. Civilian ammunition may not meet these requirements and their use could result in injury or death to Air Force personnel or damage to government equipment. **Exception:** When authorized as outlined in DoDD 5210.56, AFOSI personnel may use government procured ammunition in authorized privately owned weapons when performing official duties.

5.6.2. If possible, individuals are to fire and qualify with the actual assigned military firearm with which they are or will be armed. Do not remove firearms from extended storage packaging solely to comply with this requirement, unless the individual is deploying with the weapon.

5.6.3. Non-DoD personnel are not authorized to fire government SA/LW or ammunition. This includes the prohibition of events such as firepower demonstrations, training of civilian community organizations or familiarization fire for any non-DoD personnel. **(T-3)**. **Exception:** This does not include qualification or sustainment training of personnel contracted by the Air Force who require qualification and arming as part of their contract. Additionally, this policy does not include qualification/sustainment training or arming of personnel employed by the State or contracted by the State to provide security for the ANG as part of their contract.

5.6.4. Where applicable, the Air Force has adopted US Army Field Manuals as instructor guides and references for most SA/LW. Combat Arms sections use them as a guide for conducting the training programs. However, Air Force publications and policies take precedence when there are conflicts in guidance or procedures.

5.6.5. Do not mix initial or recurring students with remedial students in the same classes.

**5.7. Handgun Orientation Training:** Handgun orientation training may be conducted for USAFA and ROTC officer accessions. This training consists of classroom instruction in general firearms safety, basic operation and marksmanship fundamentals. After completion of classroom training, students participate in a live-fire session by completing Phase II (evaluation) of the handgun AFQC. Trainees earn the SAEMR if they achieve an expert score. This program does not qualify an individual for armed duty.

**5.8. Rifle Orientation Training:** Rifle orientation training may be conducted for USAFA and ROTC officer accessions. This training consists of classroom instruction in general firearms safety, basic operation and marksmanship fundamentals. After completion of classroom training, students participate in a live-fire session on the Group C Rifle/Carbine AFQC following the guidance for Basic Military Training students as outlined in AFMAN 36-2655. **Note:** USAFA and ROTC students will use iron sights only if trained on the M16A2 rifle. Trainees earn the SAEMR if they achieve an expert score. This program does not qualify an individual for armed duty.

**5.9. Initial Firearms Live-Fire Qualification:**

5.9.1. Initial SA/LW training is completed through academic and live-fire training and qualification for individual, gunners and assistant gunners. Initial full distance qualification is mandatory for first time qualification on the MK19 and M2 machine guns. Initial full distance qualification is the preferred method for the M240 machine guns and the M249 automatic rifle. AF/A4SF may approve M240 and M249 initial 10-meter qualification when the one-way travel time to local full distance ranges is more than two hours or when local full distance ranges are not available, or their use is cost prohibitive. The Security Forces/Combat Arms organizational commander will inform the MAJCOM Security Forces when they are using initial 10-meter qualification. **(T-2).** **Note:** No approval is required for 10-meter recurring qualification with the M240 and M249.

5.9.2. Initial live-fire qualification is detailed, in-depth training designed to give an individual the knowledge and skills necessary to meet qualification standards to be armed for a specific type of firearm. The firearms program evaluates the individual's marksmanship and operator skills. Individuals who have an arming requirement (peacetime or wartime) must satisfactorily complete the appropriate qualification course for the type of firearm(s) they will be required to employ. **(T-0).** Officer accessions at the Air Force Academy are to receive initial handgun and rifle live-fire qualification. Officer accessions at Officer Training School are to receive initial handgun live fire qualification.

**5.10. Recurring Qualification Training:** Personnel required to maintain SA/LW qualification must successfully complete qualification training at the frequency specified for their arming group and by the course of fire. **(T-1).** They must have already been initially qualified (live-fire) on the weapon. **(T-1).** Combat Arms can verify qualification using ARIS or the individual's AF Form 522. Recurring qualification is not usually as detailed as initial or remedial training and is used to counter proficiency and skill retention lost over time.

5.10.1. Weapons safety procedures and the training objectives (performance tests) in AFMAN 36-2655, are the minimum mandatory items required for Group A recurring training on the rifle, handgun and shotgun.

5.10.2. A "training session" is defined as one trip to the classroom/range to receive SA/LW qualification training. "Re-fires" are defined as additional attempts during a qualification training session (occurs when a student fails to qualify). If a student fails to qualify only one re-fire is permitted, then the student must be scheduled for remedial training. **(T-3).**

5.10.3. Unit commanders may grant a 30-day qualification extension to individuals who were qualified at the time they reported for training, but failed the course. This extension cannot cause the individual's qualification to exceed 12 months, or 24 months for Group A aircrew personnel when the MAJCOM has elected to link SA/LW qualification to an aircrew ground training cycle program. Unit training sections will ensure qualification extensions are annotated in the remarks section of the individual's printed AF Form 522 and provide the Combat Arms organizational commander with a courtesy copy of the extension letter. **(T-2)**. Since this extension can only be granted by the individual's current commander, it is not transferable if the individual changes units and does not require entry into ARIS. This 30-day extension gives commanders some flexibility in meeting home station peacetime arming requirements. This option does not permit personnel to deploy to high threat areas. If a person fails to qualify after the second attempt, the person is considered unqualified at the time of the second failure and they are not authorized an extension. **Note:** This provision is not automatic. It can only be administered on a case-by-case basis with the written approval of each individual's unit commander/designated official.

5.10.4. Individuals who fail to meet a specific qualification training standard during multiple phase courses may continue to fire the entire course before receiving an on the spot re-fire attempt on the phase they failed. Group re-fire attempts may be administered after the entire course is fired or anytime between phases. However, accurate ammunition expenditures should be included on the AF Form 710.

**5.11. Remedial Firearms Training:** This is in-depth training to emphasize shooting fundamentals. Remedial training sessions are kept small, or individualized, to focus on specific problems and afford the trainee an opportunity to improve.

5.11.1. Instructors may issue additional ammunition for use during remedial zeroing/teaching phases. Conduct ball and dummy exercises, similar drills or simulator training, as needed, before evaluation.

5.11.2. Students are permitted one re-fire during the remedial training session(s), if they fail on the second attempt; schedule them for a second remedial class.

5.11.3. If a student fails to qualify and has been scheduled for remedial training, the firing line official will prepare a written assessment of the shooter's problems. **(T-3)**. This evaluation assists future instructors to focus efforts on the problems. Maintain the assessment until the next scheduled remedial training class.

5.11.4. If the student fails to qualify after the second remedial class, the Combat Arms NCOIC will provide the individual's unit commander a written summary of probable causes of the failures. **(T-3)**. If the commander determines the individual's duties require arming and recommends the individual for additional training, the student will attend another remedial class with no more than two attempts at qualifying. **(T-3)**.

5.11.5. The Combat Arms NCOIC should provide a progress report to the commander for review after each training session.

5.11.6. If the member still fails to qualify after additional training, the commander makes a determination regarding the individual's suitability for armed duty or contingency deployment. **(T-3).** **Note:** As long as the individual continues to have an arming requirement and meets all other suitability requirements, the commander may continue to send them to remedial training. The Combat Arms NCOIC will provide progress reports to the individual's commander after each failure and the commander must recommend additional training after each failure. **(T-3).** There is no limit to the number of remedial classes.

## **5.12. Overseas Firearms Qualification Information:**

5.12.1. Some Air Force personnel require SA/LW qualification training for assignment to overseas areas. A Personnel Processing Code (PPC) identifies if an assignment requires individuals to be SA/LW qualified. Personnel with questions about PPCs or overseas firing requirements should contact their local Military Personnel Section (MPS), Military Personnel Flight (MPF) or gaining command for guidance on this personnel action. The Combat Arms section only provides SA/LW qualification training not interpretation of the codes or justification. For unique situations, refer to [paragraph 5.27](#) for qualification extension options. Personnel being reassigned from overseas areas to bases in the Continental United States (CONUS) do not require SA/LW qualification. They receive qualification training, if required, at their gaining base.

5.12.2. MAJCOM PPC identified individuals from either arming group with overseas assignments normally receive either rifle/carbine qualification training (enlisted) or handgun qualification training (officer) unless function or mission dictate otherwise. The goal is for these individuals to meet live-fire qualification training standards. However, if an individual fails to qualify after three attempts, the losing MPS/MPF should contact the gaining command for guidance.

5.12.3. When an assignment has a PPC assigned requiring an individual to be small arms qualified, the MPS/MPF personnel relocation element notifies the individual's unit by identifying the requirement in the relocation notification. As with other small arms qualification training, the individual schedules training with Combat Arms through their unit. If training is not entered in ARIS, the individual or the individual's unit ensures the AF Form(s) 522 is provided to the MPS/MPF for transfer to the new assignment. During in-processing, the gaining MPS/MPF ensures the AF Form(s) 522 is given to the member's new unit. See the MPS/MPF for further guidance.

5.12.4. When identified by a PPC code, Air Force personnel receive firearms training before departing for an overseas assignment. While assigned overseas, individuals receive recurring firearms training according to established training policies. The unit scheduler for personnel requesting SA/LW qualification training for a PCS assignment is responsible for verifying the individual's requirement to receive training before scheduling them for a class. **(T-3).**

**5.13. Pre-Deployment Firearms Qualification Training Requirements:** This section provides guidance on the minimum firearms qualification training required for Air Force personnel deploying to a contingency operation or area that requires weapon qualification. For deployment, individuals complete all tables/phases/orders as required in the course of fire without deviation or waiver, other than those approved by the combatant command (CCMD), for the weapon(s) required for the deployment. **Note:** The CCMD may impose requirements that are more stringent or may not approve the application of home station waivers. The unit deployment manager will verify reporting instructions to ensure their personnel receive required training within the specified time. **(T-3).**

5.13.1. All personnel identified by name by their commander to fill a deployment tasking to a combat zone in time of war or a designated hostile fire area (actually deploying, not merely subject to deployment) will complete live-fire qualification training on all individual (e.g., rifle, carbine, handgun, grenade launcher, shotgun, submachine gun, automatic rifle) and crew-served (e.g., light, medium and heavy machine guns) SA/LW, identified for the deployment. Groups B and C personnel will complete this training within 120 days (180 days for crew-served SA/LW) of the date they final out-process their home station for deployment, unless they have completed qualification training within 12 months of the deployment departure date as outlined in [paragraph 5.5.2.1 \(T-1\)](#). This qualification will be valid for 12 months or the entire duration of the deployment, regardless of length. The SA/LW training requirement is identified on the individual's deployment orders. Students present a deployment tasking letter or email signed by their unit commander or designee (e.g., UDM or UTM) when reporting for training. **(T-3).** **Note:** The unit commander may delegate this verification role to the unit scheduler and provide Combat Arms with a notification indicating this.

5.13.2. Due to more frequent and advanced training, Group A personnel who have successfully completed live-fire qualification training within 12 months of the deployment departure date, wearing ICE, and the qualification will not expire prior to deployment final out-processing are considered deployment weapons qualified and do not require any additional qualification training. **Note:** This applies to all types of SA/LW. This qualification is valid for the entire duration of the deployment, regardless of length, or until the expiration date on the AF Form 522, whichever is longer. If they do not complete live-fire qualification with the weapon they will take on the deployment, they must complete live-fire zero with the weapon and sights/optics they will take on the deployment, prior to leaving home station. **(T-2).**

5.13.3. Air Force personnel permanently assigned to sister service installations and directly supporting joint service missions who are authorized to use sister service firearms qualifications as outlined in [paragraph 5.15](#) may use this qualification for pre-deployment if accomplished within the required time. The qualification is entered into ARIS as outlined in [paragraph 5.15](#)

#### 5.13.4. Short Notice Deployments:

5.13.4.1. Unit commanders with arming group B and/or C personnel assigned to a unit type code (UTC) with a designed operational capability statement requiring a 72-hour or less response time, or units with a Joint Mission Tasking/Charter, may designate up to 10 percent of their unit group B and/or C personnel to receive annual pre-deployment qualification training. If the wing commander deems this quantity insufficient, they may request approval of a higher percentage from their applicable MAJCOM functional three-digit office, with concurrence of the MAJCOM Security Forces to ensure supportability.

5.13.4.2. When arming group B or C individuals must respond to a tasking in 30 days or less (from notification date) and Combat Arms is unable to conduct qualification training within the required time, these individuals may deploy as long as their current pre-deployment qualification has not exceeded 12 months. Unit training officials must document the individual's AF Form 522 indicating that the short-notice did not allow Combat Arms time to provide training. **(T-3)**. The CCMD may impose requirements that are more stringent and unit deployment managers should verify reporting instructions to ensure their personnel receive required training within the specified time or that CCMD requirements are otherwise met.

5.13.4.3. When the actual required response time for a deployment allows Combat Arms to provide qualification training, these individuals must complete pre-deployment qualification within the timelines outlined in [paragraph 5.13.1](#) and [5.13.2](#) **(T-1)**. The goal is for all required personnel to complete pre-deployment qualification within the times outlined in these paragraphs; however, this provides commanders with a method to prepare for short-notice deployments.

5.13.5. For individuals that qualify under the guidance in [paragraph 5.13.1](#), if their deployment departure is delayed for any reason, they remain deployment qualified for up to 12 months.

5.13.6. Group A individuals whose SA/LW qualifications were current prior to departure from home station for deployment will remain qualified for 30 days upon return to home station regardless if their original expiration dates, not to exceed a total qualification length of 14 months. Group A individuals are exempt from unit live-fire sustainment training while deployed. Personnel armed with the MK19 and M2 machine guns are exempt from six-month mechanical recurring training while deployed. Additionally, Designated Marksman and Advanced Designated Marksman personnel are exempt from semi-annual qualification and sustainment training requirements while deployed and their qualifications remain valid for the entire length of deployment.

5.13.7. Individuals must perform all reloading portions in the course of fire using the magazine pouches or vest they expect to use when deployed. **(T-2)**. Commanders may require other unique ICE to be worn during firing, with approval from the Combat Arms NCOIC to ensure range safety is not compromised. For ranges where helmets cannot be worn during live-fire due to hearing protection requirements, Combat Arms will perform dry-fire training with students wearing helmets in the classroom and on the range and conduct performance evaluations to ensure proficiency. **(T-2)**. These individuals then complete live-fire without the helmet.



5.13.8. This policy applies to all individuals with an arming requirement at the deployed location, whether they take SA/LW or have them issued in theater.

5.13.9. Aircrew personnel who will not perform any ground combat duties at the deployed location or use ICE are exempt from pre-deployment firearms qualification training requirements. If they have an aircrew arming requirement, their live-fire qualification has to be current before deployment departure. Aircrew personnel armed with the Aircrew Personal Defense Weapon must complete pre-deployment qualification with the Aircrew Personal Defense Weapon, as outlined in AFMAN 36-2655.

5.13.10. Individuals who regularly deploy to hostile fire areas multiple times during a 12-month period are not required to complete qualification training prior to each deployment. If the individual has completed live-fire qualification wearing ICE during the previous 12-month period and they deploy again, after returning to their home station, they are considered deployment qualified. Unit commanders are responsible for ensuring their personnel do not abuse this policy by using it as a way to circumvent the intent of ensuring Airmen are prepared for combat.

5.13.11. Units/bases unable to comply with these requirements contact AFSFC for guidance on alternate methods of accomplishing the training. The AFSFC coordinates with AF/A4SF to facilitate action to meet this requirement.

5.13.12. There are locations with pre-positioned SA/LW and firing the actual weapon before the deployment is not feasible. In these cases, if possible, the installation/site commander at the deployed location should make allowances for conducting zero firing soon after the deployed personnel arrive.

5.13.12.1. Combat Arms personnel make provisions for individuals deploying with a SA/LW from extended storage to zero their weapon if they are already qualified or if their weapon has been changed for some reason. (T-1).

5.13.12.2. Group A personnel must complete live-fire zero with the SA/LW and sights (optics) they will take on the deployment, prior to leaving home station if they used a different weapon to complete qualification training. (T-1).

**5.14. Virtual Training Systems (VTS):** VTS or firearm simulators are efficient and time effective tools to provide real world training at the unit level in the following areas: use of force, theater or command specific rules of engagement, tactical and judgmental scenarios. VTS are very good for initial through advance marksmanship and remedial training. Personnel are encouraged to utilize VTS to practice marksmanship fundamentals prior to qualification training.

5.14.1. Arming groups that do not fire on an annual basis are encouraged to use VTS. Additionally, units should use VTS to mitigate training gaps, such as non-availability of full-distance rifle and machine gun ranges, as well as other problems with inadequate training facilities.

5.14.2. VTS firearm simulators must meet the capabilities requirements outlined by AF/A4S. Units may obtain these requirements from the USAF Combat Arms AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>). AF/A4SF and the AFSFC will not be able to support systems that do not meet these requirements with operation and training guidance.



**5.15. Firearms Qualifications for Air Force Personnel Assigned to Other Services:** Air Force personnel permanently assigned to sister service installations and directly supporting joint service missions, such as Tactical Air Control Party or Air Support Operations Center personnel, are authorized to use sister service approved firearms qualification courses conducted by host service personnel as their primary method of accomplishing qualification training during their tour of duty. Units with personnel receiving qualification training from other Services must arrange to have their qualification data entered into ARIS. **(T-2).** The Combat Arms section at the installation providing administrative support is responsible for updating SA/LW qualification data submitted by the unit. This ensures a record of qualification is visible within the Air Force system.

5.15.1. Other Service qualifications cannot be used to arm Air Force personnel for in-garrison arming missions on Air Force installations. Members who are reassigned from a sister service installation to an Air Force installation must complete Air Force firearms qualification training to remain qualified. **(T-2).**

5.15.2. Units using this option must ensure individuals receive Use of Force and Rules of Engagement Basics training during qualification training. **(T-3).** Unit training personnel may provide this training following the guidance in [paragraph 5.2.8](#)

**5.16. Pre-Deployment Qualification Training by Other Services:** In short notice or unanticipated circumstances, Airmen may have no alternative other than to report to pre-deployment training conducted by another Service or agency (e.g., US Army Power Projection Platform) without prior Air Force qualification. This is an exception to policy and only used after all efforts to get the Airmen qualified by Air Force Combat Arms have been exhausted.

5.16.1. When an Airman reports to pre-deployment training conducted by another Service or agency under such conditions, training and qualification by the host Service may be required. Commanders may use one of two courses of action to offset this shortfall: send Air Force Combat Arms personnel to the training location to qualify Air Force members, or if not feasible, request approval from AF/A4SF to utilize host Service training, qualification courses and training personnel to qualify Air Force personnel.

5.16.2. If leadership selects the second option above, qualification training must satisfy the training objectives for the appropriate weapon(s) as listed in AFMAN 36-2655. **(T-1).** Additionally, other Service qualifications under these conditions are only valid for the specific mission requiring the training and may not be used for in-garrison arming of Air Force personnel.

**5.17. Weapons Training by other than Air Force Combat Arms Personnel:** Other than individuals addressed in [paragraphs 5.15](#) and [5.16](#), Air Force members must be live-fire qualified by Air Force Combat Arms personnel before participating in any other live-fire SA/LW training including training provided by another Service, agency or contractor. **(T-2).**

**5.18. Unit Live-Fire Proficiency/Sustainment Training:** This section describes an innovative concept to facilitate increased hands-on SA/LW training. The intent is to permit the user to create a SA/LW training program more in-line with their operational needs. This effort does not replace periodic Air Force SA/LW qualification requirements but is additional training to maintain perishable skills by affording personnel more live-fire time. Only individuals who are currently qualified on the weapon may participate in the proficiency/sustainment program. For this initiative to be effective Combat Arms sections should be open-minded and creative without sacrificing safety. Combat Arms should be responsive to the unique training requirements of other specialties and able to identify training capabilities within the restrictions of the firing range. Only Combat Arms personnel are authorized to conduct SA/LW qualification training, but anyone range official certified by the Combat Arms NCOIC can conduct proficiency or sustainment training.

5.18.1. Units with authorized proficiency munitions, per AFMAN 21-209, Volume 1 and the GMAT, may use Air Force small arms ranges to conduct their proficiency/sustainment training on an as-available basis. The Combat Arms NCOIC will establish procedures for scheduling and use of the firing range. **(T-3).**

5.18.2. Air Force specialties, which previously maintained semi-annual and quarterly SA/LW qualification requirements, may use this provision to supplement their annual qualification training.

5.18.3. Units who are authorized proficiency/competition ammunition are responsible for managing their individual ammunition supply accounts, to include disposition of munitions residue. Combat Arms is not required to provide ammunition, manpower or SA/LW to conduct unit proficiency/competition training programs.

5.18.4. Combat Arms sections will assist units with development of their SA/LW training program. **(T-3).**

5.18.5. Before conducting live fire training, Combat Arms must approve courses/type of fire for each SA/LW used on their range to ensure range safety limitations are met. **(T-2).**

5.18.6. The unit training section can establish a unit level proficiency SA/LW training program at the discretion of the unit commander in accordance with this instruction. This program should focus training on advanced SA/LW tactics, techniques and procedures, as well as mission specific training needs. This program should also be progressive in nature to encourage a continual improvement in SA/LW handling skills and tactics proficiency.

5.18.7. Unit commanders are also encouraged to institute a SA/LW training program that does not include live-fire. Unit NCOs who are qualified on the SA/LW being trained can provide training to their personnel using AFTTP 3-4, *Airman's Manual*, Combat Arms lesson plans and instructor guides as references. Individuals are not required to be qualified in order to participate in non-live-fire SA/LW training.

5.18.8. Individuals who are range safety officer certified by the Combat Arms NCOIC may conduct unit live-fire sustainment training as outlined in [paragraph 2.3.2.2](#)

**5.19. Firearms Competitions/Courses:** Commanders may approve the use of government SA/LW and authorized munitions for Air Force personnel to participate in military/civilian shooting competitions and courses. AFMAN 21-209, Volume 1 and the GMAT provides allowances for matches conducted as outlined in AFI 34-266, *Fitness, Sports, and World Class Athlete Program*, and other competitions.

**5.20. Small Arms Expert Marksmanship Ribbon (SAEMR):**

5.20.1. Award the SAEMR to the following personnel:

5.20.1.1. Personnel who live-fire qualify with an expert score on the Handgun/Rifle/Carbine AFQC, Group C AFQC or the AFOSI BAT Course and meet all other course objectives (see AFMAN 36-2655).

5.20.1.2. Personnel who are unable to fire the AFQC but achieve an expert score (through live-fire) on another Service's qualification program such as the U.S. Army M16 rifle qualification course. AF/A4SF must pre-approve this course for Air Force personnel and/or units physically assigned to another branch of the military. (T-2).

5.20.1.3. Personnel who live-fire qualify with an expert score on the rifle or handgun orientation training and meet all other course objectives identified in [paragraphs 5.7](#) and [5.8](#) of this instruction.

5.20.2. The AF Form 522 is the basis for the SAEMR award. The individual awarded the SAEMR is responsible for bringing the AF Form 522 to the MPS/MPF Awards and Decorations section. The MPS/MPF enters the award on the individual's automated personnel record.

5.20.3. AFMAN 36-2806, *Awards and Memorialization Program*, prescribes authority for the award of this ribbon. AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*, shows proper wear of the SAEMR.

5.20.4. One Bronze Service Star can be awarded in addition to the SAEMR when an individual qualifies as expert with both the rifle and a handgun. Only one award per weapon type (rifle or handgun) is made no matter how many times the individual qualifies as expert.

5.20.5. Individuals may not fire any Air Force qualification courses or other service's qualification programs, for the sole purpose of obtaining the expert ribbon.

**5.21. Non-Lethal Munitions Qualification with Firearms:** Personnel identified by their unit commander to be armed with non-lethal munitions must initially qualify on the AFQC or specialized course as applicable; then fire the non-lethal course, phases or orders outlined in AFMAN 36-2655. (T-1). Non-lethal qualification training is documented as a separate qualification in ARIS and on the individual's AF Form 522 and expires on the weapon's AFQC expiration date. Combat Arms personnel are not required to be qualified as non-lethal instructors in order to train on non-lethal munitions.

**5.22. Blank Fire, Close Combat Mission Capability Kit (CCMCK) Fire and Exercises:** Air Force personnel participating in training with blank ammunition or CCMCK (marking cartridges) such as field exercises, force on force training, military working dog teams and honor guard are not considered armed as defined by AFI 31-117. Therefore, unless specified in a training program, such as the Security Forces Shoot, Move and Communicate (SMC) Course, they are not required to maintain firearms qualification strictly to participate in this training. Individual units will provide their own training to emphasize safe handling, weapon operation, use of blank ammunition and operator maintenance as directed in AFMAN 31-129. **(T-2)**. This training should be documented on AF Form 1098 or AF Form 797, *Job Qualification Standard Continuation/Command JQS*. Additionally, units/personnel will follow the guidance in **Chapter 7** of this instruction when planning or conducting CCMCK training, which contains additional training/certification requirements for personnel conducting this training. **(T-1)**.

5.22.1. Bird/wildlife Aircraft Strike Hazard Program. Combat Arms should assist unit trainers in OJT task certifying their personnel. These personnel are not certified to go “solo” until, they have completed training as outlined in the approved local Bird/wildlife Aircraft Strike Hazard plan.

5.22.2. Individuals who carry the weapon with ammunition, other than marking cartridges, that fires any type of projectile (including shot) must complete the appropriate complete qualification course before carrying the weapon with this type ammunition. **(T-0)**. This includes personnel performing duties such as Bird/wildlife Aircraft Strike Hazard or Pest Control, when they are equipped with this type ammunition.

### **5.23. Deviations:**

5.23.1. Deviations from program or facility criteria are categorized as permanent or temporary.

5.23.1.1. A permanent deviation is given when a condition makes it impossible to comply with program or facility criteria or a training objective, and it is impossible or too expensive to correct the condition. The deviation cannot create an unsafe situation.

5.23.1.2. A temporary deviation is for a correctable condition temporarily making it impossible to comply with program or facility criteria or a training objective.

5.23.2. The Security Forces/Combat Arms organizational commander submits deviation requests to the appropriate approval authority for all facility and equipment limitations preventing full compliance with or accomplishment of program or facility criteria. The request for deviation will address the following:

5.23.2.1. Specify the reasons why a deviation is needed. **(T-3)**.

5.23.2.2. Explain what is being done to lessen the impact and meet criteria. **(T-3)**.

5.23.2.3. Include plans to correct the situation. **(T-3)**.

## 5.24. General Exceptions:

5.24.1. Individuals stationed in countries or areas within a country where customs, laws or international agreements make it impossible to receive firearms training are not required to have firearms training for the duration of the assignment, not to exceed 24 months. This provision does not preclude MAJCOMs from maintaining qualification intervals at established TDY locations. **Note:** Individual SA/LW qualifications must be current prior to being granted this 24-month exception. **(T-1).** This 24-month exception is the total length of qualification and no extensions may be granted (individuals cannot be qualified longer than 24 months). **(T-0).**

5.24.2. Students attending technical training courses at Lackland AFB are exempt from firing SA/LW phases/orders requiring chemical warfare protective equipment (i.e., gas mask and gloves). Although not required, students may fire these phases/orders upon arrival at their first duty station. Individuals must fire these phases/orders before deployment. **(T-1).** **Exception:** Security Forces Apprentice Course and Security Forces Officer Course graduates qualify on the full course of fire for the Rifle/Carbine AFQC and Handgun AFQC.

5.24.3. HQ AFOSI manages use of Federal Law Enforcement Training Center (FLETC) certified instructors and task certified AFOSI agents to ensure sufficient numbers of personnel to support the USAFSIA firearms training program. The following paragraphs apply only to training conducted at the USAFSIA.

5.24.3.1. When sufficient numbers of Combat Arms or civilian equivalent personnel are not available, USAFSIA/CC may authorize FLETC firearms instructors at the USAFSIA who have successfully completed the Firearms Instructor Training Program and Law Enforcement Instructor Training Program to perform lead instructor, tower operator, assistant instructor, and firing line official duties for Air Force qualification training of AFOSI students/agents at the USAFSIA on the AFOSI issue handgun, M16 series rifle/carbine, and the AFOSI issue shotgun. FLETC firearms instructors must successfully complete the live-fire qualification course before conducting training and annually thereafter. **(T-1).** These personnel will be trained and evaluated by a task certified Combat Arms instructor whenever possible. **(T-2).**

5.24.3.1.1. FLETC firearms instructors must follow the guidance in this instruction as well as the guidance in the appropriate chapter of AFMAN 36-2655 and/or AFOSIMAN 71-113 (for the AFOSI BAT Course) while conducting Air Force qualification training. **(T-1).** FLETC firearms instructors will use Air Force approved lesson plans for this training. **(T-1).**

5.24.3.1.2. FLETC firearms instructors that meet the requirements in [paragraph 5.24.3.1](#) may certify AFOSI agents to perform assistant instructor and/or firing line official duties at the USAFSIA following the guidance in [paragraph 5.3](#) and subparagraphs.

5.24.3.2. If Air Force Combat Arms SA/LW maintenance support is unavailable (lack of assigned Combat Arms personnel or not reasonably available at a nearby Air Force installation), USAFSIA/CC may approve use of the FLETC Gunsmith Shop to inspect and repair student/agent Air Force SA/LW. Weapons are inspected/repared in accordance with [Chapter 6](#) of this instruction and the applicable AFTO for the SA/LW.

When FLETC gunsmiths perform inspections or maintenance, they will provide a copy of the inspection report and/or repair documents to the office designated by USAFSIA/CC for entry into ARIS. **(T-2)**. All inspections and repairs of Air Force SA/LW must be entered into ARIS on the weapon AFTO Form 105. **(T-2)**.

#### **5.25. General Deviations:**

5.25.1. Personnel who live-fire qualify on one type of shotgun may carry another shotgun type once they have successfully completed mechanical training and performance evaluations conducted by Combat Arms on the other shotgun. Combat Arms will document mechanical training as a separate qualification in ARIS or on the individual's AF Form 522. **(T-2)**. The qualification expires on the original AFQC live-fire expiration date.

5.25.2. The Combat Arms organizational commander may approve temporary use of qualified Group A personnel to help the Combat Arms section when there is not enough Combat Arms (3P0X1B, SEI 312, DoD civilian equivalent) manpower at the installation to meet the workload. These personnel may serve as assistant instructors or firing line officials only as outlined in [paragraphs 4.3.1](#) and [4.3.2](#). This option only applies to rifle/carbine, handgun and shotgun training.

#### **5.26. Installation-Level Deviations:**

5.26.1. Firearm qualification extensions outlined in [paragraph 5.27.2](#)

5.26.2. Temporary facility criteria deviations. When the installation is unable to construct or maintain ranges according to specified criteria, installation commanders may approve a temporary deviation not to exceed 12 months. The Combat Arms NCOIC, in coordination with CE, base safety, and BE develops the request and forwards it through the Security Forces/Combat Arms organizational commander to the installation commander. Ensure the MAJCOM Security Forces and AFSFC receive a courtesy copy of the temporary deviation. If the deviation cannot be resolved within 12 months, forward the deviation request, through installation channels, to AFSFC and courtesy copy the MAJCOM Security Forces.

**5.27. Firearms Qualification Extensions.** When mission requirements or small arms range limitations prevent Combat Arms from conducting qualification training, organizations may use the following options to extend firearms qualifications. Individuals must be currently qualified (not past the expiration date on the AF Form 522) on the weapon and course to receive an extension. **(T-0)**.

5.27.1. **Squadron Commander Extensions.** The authorizing official (arming authority) for the unit may grant one-time qualification extensions of up to 120 calendar days. **(T-3)**. Unit training sections ensure qualification extensions are posted on the individual's printed AF Form 522 and provide installation Defense Force Commanders with a courtesy copy of the extension letter. **(T-3)**. **Exception:** Security Forces squadron commanders may only grant a one-time qualification extension of up to 90 calendar days. **(T-3)**.

5.27.2. **Installation Level Extensions.** Installation commanders, Defense Force Commanders and senior-level Air Force Reserve and ANG commanders may grant one-time qualification extensions of up to 12 continuous months for their affected personnel. The granting authority informs each unit of the types of firearms, courses of training, duration of extensions, and authorizing documents. **(T-3)**. Each unit training section ensures



qualification extensions are posted on the individual's printed AF Form 522. **(T-3)**. Squadron commander and installation level extensions may not exceed a total of 12 continuous months when combined. **(T-0)**. The items below should be considered before granting lengthy extensions.

5.27.2.1. Impact on the force protection mission.

5.27.2.2. The number of individuals requiring extension, the extension effects and specific arming requirements.

5.27.2.3. The reason for the extension, corrective action, compensatory measures, and get well date.

**5.27.3. MAJCOM Extensions.** MAJCOM authorizing officials may approve qualification extensions of more than 12 continuous months. Document these extensions in memorandum format, ensuring the type(s) of firearm(s), courses of training, and duration of extension are listed in the memorandum. MAJCOMs will specify an approving authority for their commands. **(T-2)**. Extensions of more than 12 months should only be approved in severe circumstances where no other option is available. The total length of qualification, including all extensions, cannot exceed 24 months from the date of qualification training under any circumstances. **(T-0)**.

**5.27.4. Contingency Deployments.** Firearms qualifications do not expire during contingency deployments if the requirements in [paragraph 5.13](#) of this instruction have been met and extensions are not required. Firearms qualification extensions do not change the requirement for annual use of force training in non-deployed circumstances.

**5.28. AF/A4SF Deviations:** AF/A4SF can:

5.28.1. With concurrence from the MAJCOM Security Forces, approve qualification extensions outlined in [paragraph 5.27.3](#)

5.28.2. With concurrence from the MAJCOM Security Forces and AFSFC (MAJCOM Security Forces for ANG and AFRC units), waive night fire familiarization/qualification training if the night fire course of fire cannot be fired as intended due to range limitations, mandatory quiet hours, etc. This does not apply to pre-deployment qualification training and any deviations for this training must be coordinated with the CCMD and approved by AF/A4SF.

5.28.3. AF/A4SF approves all deviations to all courses of fire contained in AFMAN 36-2655, after review by AFSFC.

## Chapter 6

### WEAPONS MAINTENANCE, INSPECTION AND CONFIGURATION

**6.1. Purpose and Program Overview:** This chapter provides guidance on the installation's SA/LW inspection and maintenance program. Base Combat Arms personnel are responsible for the inspection and maintenance of all military SA/LW assigned to the installation and those required by an approved support agreement. Conduct SA/LW inspections and repairs as outlined in applicable Air Force Technical Orders (TO), Time Compliance Technical Orders and Technical Manuals. Combat Arms will enter all SA/LW inspections and maintenance on the AFTO Form 105 in ARIS for each SA/LW inspected or repaired. **(T-2)**. For SA/LW with existing, hard copy, AFTO Forms 105, Combat Arms transfers the information from the paper form into ARIS during the first inspection of the weapon.

6.1.1. Air Force SA/LW are to be repaired by tasked-certified Combat Arms personnel only. **(T-1)**. Personnel assigned to the Air Force Small Arms Depot may perform SA/LW maintenance (to depot-level) and test fire SA/LW with proper training and certification. Air Force units/personnel are not authorized to contract or hire civilian gunsmiths or other non-Combat Arms personnel to repair, inspect, or modify Air Force SA/LW. **(T-1)**. Modification of any kind to Air Force SA/LW is not authorized without approval from AF/A4S and AFLCMC/EBRMW with coordination through the AFSFC. **(T-1)**. This includes any changes to the weapon from the "As Issued" configuration. The "As Issued" configuration is how the weapon is configured when issued to Air Force units as a new item. When assigned to other U.S. military installations, units are to receive support from the servicing Air Force installation Combat Arms. If the servicing Air Force installation's Combat Arms support is unavailable, AF/A4SF may approve use of other Service qualified (Combat Arms equivalent) personnel to inspect and repair Air Force SA/LW. AFLCMC/EBRMW, may approve or establish repair of Air Force SA/LW through contracts when requested by the unit and approved by AF/A4S. When other agencies perform inspections, maintenance or modifications, the owning unit of the SA/LW will provide a copy of the inspection report and/or repair documents to the host Combat Arms section. **(T-2)**. The host Combat Arms section will enter the action performed on each SA/LW into ARIS. **(T-2)**.

6.1.2. Air Force TOs specify the Additional Authorization List items and authorized munitions for each type of firearm.

6.1.2.1. The Allowance Standard Code 538 and *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories* listing identify additional equipment items approved for use with Air Force firearms not identified in the applicable TOs.

6.1.2.2. The GMAT on the Global Ammunition Control Point website (<https://www.my.af.mil/ammoprod/wm/>) identifies ammunition authorizations approved for use by Air Force functional area.



6.1.3. Units requesting non-standard commercially purchased items (commercial parts, services and accessories [grips, slings, lights, etc.] and ammunition), not specifically identified for use in applicable TOs, Allowance Standard Code 538, the *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories* listing or the GMAT, will follow the guidance in the following paragraphs. **(T-1). Note:** This does not apply to tools and fixtures used by Combat Arms for SA/LW repairs.

6.1.4. On a case-by-case basis, non-Air Force military and commercial weapons parts, accessories and ammunition may be approved and procured for Air Force use. The Air Force Global Ammunition Control Point (AFLCMC/EBHM), at Hill AFB UT, approves procurement of non-Air Force military and commercial ammunition requests and units must follow the guidance in AFMAN 21-201 and AFI 91-205, *Nonnuclear Munitions Safety Board*, for the request and approval of COTS ammunition. **(T-2).** AFLCMC/EBRMW, at Robins AFB GA, approves procurement of commercial weapons parts and accessories after approval by AF/A4S and AFSFC and users will request approval for these items from these agencies agency. Once approved, certified Combat Arms personnel must install and inspect all non-standard commercially purchased items regardless of the owning organization. **(T-1).** The Air Force Non-Nuclear Munitions Safety Board and AFLCMC/EBRMW (for use in the weapon) must approve all commercial munitions and users must follow the guidance in AFI 91-205 for request and approval of these items. **(T-1).** Air Force units/agencies procure SA/LW, accessories and ground munitions through approved Air Force logistics channels/processes only. Organizations are not authorized to use government credit cards to purchase firearms or ammunition.

6.1.5. Accessories and Associated Equipment: Users or organizations are not authorized to obtain or use any SA/LW accessories or associated equipment that are not approved on the *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories* listing maintained on the USAF Combat Arms AFNet, EIS website (<https://cs2.eis.af.mil/sites/12150>). Most items on the listing are obtained through the Air Force supply system. AF/A4S, AFLCMC/EBRMW and AFSFC do not normally allow the commercial purchase of any accessories or associated equipment for SA/LW. Units must request approval from these agencies to commercially purchase any SA/LW accessories or associated equipment. **(T-1).** Examples of accessories include; scopes, aiming devices, adapters, mounts, sights and similar items. To request accessories not included on the listing, use the procedures in **paragraph 6.1.6** through **6.1.6.2** Modified SA/LW parts also fall into this category. Units/individuals are not authorized to procure or install commercial parts, either standard or modified, for Air Force SA/LW or to otherwise modify SA/LW in any manner. Examples include; modified controls (e.g., triggers, magazine catch buttons, safeties, selector levers, trigger kits), stocks, handguards, springs, magazines or similar items. If a unit has a capability requirement for a modified part, use the procedures in **paragraphs 6.1.4** to identify the capability gap and request/recommend a solution.

6.1.6. Air Force Small Arms and Associated Equipment Requirements, Procurement, Modification and Improvement Process: A verified capability requirement or gap coupled with senior leadership involvement is essential when establishing a requirement, acquiring a new weapon system/accessory or identifying a needed modification or improvement. Needs or capability gaps should be identified by the MAJCOMs and pushed forward to the

appropriate Air Staff functional agency so a coherent picture is presented when working acquisition strategies.

6.1.6.1. If there is a need, requirement, capability gap or new mission, which cannot be supported by current types, amounts and capabilities of Air Force SA/LW, associated equipment or munitions, unit commanders identify the need to their respective MAJCOM or AFIMSC functional manager. Use of functional area management will allow all needs to be checked and authenticated.

6.1.6.2. The MAJCOM evaluates the shortfall and/or validates the need following the guidance in AFI 10-601, *Operational Capability Requirements Development*. If the MAJCOM believes a new weapon or improvement to an existing system may be required, they use the guidance in AFI 10-601 to identify the need and initiate the requirements process.

**6.2. SA/LW Modifications:** For logistic support, SA/LW systems are categorized and defined as support equipment items. A modification is defined as an alteration to a configuration item that, as a minimum, changes the form, fit, function or interface of the item. All modifications to SA/LW systems, whether permanent or temporary, must be approved by AFLCMC/EBRMW with concurrence by AF/A4S and coordinated with the AFSFC. **(T-1)**.

**6.3. Specific Weapons Maintenance, Inspection and Configuration Responsibilities:**

6.3.1. **Base Physical Security Systems Program Element Manager (AF/A4PY):** Overall Air Force Small Arms Executive Office representative for procurement dollars, program support dollars and Air Staff representative for program management and oversight.

6.3.2. **AFSFC, Combat Arms:** Provides user input/support and requirements solutions to activities related to the development, systems integration, test, evaluation, and fielding of Air Force SA/LW and related requirements such as fire-control, optics, modifications, associated equipment, accessories, munitions and critical maintenance tools/gauges. Works closely with Air Force Life Cycle Management, Functional Area Managers, Lead Commands and other entities, as required. Engages SA/LW users at joint committees, requirements working groups and works with other agencies. Monitors research, development, acquisition programs and testing to incorporate Air Force requirements. Coordinates activities with AF/A4S and ensures all official positions and plans are approved.

6.3.3. **Small Arms Program Office, (AFLCMC/EBRMW):** Provides overall life cycle logistic management of Air Force SA/LW and takes funding direction from the AF/A4PY Program Element Manager. Responsible for acquisition and sustainment of all Air Force SA/LW. Supports warfighter needs based on funding, direction, and valid requirements. Works closely with AF/A4S, AF/A4PY and AFSFC.

6.3.4. **Nuclear Weapons, Missiles and Munitions Division (AF/A4LW):** Responsible for policies and procedures for management of munitions accountability, forecasting, and logistics support under the USAF Combat Ammunition System.

#### **6.4. SA/LW Categories and Storage Definitions:**

6.4.1. Service Weapons. Any handheld, shoulder-fired or crew-served SA/LW generally issued to Airmen in the field. Crew-served SA/LW are any weapons designed to fire a projectile and normally require more than one person to properly employ. In the Air Force, crew-served SA/LW include the M240, M2 and MK19 machine guns. Combat Arms personnel must obtain a complete listing of all SA/LW and associated equipment assigned to their installation from Base Supply (refer to [paragraph 6.7](#)). (T-3). This listing includes types and quantities of firearms, owning organizations (account codes), and points of contact.

6.4.2. Match Grade Weapons. Any handheld or shoulder-fired weapon designed, modified, or manufactured for use in competitive shooting.

6.4.3. Ceremonial Weapons. Military service and non-service model SA/LW used for drill team and honor guard purposes. These SA/LW may or may not be inert (design altered to prevent live-fire use) depending on the need to fire blank ammunition.

##### **6.4.4. Storage Definitions:**

6.4.4.1. In-Use: Any SA/LW not stored and packaged according to applicable Special Packaging Instructions (SPI) as outlined on <https://spires.wpafb.af.mil/> are considered in-use and fall under one of two sub-categories. Regardless of the sub-category, they are still classified as in-use weapons.

6.4.4.1.1. Active In-Use: An active weapon is a weapon issued for duty within a period of 90 days. The weapon may or may not be assigned to an individual.

6.4.4.1.2. Inactive In-Use: An inactive weapon is a weapon that has been stored for a period of 90 days without use. The weapon may or may not have been assigned to an individual.

6.4.4.2. Extended Storage/Preferred Packaging: Only SA/LW stored and packaged according to applicable SPI as outlined on <https://spires.wpafb.af.mil/> fall into this category. All others are considered In-Use. Weapons removed from special packaging become in-use until they are properly returned to storage following the applicable SPI.

#### **6.5. Levels of Firearms Maintenance:**

6.5.1. Depot Maintenance. Maintenance on SA/LW beyond base level Combat Arms capabilities (may include complete rebuilding of parts, assemblies and end items). This could include parts manufacture, parts and SA/LW modifications and testing, and parts and SA/LW reclamation. Usually, depot maintenance is done in support of the Air Force supply system. The Air Force Directorate of Logistics, Vehicles, Equipment and Fuels Management Branch, AF/A4LR, has depot maintenance policy responsibility. AFMC and AFLCMC/EBRMW are supporting agencies. Depot-level maintenance on Air Force SA/LW is usually done by other Services through contracts from AFLCMC/EBRMW. The Air Force Small Arms Depot at Joint Base San Antonio-Lackland, Texas, has limited depot maintenance capability.

6.5.2. Field Maintenance (Organizational, Direct Support, and General Support). Inspections and maintenance authorized for and accomplished by Combat Arms personnel in direct support of using organizations. This includes all inspection and maintenance of SA/LW assigned to the installation and governed by support agreements. This maintenance is limited to the repair of end items or unserviceable assemblies in support of using organizations. These inspections and maintenance procedures are very detailed/technical processes, requiring special training and equipment to be properly performed. Owners of unique SA/LW systems are responsible for providing funding to procure required gauges/tools/parts through supply or depot channels for inspection/repair/replacement by Combat Arms. Unique SA/LW are defined as those that are not standard Air Force service weapons and that are not supportable with technical data, cataloged parts, inspection gauges or other maintenance support. Examples of standard Air Force service weapons include M9, M11, M18 pistols, M16A2 rifles and M4 carbines. Combat Arms will ensure PMEL inspections are performed on gauges procured for these SA/LW. **(T-2)**. Weapon parts for unique SA/LW not used for base or personal defense should not be stocked. Owing units of unique SA/LW will provide funds as needed to purchase replacement parts. **(T-3)**. Installation Combat Arms sections are authorized to perform the following maintenance:

6.5.2.1. Service Weapons (non-match grade). Inspect and repair within applicable limits of the TO pertaining to the weapon. Combat Arms are authorized to stock SA/LW spare parts for maintenance levels below depot. Every Combat Arms member is responsible for practicing supply discipline. Use historical data, maintenance records, and anticipated mission needs to assist in determining stock levels of SA/LW replacement parts. Stock at least one of any item at the Combat Arms weapons repair shop when a known requirement exists. This includes parts requiring infrequent replacement. Use the total number of "in use" and packaged SA/LW, where maintenance support is provided, to establish a spare parts inventory.

6.5.2.2. Match Grade Weapons. Combat Arms personnel must perform inspections, to include gauging, in accordance with the weapon TO and this instruction. **(T-2)**. For inspection and repair/replacement of specialized or fitted parts outside the scope of normal Combat Arms sections, owning units are to refer these items to depot or the Air Force Small Arms Depot for support at the direction of the item manager. Those Air Force shooting team members with SA/LW needing specialized inspection/repair coordinate with AFSVA/SVORF, ATTN: AF Shooting, 2261 Hughes Ave, Suite 156, JBSA Lackland TX 8236-9854, Defense Switched Network 969-7352 or commercial (210) 395-7352, for shipment of SA/LW. The mailing address of the Air Force Small Arms Depot is 1520 Service Road, Suite 1, Lackland AFB TX 78236-5722. All other requests for match grade specialized inspection/repair go through AFLCMC/EBRMW.

6.5.2.3. Ceremonial Weapons. Combat Arms personnel must perform inspections, to include gauging, in accordance with the weapon TO and this instruction on all ceremonial SA/LW capable of firing a live or blank ammunition cartridge. **(T-1)**. Additional support is limited to those inspections to ensure units are conducting proper operator maintenance, and replacement of broken or worn parts preventing the proper operation of the weapon, or posing a safety hazard. Replacement parts for some of these non-service model SA/LW (e.g., M1 Garand, 1903 Springfield) are not always available through routine military supply channels. The owner/user is responsible for coordinating

maintenance outside the scope of local Combat Arms sections with AFLCMC/EBRMW. Combat Arms is not required to inspect non-firing (inert) ceremonial weapons and the condition and care of these SA/LW is the responsibility of the owning organization.

6.5.3. Operator Maintenance (Individual). This is SA/LW maintenance performed by individuals and/or the assigned unit. This maintenance is limited to authorized disassembly, assembly, cleaning, lubricating, preserving, tightening some screws, adjusting sights, replacing slings, spare barrel bags, etc., and performing preventive maintenance checks according to the weapon TO. Using organizations will not order or bench stock SA/LW parts, as this is outside the scope of operator maintenance. **Note:** Using organizations will not procure commercial SA/LW parts, accessories (grips, slings, holsters, lights, etc.) other than those approved for COTS purchase on the *USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories* or approved as outlined in [paragraph 6.1.3](#). Combat Arms is the only organization authorized to procure SA/LW parts. The base Combat Arms section is the focal point for all authorized SA/LW parts procurement and replacement. Using organization can transfer funds to the Combat Arms account so Combat Arms can control ordering of replacement parts for service weapons. TO references to "Organizational Maintenance," refer to Army maintenance levels. In the Air Force, Combat Arms personnel perform this level of maintenance.

6.5.4. Weapons Cleaning. Each unit possessing firearms is responsible for their own SA/LW preventive maintenance cleaning and lubrication program (to include magazines, spare barrel kits, tripods, etc.) in accordance with the weapon TO for both in-use and extended storage SA/LW. Combat Arms advises unit weapons custodians on cleaning frequency if local conditions warrant more frequent cleaning. As a minimum, owning units will perform preventive maintenance on all their assigned in-use (whether active or inactive) SA/LW to include cleaning, lubrication and operator inspection, immediately after firing any type of ammunition and every 90 days, whether the weapon is fired or not. **(T-2)**. Combat Arms sections will develop a weapon custodian handbook listing the needed cleaning items and general information needed in support of SA/LW. **(T-3)**. This handbook also outlines weapon custodian responsibilities and procedures concerning Combat Arms related requirements.

6.5.4.1. Units are responsible for developing a standardized method of documenting their required cleaning and preventive maintenance. Units may use an Air Force general purpose form for documenting this cleaning. The AFTO Form 105 is not used to document this cleaning. Combat Arms training SA/LW are exempt from this requirement.

6.5.4.2. Combat Arms will review unit SA/LW preventive maintenance (cleaning/operator inspection) documentation during SA/LW inspections and annotate findings on the weapon inspection report. **(T-2)**.

6.5.4.3. In accordance with each SA/LW Operator's Manual, owning units are responsible for ensuring proper cleaning equipment/materials are available for each assigned weapon to include those in extended storage.

**6.6. Procedures for Maintenance of Unserviceable Weapons:** Owning agencies will take SA/LW needing repair and AFTO Forms 105 (if not already in ARIS) to the base Combat Arms section. **(T-3).** Combat Arms personnel inspect the weapon and determine if they can repair it or if depot repair is needed. If Combat Arms is to retain the weapon for repair, place a Department of Defense (DD) Form 1577-2, *Unserviceable (Repairable) Tag*, on the weapon, until all repairs are made, and issue a receipt to the owning agency. Notify the owning agency when the weapon is repaired. If Combat Arms does not retain the weapon for repairs at the time of inspection, ensure coordination with the owning unit until repairs are made. Combat Arms will place a completed DD Form 1577-2 on SA/LW needing depot maintenance and return them to the owning organization for turn-in to Base Supply. **(T-2).** Combat Arms will maintain a permanent SA/LW maintenance log of all maintenance performed on SA/LW. **(T-2).** This log is maintained in the SA/LW maintenance shop to provide a historical record of parts used, maintenance performed, etc. Record the maintenance action on the weapons AFTO Form 105 in ARIS in accordance with TO 11W-1-10. **(T-2).** Combat Arms will transfer all existing information on the hard copy AFTO Form 105 into ARIS. **(T-1).** Process unserviceable parts/scrap material for turn-in in to DRMO. If DRMO or local supply is unable to receive unserviceable parts/scrap, Combat Arms will coordinate demilitarization or disposal of unserviceable SA/LW parts according to DoDM 4160.21, Vol 1. **(T-0).** Where conflicts occur between TOs for the same weapon, follow the more stringent/detailed guidance.

6.6.1. Weapons requiring depot maintenance are shipped to depot as complete end items in the “As Issued” configuration, to include all accessories (i.e., magazines, slings, original optics, original sights, spare barrel, spare barrel cases and printed copies of AFTO Forms 105). Do not ship SA/LW cannibalized, stripped of parts, or those containing unserviceable parts, back to depot when they are repairable/replaceable by Combat Arms, unless specifically authorized by AFLCMC/EBRMW. If MAJCOMs/functions/units have received approval as outlined in this instruction to add parts or accessories to Air Force SA/LW, Combat Arms and/or the owning organization must remove them and return the weapons to “As Issued” configuration before returning them to depot or turning them into Base Supply as excess items. **(T-1).**

6.6.2. Limited parts cannibalization may be accomplished by Combat Arms personnel for the sole purpose of reducing the total number of unserviceable SA/LW assigned to a unit. This procedure is limited to SA/LW assigned within the same unit. An example of proper use of this procedure would be four SA/LW with four different broken parts such as a missing sling, cracked hand guard, pistol grip and stock. Placing all of these broken parts on one weapon would result in only one weapon being tagged for repairs versus four. When the weapon is repaired, all new parts are installed and annotated appropriately. **CAUTION:** Do not exchange any parts expressly forbidden in the weapon TO.

**6.7. Inspection of Weapons:** Use the guidance in the following paragraphs along with the weapon TOs to conduct inspections of SA/LW. Combat Arms performs weapons inspections to determine weapon serviceability, safety, discover conditions causing (or that could cause) failures, and to determine if required preventive maintenance checks are being performed. Additionally, Combat Arms will verify the serial numbers of all inspected SA/LW against the unit’s Custodian Authorization/Custody Receipt Listing during all types of inspections and report any discrepancies to the Base Supply Equipment Management Section. **(T-2).** Qualified Combat Arms personnel will inspect military SA/LW assigned to all organizations. **(T-1).**

Annually, Combat Arms personnel are to contact the Base Supply Equipment Management Section to validate the SA/LW types, quantities, and accounts assigned to the installation. This may also include local school/university ROTC programs with drill weapons. Occasionally, new SA/LW are received and accounts are established without custodians notifying the servicing Combat Arms section. This same validation process is applied to units who are supported in accordance with an approved support agreement and that do not have their own assigned Combat Arms personnel. The Combat Arms section is responsible for obtaining sufficient levels of tools and gauges needed to accomplish inspections on service SA/LW. Additionally, they must ensure gauges are processed for calibration through the servicing PMEL at intervals established in TO 33K-1-100-2, *Technical Manual, TMDE Calibration Interval Technical Order and Work Unit Code Reference Guide*. **(T-2)**. Where conflicts occur between TOs for the same weapon, follow the more stringent/detailed guidance.

6.7.1. Organizations and individuals possessing SA/LW are responsible for the following:

6.7.1.1. Coordinating inspections with all applicable agencies (Combat Arms, Traffic Management Office, Packing and Crating, Supply, and Resource Protection).

6.7.1.2. Preparing the SA/LW for inspection and initiating DD Forms 1574, *Serviceable Tag*, for extended storage SA/LW. Do not place DD Form 1574 on in-use SA/LW. Combat Arms accomplishes initial creation of the AFTO Form 105 in ARIS for weapons not previously entered.

6.7.1.3. Ensuring all SA/LW are cleaned and ready for inspection, to include the mechanical zeroing of extended storage SA/LW.

6.7.2. Pre-Issue Inspection. Base supply or the organization receiving SA/LW from depot or another installation must notify the Combat Arms section within 10 days (ANG/AFRC within 30 days) to schedule a weapons inspection. **(T-2)**. Combat Arms personnel must inspect SA/LW within 30 days (ANG/AFRC within 60 days) of notification. **(T-2)**. Combat Arms must inspect all SA/LW prior to units placing them into operational service or extended storage. **(T-2)**. This inspection consists of disassembly, gauging, proper assembly and function check. If required, Combat Arms personnel assist owning organizations in completing the SF 368, *Product Quality Deficiency Report*, as outlined in TO 00-35D-54. Combat Arms personnel enter "Pre-issue Inspection/Gauged" on the weapon's AFTO Form 105 in ARIS.

6.7.3. Inspection of In-Use SA/LW. In-use SA/LW are those not in extended storage packaging in accordance with Specialized Packing Instructions (SPI). As a minimum, Combat Arms personnel will perform this inspection on active in-use SA/LW semi-annually (every six months) and on inactive in-use SA/LW annually (every 12 months). **(T-2)**. Combat Arms will inspect active in-use SA/LW not used for operational purposes and used exclusively for training (except for Combat Arms training SA/LW) annually (every 12 months). **(T-2)**. Combat Arms will complete these semi-annual and annual inspections within 30 days before or after the date of the previous inspection. **(T-2)**. All in-use SA/LW inspected will have a complete serviceability inspection to include cleanliness, lubrication, authorized parts/accessories and complete function check. **(T-2)**. Weapons found to have been painted or coated with a substance other than that authorized in the applicable TO should be removed from service immediately. At least 25 percent of the SA/LW are to receive full gauging in accordance with maintenance TOs. AF/A4SF may increase this



percentage. However, under no circumstances may this percentage be reduced to less than 25 percent. Combat Arms will develop a local method of tracking SA/LW that have been gauged by serial number to ensure the same weapons are not gauged on subsequent inspections, until all weapons have been gauged. **(T-2)**. This is not required if Combat Arms gauges 100 percent of in-use SA/LW during all in-use inspections. This inspection may be accomplished at the time the SA/LW are used for firearms training or staggered throughout the year to meet requirements. At the time of inspection, Combat Arms will ensure all quadrant sights, magazines, spare barrels, tripods, traversing and elevating mechanisms, and other subassemblies of crew-served SA/LW are inspected for serviceability. **(T-2)**. Combat Arms will add a statement to the inspection report describing the quantity and type of items inspected, the condition in which they were found, and whether corrective actions are needed or were accomplished. **(T-2)**. All items with a serial number and open discrepancies should be reflected in the report to assist in accountability and tracking of corrective actions. Combat Arms must inspect weapons not available for the inspection (temporary duty [TDY], issued, etc.) within 15 duty days upon return from TDY or issued status. **(T-2)**. Combat Arms personnel will enter “Semi-Annual Inspection” or “Annual Inspection” (for inactive in-use SA/LW) on the weapon’s AFTO Form 105 in ARIS and “Semi-Annual Inspection/Gauged” or “Annual Inspection/Gauged” (for inactive in-use SA/LW) on those receiving full gauging. **(T-2)**. Pre-deployment inspections and/or post-deployment inspections satisfy the requirements of this paragraph if they are accomplished within the required inspection period.

6.7.4. Inspection of Combat Arms Training Weapons. Combat Arms must complete a full serviceability inspection, including gauging, on all rifles and pistols assigned to the section in accordance with maintenance TOs semi-annually (ANG and AFRC units will inspect Combat Arms rifles and pistols annually). **(T-2)**. This inspection may be accomplished at the time the SA/LW are used for firearms training or staggered throughout the year to meet requirements. At the time of inspection, ensure all quadrant sights, magazines, spare barrels, tripods, traversing and elevating mechanisms, and other subassemblies of crew-served SA/LW are inspected for serviceability. AF/A4SF may change this requirement to a percentage less than 100 percent, for USAFA, Regional Training Centers and AETC bases conducting Basic Military Training/Technical Training, as appropriate. However, under no circumstances will this percentage be reduced to less than 20 percent. Combat Arms personnel enter “Semi-Annual Inspection/Gauged” on the weapon’s AFTO Form 105 in ARIS. **(T-1)**.

6.7.5. Inspection of Weapons in Extended Storage/Preferred Packaging. Units will not remove SA/LW from extended storage for use during exercises unless absolutely necessary and authorized by the installation commander. **(T-2)**. Weapons properly stored in accordance with the special packaging instructions (SPI) do not require any periodic inspection by Combat Arms. Obtain SPI’s for weapon system at <https://spires.wpafb.af.mil/>; enter national stock number for weapon in “Quick Search.”

6.7.5.1. Combat Arms will conduct a complete serviceability inspection, including gauging, on all weapons removed from extended storage packaging prior to deployment or placing into operational status. **(T-2)**. Combat Arms inspects weapons removed from extended storage/preferred packaging for deployment as outlined in [paragraph 6.7.6](#) Combat Arms inspects weapons removed from extended storage packaging for



operational use as directed in [paragraph 6.7.3](#), although they will gauge 100 percent of these weapons. Document the AFTO Form 105 in ARIS for these weapons as “Annual Inspection/Gauged.” Extended storage inspections, including gauging, conducted within 120 days of deployment or placing into operational status meet the inspection requirements in this paragraph.

6.7.5.2. When weapons are removed from extended storage packaging and they will be placed back into extended storage/preferred packaging without being deployed or placed into operational status, Combat Arms uses the following guidance for inspections. An example of this is opening a container of weapons to remove one weapon for deployment, but returning the remaining weapons extended storage packaging. **Note:** Weapons sealed in barrier bags in accordance with the SPI, where the bag has not been opened and there are no tears or perforations in the bag, do not require inspection. Inspection of these SA/LW takes a joint effort from the organization or unit possessing the SA/LW, Traffic Management Branch (Preservation, Packing and Packaging), Base Supply and Combat Arms. Combat Arms personnel will perform a serviceability inspection immediately before units place/return SA/LW to extended storage, in accordance with special packaging instructions (SPI). **(T-1)**. The owning organization must ensure weapons are properly packaged/sealed within 30 days of this inspection or re-inspection is required. **(T-2)**. Pre-embarkation inspections and/or post-deployment inspections including gauging satisfy the requirements of this paragraph if conducted within the specified times.

6.7.5.2.1. Combat Arms will perform a serviceability inspection of 100 percent of weapons removed from extended storage/preferred packaging before units return the weapons to extended storage packaging. **(T-2)**. Owing units will ensure all weapons are cleaned and lubricated prior to the Combat Arms inspection and before they return the weapons to extended storage packaging. **(T-2)**. The 100 percent Combat Arms inspection includes a visual inspection for corrosion, damaged/worn/missing parts, unauthorized accessories/modifications, function check and proper cleaning/ lubrication. Combat Arms should pay particular attention to proper lubrication of the weapons to prevent corrosion during extended storage. All personnel, including Combat Arms that handle weapons must wear lint-free, clean gloves to prevent contamination of the weapons prior to being repacked. **(T-2)**.

6.7.5.2.2. Combat Arms will gauge a minimum of 20 percent of each model weapon during these inspections and ensure that weapons gauged during previous inspections are not gauged again until the entire quantity of weapons of the same model have been gauged. **(T-1)**. If Combat Arms finds any unsatisfactory conditions (corrosion, failure to pass gauging checks, missing parts, etc.), they will gauge an additional five percent of the same model weapon, stored in the same manner. **(T-1)**. If Combat Arms finds unsatisfactory conditions on these weapons, they will gauge 50 percent of the same type weapon stored in the same manner and if any unsatisfactory conditions are found on these weapons, they will gauge 100 percent of the same model weapons stored in the same facility. **(T-1)**. Combat Arms personnel will enter “Extended Storage Inspection/Gauged” or “Extended Storage Inspection/Not Gauged” as applicable on the weapon’s AFTO Form 105 in ARIS. **(T-2)**.

6.7.5.3. When placing SA/LW in extended storage/preferred packaging for the first time, follow the guidance in [paragraph 6.7.5.2.1](#) with the addition of gauging 100 percent of weapons being placed in extended storage. **(T-1)**.

6.7.6. Pre-embarkation Inspections. Due to the time required to conduct these in-depth and detailed inspections, units alerted for deployment should contact Combat Arms as soon as possible to schedule/conduct this inspection. Combat Arms completes a full serviceability inspection, including gauging. If the weapon has received a serviceability inspection including gauging for other reasons within the required time, it satisfies the requirement for the pre-embarkation inspection and Combat Arms annotates this on the AFTO Form 105 in ARIS. Combat Arms will complete this inspection within 120 days of the weapon departing the installation for deployment or expeditionary training if the weapon will not return to home station before deployment. **(T-1)**. This requirement should be included in the Installation Deployment Plan. The Security Forces/Combat Arms organizational commander may work with the installation deployment officer to establish a centralized location for this inspection. Combat Arms must ensure all SA/LW and associated equipment being deployed meet the applicable TO requirements. **(T-1)**. Combat Arms personnel will enter "Pre-embarkation Inspection" on the weapon's AFTO Forms 105 in ARIS. **(T-2)**. Ensure the unit sends the ARIS AFTO Form 105 with the SA/LW.

6.7.7. Post Deployment Inspections. Unit weapons account custodians will notify Combat Arms and base supply within 5 duty days of weapons returning from deployed locations. **(T-2)**. Combat Arms personnel will perform a complete serviceability inspection on in-use SA/LW returning from deployments exceeding 30 days and any SA/LW removed from extended storage, regardless of deployment length. **(T-1)**. Perform a complete serviceability inspection including gauging on 100 percent of all SA/LW in accordance with maintenance TOs. **(T-1)**. Weapons found to have been painted or coated with a substance other than that authorized in the applicable TO should be removed from service immediately. Accomplish this inspection within 60 days of return date on in-use SA/LW and within 120 days on SA/LW being returned to extended storage. **(T-1)**. Combat Arms personnel will enter "Post Deployment Inspection" on the ARIS weapon's AFTO Form 105 and enter any maintenance accomplished while deployed if not previously entered. **(T-1)**.

6.7.8. Turn-In Inspection. Combat Arms will perform a complete serviceability inspection to include full gauging on all SA/LW and accessories being turned in to Base Supply. **(T-1)**. Only approved stock-listed items for the weapon are authorized for turn in. Non-standard items such as after-market slings, sights, grips, camouflage paint, or other items are removed and replaced (if applicable) with stock-listed items. SA/LW must include all "As Issued" configuration items/accessories when they are turned in. **(T-1)**. Combat Arms will ensure repair of the weapon (within their authorization) if parts are unserviceable. **(T-1)**. Combat Arms personnel will enter "Turn-in Inspection/Gauged" on the weapon's AFTO Form 105 in ARIS. **(T-2)**. Combat Arms will notify the unit of damaged or missing accessories required for complete end item turn-in. **(T-2)**. The owning unit is responsible for replacing these accessories prior to turn-in, ensuring a DD Form 1574 is attached to the weapon and including a print out of the AFTO Form 105 with the weapon.

6.7.9. Inspection Reports. Refer to [paragraph 2.2.13](#) for weapon inspection report requirements and procedures.

**6.8. Packaging Weapons:** Packaging SA/LW for shipment or storage takes a joint effort from the organization or unit possessing the SA/LW, Traffic Management Branch (Preservation, Packing and Packaging), Base Supply and Combat Arms. Before packaging SA/LW, Combat Arms personnel must inspect the SA/LW and complete the DD 1574 or DD 1577-2 (if required). **(T-1).** A completed ARIS generated AFTO Form 105 must accompany the weapon in shipment through supply channels if the weapon is being returned to depot. **(T-2).** Weapons will be prepared and packed for shipment or storage according to applicable SPI or TO. **(T-1).** The owning organization is responsible for packaging and/or sealing SA/LW scheduled for shipment or storage. For example, M16 rifles will be packed for storage or shipment according to SPI 00-856-6885, *Special Packaging Instruction, M16 Rifle* or M9 pistols use SPI 00-317-2468. Organizations may obtain SPI's for weapon systems at <https://spires.wpafb.af.mil/>; enter national stock number for weapon in "Quick Search."

**6.9. Support Agreements (Weapons Maintenance Support):** The host Combat Arms section will provide all SA/LW maintenance support, mandated in this chapter, to those tenant Air Force units without their own AFSC 3P0X1B, SEI 312 or DoD civilian equivalent personnel assigned. **(T-3).** Tenant units without sufficient numbers of their own AFSC 3P0X1B, SEI 312, or civilian equivalent personnel assigned and present during a Unit Training Assembly (UTA), request host Combat Arms support to augment their personnel during SA/LW maintenance cycles through the host-base Security Forces/Combat Arms organizational commander. If host Combat Arms manpower support is required, it should be provided if manpower permits. For AFRC units, this support includes complete access to and use of all SA/LW maintenance facilities, tools, gauges, publications, and any other items necessary for SA/LW maintenance. Unless specified in the support agreement, and agreed upon by the host Security Forces/Combat Arms organizational commander, this support does not include spare SA/LW parts. Formalize this training and/or support through an agreement according to AFI 25-201.

## Chapter 7

### CLOSE COMBAT MISSION CAPABILITY KIT (CCMCK) TRAINING

**7.1. Overview.** Air Force personnel may use Air Force Non-Nuclear Munitions Safety Board approved small arms dye-marking cartridges and CCMCKs to conduct force-on-force and shoot, move and communicate training, once they have met all training and certification requirements. The CCMCK allows force-on-force close combat training by temporarily converting small arms (M16A2 Rifle, M4/M4A1 Carbine, M249 Automatic Rifle, M9 Pistol and M11 Pistol) to fire low-velocity dye-marking ammunition. CCMCK ammunition includes 5.56mm single round marking ammunition for the M16 series weapons, 5.56mm linked marking ammunition for the M249 and 9mm marking ammunition for the pistols. Dye-marking ammunition is loaded into the magazine/feedway of the converted weapon in the same manner as service ammunition. Once loaded, the weapon cycles and functions the same as with service ammunition and marks the target with minimal hazard to personnel wearing appropriate safety equipment. The system allows normal weapon employment cues such as aiming, firing, force-on-force training and interactive live-fire scenario execution.

7.1.1. Air Force personnel must use Air Force TO 11W2-9-4-11, *Technical Manual Operator's Manual For Close Combat Mission Capability Kit (CCMCK)*, in conjunction with this instruction when planning, resourcing and conducting dye-marking cartridge training. **(T-1)**. In the event of any differences in procedures between the TO and this instruction, specifically in **Chapter 2**, Section I, *CCMCK Range Safety*, of the TO, the guidance in this instruction takes precedence and units/personnel comply with the procedures contained herein.

7.1.2. During conduct of training, range/training officials must have a copy of TO 11W2-9-4-11, this instruction and the local operating instruction available at the training location, within the training area. **(T-3)**.

**7.2. Background.** Most Air Force small arms range firing ranges do not permit units to conduct live-fire training involving shooter movement forward of the firing line or transversely beyond the width of individual firing positions. This prevents units from conducting tactical or shoot and move training. Additionally, conducting this type training with operational ammunition presents a very high risk of injury or death to personnel. The CCMCK and associated dye-marking ammunition virtually eliminates these risks.

7.2.1. Approved weapon CCMCKs, munitions and safety equipment are those listed in TO 11W2-9-4-11. Units may use approved goggles (not spectacles) listed on the Authorized Protective Eyewear List (APEL) in lieu of Sand, Wind and Dust goggles. These dye-marking systems provide training duplicating high-stress, real life operational environments such as close quarter's battle.

7.2.2. The CCMCKs are designed to look, feel, function and have the same balance and safety features as standard service weapons. By utilizing dye-marking cartridges and CCMCK systems, it is possible to provide realistic "Shoot-No-Shoot" training in a myriad of environments, with variable, unpredictable threats.

7.2.3. One of the most effective uses of the CCMCK is to conduct tactical and force-on-force training at base level. Units are encouraged to use a progressive approach to implementing force-on-force training by providing training through dry-fire drills and use of blanks and/or on simulators before conducting this type training with dye-marking cartridges. Use of the CCMCK is also especially useful when the base is limited to a partially contained range or does not have advanced live-fire training facilities.

### 7.3. System Description.

7.3.1. Absolute control of the training environment is critical, as weapons with CCMCKs installed look almost identical to real-world weapons. A real-world response into the play area would be disastrous! Modified weapons function in a normal manner when firing the dye-marking cartridge. Conversion kits only replace internal parts of the weapon and are not easily distinguishable from operational firearms. Only trained personnel, familiar with the system, are authorized to install the CCMCK. **(T-2).**

7.3.2. Dye-marking cartridges consist of a modified cartridge case, a sabot and a thin-walled plastic projectile containing a detergent-based or wax-marking compound. Cartridges are propelled by a small quantity of propellant. This small amount of propellant results in a projectile driven at a slower velocity with reduced energy. Weapon cycling occurs because the cartridge case is free to slide rearward over the sabot during firing, resulting in a straight blowback action. Multi-colored dye-marking cartridges are available for use. **Note:** Dye-marking cartridges from different manufacturers are not interchangeable. Units may not purchase cartridges through the COTS process that are centrally procured and available through the munitions supply system. **(T-0).**

7.3.3. In the M16 series weapons (M16A2 and M4), the CCMCK replaces the bolt carrier group to allow firing 5.56mm dye-marking cartridges without additional modifications. This kit can utilize normal M16 series magazines (the type employed for operational use).

7.3.4. The M9 and M11 pistol CCMCKs consist of a replacement barrel assembly that will not chamber conventional 9mm cartridges.

7.3.5. Units/personnel may only use the conversion kits/munitions listed in TO 11W2-9-4-11. The use of any other conversion kits or munitions is not authorized. **(T-1).**

**7.4. Employment of CCMCK Training.** Employing CCMCK training enables realistic training in areas that were previously limited or nonexistent due to the use of the Multiple Integrated Laser Engagement System or firing range limitations. Dye-marking cartridges are authorized for the following types of Air Force training (refer to the GMAT found within the Agile Munitions Support Tool located at <https://www.my.af.mil/ammoprod/wm/GMAT/tables.aspx> for specific authorizations.)

7.4.1. Military Operations in Urban Terrain.

7.4.2. Prime Nuclear Airlift Forces, Launch Facility, Weapons Storage Area, Convoy Exercises and Air Base Defense.

7.4.3. Training Using the Full Use-of-Force Continuum.

- 7.4.4. Firearm Retention Drills.
- 7.4.5. Routine and Felony Traffic Stop Training.
- 7.4.6. Judgmental Shooting (e.g., shoot/don't shoot scenarios).
- 7.4.7. Emergency Services Team Scenarios.
- 7.4.8. Building/Room Clearing.
- 7.4.9. Hostage Rescue.
- 7.4.10. Aircraft/Vehicle/Bus/Boat Assaults.
- 7.4.11. Fire-Team/Squad Close Quarters Combat.
- 7.4.12. Flight Deck Denial (Raven, Fly Away Security Team).
- 7.4.13. Shoot, Move and Communicate Training.

## **7.5. Implementation of CCMCK Training.**

7.5.1. Personnel. Personnel responsible for implementing training/exercise scenarios using the CCMCK (instructing or performing CRO/RSO duties) must complete training by attending either a manufacturer's course, MAJCOM/AFIMSC approved course or a unit developed train-the-trainer course. **(T-3)**. This training should be documented in the individual's training record. After completing training, these personnel must be certified by Combat Arms on installing/removing the CCMCK and required maintenance of the CCMCK and weapons in which they are used, in addition to CRO/RSO requirements. **(T-2)**. Combat Arms may document this training on an AF Form 483 or locally developed form. Units should contact their local Combat Arms section for support in properly setting up CCMCK training. **Note:** The typical method of implementing CCMCK training is through a unit developed train-the-trainer course and Combat Arms certification. See AFMAN 36-2655 for specific guidance on implementing the Security Forces SMC Course.

7.5.1.1. Individuals conducting/supervising training must also be trained and task certified by the Combat Arms NCOIC in CRO and/or RSO duties as appropriate for the role they will perform as required in **Chapter 2** of this instruction. **(T-2)**. Personnel performing CRO and RSO duties must also be qualified on the AFQC for the weapon on which they train personnel. **(T-1)**.

7.5.1.2. Even though a small arms range is not required and is actually discouraged for conducting CCMCK training, CRO and RSO skills are necessary to ensure the safety of personnel participating in training.

7.5.2. Munitions Safety. Only approved dye-marking ammunition and properly modified weapons are authorized for use in the CCMCK training/exercise area. The NCOIC or CRO will ensure that dye-marking ammunition is loaded in properly approved magazines in the training/exercise area only. The NCOIC, CRO or designated NCO will visually inspect all loaded magazines prior to commencement of each day's exercise/training. Magazines used in CCMCK training will be kept separate from magazines used for blank and live fire rounds. Personnel conducting unit training will follow the procedures outlined in **paragraph 7.8** and TO 11W2-9-4-11. **(T-1)**.



### 7.5.3. Safety Equipment.

7.5.3.1. Entry into the training/exercise area will be limited to a one-way in/out control point; the officer in charge/NCOIC or CRO is responsible for ensuring that entry requirements include inspection of all pockets, pouches and gear for real-world knives, weapons, ammunition or other hazardous or dangerous items. **(T-3)**. Training officials confiscate these items until completion of all training or the end of the exercise. The officer in charge or NCOIC will ensure all safety equipment is authorized by TO 11W2-9-4-11 and that personnel inspect all safety equipment in accordance with TO 11W2-9-4-11 and/or the manufacturer's guidance before each use. **(T-1)**. Range officials will ensure shooters wear/use all safety equipment properly. **(T-1)**.

7.5.3.2. **CCMCK Exercises/Training (shooting at personnel)**. During exercises/training, all personnel entering the exercise/training area must wear safety equipment as outlined below. **(T-2)**. The NCOIC/CRO will brief all personnel on the boundaries of the exercise area and will ensure all personnel within those boundaries wear safety clothing and gear. The minimum mandatory safety equipment includes single hearing protection (earplugs), approved CCMCK facemask, standard combat helmet, standard gloves (e.g., Nomex<sup>®</sup>, issue winter gloves), standard issue sun, wind and dust goggles, groin protection and a single layer of clothing (Airman Battle Uniform, Battle Dress Uniform, Desert Camouflage Uniform or similar uniform) with sleeves rolled down. Approved facemasks and specific safety items are listed in TO 11W2-9-4-11. Air Force personnel are only authorized to use these items. Use of operational equipment such as individual body armor and load bearing vest/load bearing equipment is highly recommended to ensure training is realistic. Commanders determine the appropriate balance of protection versus realism. Overuse of protection (e.g., excessive layering of clothing) may detract from realism. All personnel who participate in force-on-force, dye-marking cartridge training (exercise participant, exercise supervisor or observer) must wear the mandatory safety equipment. **(T-2)**.

7.5.3.3. **Marksmanship/SMC Training (shooting at non-human targets)**. When training is limited to firing marking cartridges at paper or non-human targets (pointing weapons or firing at personnel prohibited), safety equipment for shooters may be limited to the following items, single hearing protection, authorized uniform, gloves, eye protection and helmet listed in TO 11W2-9-4-11. Use of operational equipment such as individual body armor and load bearing vest is highly recommended to ensure training is realistic. Commanders determine the appropriate balance of protection versus realism. Range safety officials must wear eye protection, hearing protection and an authorized uniform, but other CCMCK safety items are optional. **(T-2)**. During this type of training, range safety officials will not allow students to point their weapons at other personnel or themselves for any reason. **(T-1)**. Safety rules and enforcement are the same as when training with live ammunition.

**7.5.4. Operating Instruction (OI).** Prior to conducting training or exercises, units must develop a local OI outlining all aspects of the local training/exercise program, including required/optional safety equipment and the authorized uses of the CCMCK. **(T-3).** As a minimum, the Security Forces/Combat Arms organizational commander must approve this OI and the unit must coordinate it with the local wing/base safety office. **(T-3).** Additionally, range officials establish rules of engagement and all range officials and participants review them prior to training or exercises. Range safety officials will strictly enforce these rules. **(T-3).**

**7.5.5. Training Site.** Training/exercise sites should be identified and approved jointly by all organizations using the site and the local wing/base safety office. A list of approved sites will be listed in the local OI.

**7.5.6. Equipment Maintenance.** Owning units will maintain all weapons, CCMCK conversion kits and safety equipment in strict compliance with TO 11W2-9-4-11. **(T-2).** Units provide resource protection for dye-marking cartridges and adapter kits in accordance with guidance for like items as outlined in AFI 31-101. **Note:** Small arms require special preventive maintenance before, during and after use of dye-marking cartridges. These procedures are outlined in TO 11W2-9-4-11 and units must follow this guidance. **(T-2).** Failure to follow the TO procedures will cause stoppages in the weapon(s) and may prevent proper functioning when the weapon(s) are returned to operational use. The TO also contains guidance for cleaning the safety equipment and personal hygiene procedures that users follow. Personnel conducting/supervising CCMCK training will ensure that all weapons are cleared and barrels are checked by inserting a cleaning rod the entire length of the bore to ensure no dye-marking rounds are lodged in the bore upon completion of training. **(T-1).**

**7.5.7. Munitions Management.** Units follow the guidance from the Air Force Life Cycle Management Center (AFLCMC), Munitions Division (AFLCMC/EBH) and AFMAN 21-201 for procurement, storage, inspection and disposition of dye-marking cartridges.

**7.6. CCMCK Training and Exercise Safety.** Except for the Security Forces SMC Course and CRO/RSO personnel, individuals are not required to be weapons qualified in accordance with this publication on the weapon(s) utilized for CCMCK training to participate in the training/exercise. However, they must be trained on weapons safety and operator mechanical skills (e.g., loading, clearing, unloading, reloading, immediate action, ammunition identification/use). **(T-1).** This training must be conducted by a unit NCO who is currently qualified in accordance with this instruction on the weapon(s) they train. **(T-3).** Units should document this training. Individuals who are currently qualified on the weapon by Combat Arms do not require this portion of training. All personnel participating in CCMCK training must be familiar with all safety requirements, utilize required personnel protective equipment and be able to distinguish between live and dye-marking ammunition. **(T-1).** Individual units must provide their own training to emphasize safe handling, weapon operation, use of dye-marking cartridges and operator maintenance. **(T-3).** This training should be documented on AF Form 1098 or AF Form 797. All personnel will follow standardized Air Force weapons handling procedures outlined in AFMAN 31-129.



**7.6.1. Dye-Marking Munitions and Weapons Safety.** Store dye-marking cartridges in separate containers from live ammunition. **(T-2).** To ensure appropriate segregation and storage, dye-marking cartridges and live ammunition should not be stored side-by-side. Consider painting a blue, two-inch wide stripe across the top of the dye-marking cartridge containers. For weapons with magazines, consider a distinctive two-inch wide, blue stripe painted or taped around the bottom of the magazine for dye-marking cartridge use only. During any training/exercise where dye-marking cartridges are used, an officer or noncommissioned officer will:

7.6.1.1. Physically inspect all training/exercise participants to ensure they are not carrying live ammunition. **(T-2).**

7.6.1.2. Inspect ammunition and magazines to ensure only dye-marking cartridges are employed. **(T-1).** This should include a joint inspection with the armorer when ammunition is picked up or turned in.

7.6.1.3. Ensure all training/exercise participants are aware of the physical differences between live and dye-marking ammunition and can readily identify both. **(T-1).**

7.6.1.4. Brief all exercise participants that weapons loaded with dye-marking rounds are not to be pointed or fired at any individual within 1.52 meters or 5 feet. **(T-0).** Additionally, brief all participants that intentional shots above the neck during force-on-force training/exercises are not authorized. Shooters will not intentionally fire at the head or face of other personnel. **(T-0).**

7.6.1.5. When the quantity or type of weapon or the location of training/exercise requires the presence of an armed guard; follow the procedures outlined in AFMAN 31-129 to identify the armed individuals and to ensure safety in the training environment. Under no circumstances will armed personnel participate in training, including performing range safety official duties. **(T-1).** During training, armed personnel will not be in the immediate area where training is conducted and must be at least 25 meters from the active training area (location of students and range safety personnel). **(T-1).**

**7.7. Care of Small Arms, CCMCK Conversion Kits and Protective Equipment.** Small arms require special preventive maintenance when using dye-marking cartridges. Units will ensure the procedures identified in the weapon operator's manual and TO 11W2-9-4-11 are followed to prevent injury to personnel or damage to equipment. **(T-1).** Units must develop procedures to clean and inspect protective equipment using the guidance in TO 11W2-9-4-11. **(T-3).** Include care/cleaning guidance for small arms (additional to operator's manual), conversion kits and protective equipment in the local OI. **(T-3).**

**7.8. Training/Exercise Safety.** Unit commanders of units conducting CCMCK training/exercises will develop and implement written guidelines for firearms safety tailored specifically to CCMCK/dye-marking training in accordance with this publication and AFMAN 31-129. **(T-2).** In doing so, they must, at a minimum:

7.8.1. Prior to conducting each training/exercise session, the OIC, NCOIC or CRO will provide a safety briefing to all range officials, students and armed guards. This briefing must include at a minimum: weapons safety procedures, minimum engagement distances, cease fire procedures, emergency procedures, range commands (if applicable) and inclement weather procedures. **(T-3).**

7.8.2. Establish local procedures for conducting exercises or training with dye-marking cartridges for the types used. **(T-3)**.

7.8.3. Establish required safety equipment in accordance with this instruction, TO 11W2-9-4-11 and local requirements for all personnel within the training/exercise area. Safety equipment must protect eyes, face, ears, throat, head, hands and groin. **(T-2)**.

7.8.4. Establish local procedures for conducting exercises or training where live ammunition is present for guard or security purposes. **(T-1)**.

7.8.5. Address procedures for clearing and modifying weapons prior to entering training/exercise area.

7.8.6. Ensure training/exercise areas are identified and located away from populated areas. Establish a 75-meter radius safety area around the entire CCMCK training area (area where CCMCK rounds are fired). If space is available, increase this radius up to 300 meters. No weapons will be fired outside the training area. Marking rounds are less than-lethal but the safety area is intended to prevent non-players, without protective equipment, from being hit with CCMCK rounds. Units must conduct operational RM analysis when establishing the safety area and identify the overall risk before approval. **(T-2)**.

7.8.7. Address emergency action procedures should an accident or incident occur. **(T-2)**.

7.8.8. Establish emergency notification procedures prior to training. Include at a minimum: base defense operations center, command post, medical, fire, explosive ordnance disposal, safety and local authorities as required (if training/exercise is off the installation). Ensure the base defense operations center knows the exercise location. **(T-3)**.

7.8.9. Establish weapons and ammunition disposition procedures in the event a training/exercise participant becomes injured, sick or incapacitated for any reason. **(T-3)**.

7.8.10. Establish local procedures ensuring accountability of exercise or training ammunition and weapon modification kits. **(T-2)**.

7.8.11. Establish a training and certification program for exercise or training supervisors and range safety officials. Range safety officials must be trained and certified as required in this publication. **(T-2)**.

7.8.12. Appoint, in writing, exercise or training supervisors, ammunition custodians and personnel armed with live ammunition. **(T-3)**.

7.8.13. Ensure radio/telephone contact is maintained between the training/exercise area and the base defense operations center during all training/exercises. **(T-2)**.

7.8.14. Coordinate OI with local safety office. **(T-2)**.

## Chapter 8

## AIR FORCE SMALL ARMS DEPOT (AFSAD)

**8.1. AFSAD Requirements.** The information in [Table 8.1](#) identifies the requirements in this publication that apply to the AFSAD. Some requirements include notes below the title that provide clarification on the applicable portions of the requirement or alternate guidance used by the AFSAD to manage their program.

**Table 8.1. Applicability of AFI 36-2654 Requirements to AFSAD.**

Paragraph	Title/Requirement	Applies to AFSAD	
		Yes	No
1.9.6.	Security Forces/Combat Arms Organizational Commander Responsibilities.	X	
1.9.6.1.	Rely on the Combat Arms section for analysis and input on weapons and tactics decisions, such as weapon/munitions capabilities, placement and selection to enhance integrated defense. Include Combat Arms in planning weapons and tactics solutions to support all missions.		X
1.9.6.2.	Range Facility construction, range modification, rehabilitation and facility maintenance. <b>Note:</b> The AFSAD Section Chief in conjunction with EBW Branch Chief will accomplish these functions.	X	
1.9.6.2.1.	Ensure facility requirements are identified to the base facility review board. <b>Note:</b> Only as applicable to AFSAD facilities.	X	
1.9.6.2.2.	Submit small arms range and support facility requirements to the base CE using an AF Form 332, <i>Base Civil Engineer Work Request</i> . <b>Note:</b> Only as applicable to the AFSAD weapons test facility and support structures.	X	
1.9.6.3.	Non-Air Force and non-military use of range.		X
1.9.6.4.	Budget forecasts to support SA/LW training and maintenance. <b>Note:</b> This requirement is intended for a standard SF unit.		X
1.9.6.5.	Munitions forecast review. <b>Note:</b> The AFSAD Section Chief will perform the role of the commander for forecasting.	X	
1.9.6.6.	Funding for installation weapons maintenance and training.		X
1.9.6.7.	Inspection of base SA/LW.		X
1.9.6.8.	Guidelines to address canceled and postponed training.		X
1.9.6.9.	Local agreements for firearms training facilities use by non-Air Force agencies.		X
1.9.6.10.	AFSC requirements for NCOIC. <b>Note:</b> The AFSAD will meet the Combat Arms NCOIC requirements; however, the position title is AFSAD NCOIC.	X	
1.9.6.11.	Support agreements. <b>Note:</b> The AFSAD will not engage in any support agreements.		X

Paragraph	Title/Requirement	Applies to AFSAD	
1.9.6.12.	Meet installation training and maintenance requirements.		X
1.9.6.13.	Provide firearms training for Air Force personnel using the priorities outlined in this instruction.		X
1.9.6.14.	Provide SA/LW inspection and repair support for all weapons assigned to the installation.		X
1.9.6.15.	Ensure adequate quantities of trained and certified non-Combat Arms Group A personnel are available to perform block officer and assistant instructor duties.		X
1.9.6.16.	ARIS use: <b>Note:</b> The AFSAD will utilize a Depot maintenance information system in support of SA/LW Depot level maintenance actions.		X
1.9.6.17.	SA/LW training course attendance. <b>Note:</b> The AFSAD Section Chief provides opportunities for assigned AFSAD personnel to attend in-depth advanced weapons maintenance courses.	X	
1.9.7.	Combat Arms NCOIC or Civilian Equivalent.	X	
1.9.7.1.	Manage installation Combat Arms Program.		X
1.9.7.2.	Safety precautions. <b>Note:</b> The AFSAD will follow applicable safety guidance as prescribed.	X	
1.9.7.3.	Facility manager for base range complex.		X
1.9.7.4.	Safeguard SA/LW and ammunition.	X	
1.9.7.5.	Hazardous waste removal.	X	
1.9.7.6.	Supervise base SA/LW maintenance and inspection program. <b>Note:</b> The AFSAD does not conduct the base SA/LW maintenance and inspection program.		X
1.9.7.7.	Coordinate with base officials for range maintenance, safety, occupational health and design.	X	
1.9.7.8.	Maintain base SDZ and VDZ maps.		X
1.9.7.10.	Submit PQDRs.	X	
1.9.7.11.	Munitions custodian.	X	
1.9.7.12.	Budget requirements.	X	
1.9.7.13.	Forecast munitions.	X	
1.9.7.14.	Develop and publish operating instructions.	X	
1.9.7.15.	Establish reference and TO library.	X	
1.9.7.16.	Training forecasts.		X
1.9.7.17.	Publish training schedule.		X
1.9.7.18.	Maintain training statistics.		X
1.9.7.19.	Request for range criteria deviations.	X	
1.9.7.20.	Range test-fire and trial operation.	X	
1.9.7.21.	Contact BE when changes occur that may pose a health risk.	X	

Paragraph	Title/Requirement	Applies to AFSAD	
1.9.7.22.	Hazard awareness for assigned personnel.	X	
1.9.7.23.	Explosive safety training.	X	
1.9.7.24.	ARIS use for section management.		X
1.9.7.25.	Agreements for Combat Arms support.		X
1.9.7.26.	Establish PMEL guidelines.	X	
1.9.7.27.	Brief unit weapon custodians and provide guidance.		X
1.9.7.28.	Certified block officer duties.		X
1.9.7.29.	Certify non-Combat Arms personnel on range use.		X
1.9.7.30.	Conduct Excellence In Competition matches.		X
1.9.7.31.	Proficiency Training. <b>Note:</b> The AFSAD personnel will conduct proficiency training on duty weapons and on weapon systems in maintenance.	X	
1.9.7.32.	Develop base unit sustainment/proficiency training.		X
1.9.7.33.	Conduct annual range inspections.	X	
1.9.7.33.1.	Document the results of the inspection and corrective action(s) necessary.	X	
1.9.7.33.2.	Range corrective actions. <b>Note:</b> The AFSAD Section Chief will perform this function.	X	
1.9.7.35.	Establish membership on the USAF Combat Arms SharePoint site.	X	
1.9.7.36.	Combat Arms email accounts.		X
1.9.8.	Combats Arms instructor requirements.	X	
1.9.8.1.	AFSC requirements for Combat Arms.	X	
1.9.8.2.	Train, qualify and certify base personnel on SA/LW.		X
1.9.8.3.	Conduct firing range operations. <b>Note:</b> AFSAD will only conduct range operations and will not conduct training on qualification courses on the AFSAD weapons test facility.	X	
1.9.8.4.	Evaluate Student performance.		X
1.9.8.5.	Maintain qualifications on all SA/LW and courses for which they are required to instruct. <b>Note:</b> The AFSAD does not provide instruction to base personnel.		X
1.9.8.6.	Maintain lesson plans.		X
1.9.8.7.	Improve teaching and training skills.		X
1.9.8.8.	Participate in proficiency training. <b>Note:</b> AFSAD Combat Arms personnel will participate in firing proficiency ammunition, but not proficiency training on instructional techniques.		X
1.9.8.9.	Maintain proficiency on SA/LW inspections and maintenance procedures.	X	
1.9.8.10.	Performs inspections and maintenance (repair) of SA/LW.	X	
1.9.8.11.	Maintain the knowledge and skills needed to function as a subject matter expert and weapons and tactics.	X	
1.10.	Waiver request to AFI 36-2654.	X	
1.10.1.	Routing range design deviation requests.	X	

Paragraph	Title/Requirement	Applies to AFSAD	
2.1.	Management of Combat Arms program.	X	
2.2.	Operation and administration of the Combat Arms section. <b>Note:</b> The portions of this section that apply to the AFSAD are identified below.	X	
2.2.1.	Combat Arms administration.		X
2.2.2.	Combat Arms program measurement.		X
2.2.3.	Reference library.	X	
2.2.4.	Forms and records management.	X	
2.2.5.	Operating Instructions. <b>Note:</b> The AFSAD will develop specific OIs to cover SA/LW Depot maintenance practices. Operating Instructions will address SA/LW maintenance procedures, supply/logistics and AFI 21-101, <i>Aircraft and Equipment Maintenance Management</i> .	X	
2.2.5.1.	Specific Range Rules.	X	
2.2.5.2.	Required Personnel Protective Equipment.	X	
2.2.5.3.	Approved Weapons.	X	
2.2.5.4.	Approved Ammunition.	X	
2.2.5.5.	Approved Laser Devices. <b>Note:</b> The AFSAD will not use laser devices on the AFSAD weapons test facility.		X
2.2.5.6.	Approved Targets and Barricades.	X	
2.2.5.7.	Daily Range Opening and Closing Procedures.	X	
2.2.5.8.	Lead Management.	X	
2.2.5.9.	Explosive Safety/Munitions Operations.	X	
2.2.5.10.	Range Closure.	X	
2.2.5.11.	HAZMAT Procedures. <b>Note:</b> The AFSAD Section Chief performs these functions.	X	
2.2.5.12.	General Safety/Hazards.	X	
2.2.5.13.	Weapons and Munitions Transport.	X	
2.2.5.14.	Annual range inspection procedures.	X	
2.2.5.15.	Resource Protection. <b>Note:</b> AFSAD will follow the guidance in AFI 31-101 and the base Installation Defense Plan.	X	
2.2.5.16.	Weapons Maintenance Procedures. <b>Note:</b> The AFSAD will follow Depot, Supply and local OI inventory requirements.		X
2.2.5.17.	Scheduling.		X
2.2.5.18.	Instructor Proficiency Training <b>Note:</b> AFSAD personnel will not conduct instructor (teaching) proficiency training, but will manage/participate in a weapons proficiency program.	X	
2.2.5.19.	Use of Ranges by Non-Combat Arms Personnel/Units. <b>Note:</b> The AFSAD weapons test facility is only used by AFSAD personnel.		X
2.2.5.20.	Non-Military/Civilian Use of Ranges. <b>Note:</b> The AFSAD weapons test facility will only be used by assigned AFSAD personnel.		X

Paragraph	Title/Requirement	Applies to AFSAD	
2.2.5.21.	Certification of non-Combat Arms Personnel. <b>Note:</b> The AFSAD will develop criteria only for personnel assigned to the AFSAD.	X	
2.2.6.	Support Agreements.		X
2.2.7.	Budget Requirements.		X
2.2.8.	Evaluations. <b>Note:</b> The AFSAD will conduct weapon maintenance evaluations on members assigned as Depot Small Arms Repair Technicians.	X	
2.2.9.	Munitions. <b>Note:</b> AFSAD NCOIC performs these functions.	X	
2.2.10.	Weapons Maintenance Log. <b>Note:</b> The AFSAD will utilize a Depot maintenance information system in support of SA/LW Depot level maintenance actions.		X
2.2.11.	Annually obtain listing of SA/LW assigned to installation.		X
2.2.12.	Maintain PMEL.	X	
2.2.13.	SA/LW Inspection Reports.		X
2.2.13.1.	Accomplish inspections. <b>Note:</b> The AFSAD will conduct inspections in accordance with the applicable TO and as applicable for the repair work conducted.		X
2.2.13.2.	Memo for inspections.		X
2.2.13.3.	Maintain copies.		X
2.2.14..	Combat Arms Scheduling.		X
2.2.14.1.	Training schedules.		X
2.2.14.2.	Annual training forecast.		X
2.2.14.3.	Priorities for scheduling individuals for training.		X
2.2.14.4.	Unit scheduling officials.		X
2.2.14.5.	No-shows.		X
2.2.15.	Trespass notices. <b>Note:</b> The AFSAD weapons test facility does not have an SDZ.		X
2.2.16.	Firearms and Ammunition Protection and Control.	X	
2.2.17.	Annual Range Safety Inspection Reports. <b>Note:</b> The AFSAD Small Arms Depot NCOIC will prepare a report of the annual range safety inspection and forward the report to the AFSAD Section Chief, after coordination with the base safety office and all other agencies who participated in the inspection.	X	
2.3.	Range book. <b>Note:</b> For the AFSAD, these requirements only apply to the AFSAD weapons test facility.	X	
2.3.1.	Range certification and inspection.	X	
2.3.2.	Military Use. <b>Note:</b> The AFSAD weapons test facility will only be used for weapons test fire and will only be used by assigned AFSAD personnel.		X
2.3.2.1.	Support Agreements - Training Support.		X
2.3.2.2.	Unit Sustainment and Proficiency Training. <b>Note:</b> Combat Arms personnel assigned to the AFSAD may use the AFSAD weapons test		X

Paragraph	Title/Requirement	Applies to AFSAD	
	facility to fire proficiency ammunition at the discretion of the AFSAD Section Chief.		
2.3.2.3.	Range safety official certification. <b>Note:</b> The AFSAD NCOIC will train/certify non-Combat Arms personnel on CRO and RSO duties, as required and the AFSAD Section Chief will determine the minimum grade requirements not below E-4 (CRO) and E-3 (RSO). The AFSAD will ensure that at least two personnel are present during any live-fire operations.	X	
2.3.2.4.	CRO and RSO certification. <b>Note:</b> The AFSAD NCOIC will develop and document a CRO and RSO training and certification program for assigned non-Combat Arms AFSAD personnel required to operate the AFSAD weapons test facility.	X	
2.3.2.5.	Documentation of CRO and RSO task certification.	X	
2.3.2.6.	RSO assignment. <b>Note:</b> The AFSAD Section Chief will appoint CROs and RSOs in writing for the AFSAD weapons test facility.	X	
2.3.2.7.	Range safety official responsibilities.	X	
2.3.2.8.	Use of non-Air Force ranges.	X	
2.3.3.	Recreational and Nonmilitary Use.		X
2.3.3.1.	Recreational use of range.		X
2.3.3.2.	Authorized civilian shooting group use of range.		X
2.3.3.3.	Civilian police agency use of range.		X
2.3.3.4.	Recreational Use of Range Property.		X
2.3.3.5.	Recreational activity conflicts with military use of range.		X
2.3.3.6.	Personnel demonstration of safe use of firearms for hunting.		X
2.3.3.7.	Posting times/dates of recreational use of range.		X
2.3.3.8.	Hold harmless agreements.		X
2.4.	Range Safety.	X	
2.4.1.	Range Facility.	X	
2.4.2.	Range Safety Plan.	X	
2.4.3.	Range Safety Rules.	X	
2.4.4.	Road Guards.		X
2.4.5.	Range Communications.	X	
2.4.6.	Display of Flag and Streamers.	X	
2.4.7.	Emergency Equipment.	X	
2.4.8.	Unsafe Acts and Conditions.		X
2.4.9.	Safety Equipment.	X	
2.4.9.1.	Issued to Combat Arms Instructions.	X	
2.4.9.1.1.	Red baseball hat. <b>Note:</b> Combat Arms personnel assigned to the AFSAD will only wear the Combat Arms hat while performing duties at the AFSAD facility.	X	
2.4.9.1.2.	Eye protection.	X	
2.4.9.1.3.	Hearing protection.	X	



Paragraph	Title/Requirement	Applies to AFSAD	
2.4.9.1.4.	Fire retardant gloves.	X	
2.4.9.2.	Provide to students.		X
2.4.9.2.1.	Hearing protection on range.	X	
2.4.9.2.2.	Eye protection on range.	X	
2.4.10.	Use of EPR ammunition.	X	
2.4.11.	Use of frangible ammunition.	X	
2.5.	Live Fire Procedures.	X	
2.5.1.	Pre-Fire Brief. <b>Note:</b> AFSAD personnel will conduct a pre-fire safety briefing to shop personnel. This may be accomplished by individuals reading and signing a daily briefing.		X
2.5.2.	Ready Line. <b>Note:</b> Due to the unique use of the AFSAD weapons test facility and its use for test fire operations, a ready line is not required.		X
2.5.3.	Firing Line.	X	
2.5.4.	Target Scoring.		X
2.5.5.	Range Policing. <b>Note:</b> AFSAD personnel will police the weapons test facility.		X
2.5.6.	Range Commands.		X
2.5.7.	Cease Fire Commands. <b>Note:</b> Personnel using the AFSAD weapons test facility will be familiar with the Cease Fire command and will be prepared to use it for emergencies.	X	
2.6.	Range Safety Inspections.	X	
2.6.1.	Inspection of range prior to use.	X	
2.6.2.	Scheduling other inspections.	X	
2.6.3.	Annual range inspection.	X	
2.6.3.1.	Backstop condition.		X
2.6.3.2.	Deterioration of Baffles.	X	
2.6.3.3.	Exposed Rocks.		X
2.6.3.4.	Bullet Traps.	X	
2.6.3.4.1.	Targets positioning.	X	
2.6.3.4.2.	Inspection of bullet trap.	X	
2.6.3.5.	Cracks in Metal Bullet Traps.	X	
2.6.3.6.	Impact ranges.		X
2.7.	Range Maintenance. <b>Note:</b> The AFSAD NCOIC performs these duties.	X	
2.7.1.	Minor maintenance. <b>Note:</b> The AFSAD NCOIC performs these duties.	X	
2.7.2.	Range maintenance training. <b>Note:</b> The AFSAD NCOIC performs these duties.	X	
2.7.3.	Range maintenance schedule.		X
2.7.4.	CE range maintenance.	X	
2.7.5.	Mining of backstops and bullet residue removal from bullet traps.	X	

Paragraph	Title/Requirement	Applies to AFSAD	
2.7.6.	De-leading or mining of backstops.		X
2.8.	Range Closures.		X
2.9.	Range Design and Support Facilities Criteria.	X	
2.10.	Facility Certification. <b>Exception:</b> The AFSAD is not required to enter information on the AFSAD weapons test facility in ARIS but will maintain certifications in local records.	X	
2.11.	Range Status Reporting Requirements.	X	
3.1.	Training management of Combat Arms personnel.	X	
3.2.	Combat Arms training requirements. <b>Note:</b> Combat Arms personnel assigned to the AFSAD will perform duties as Small Arms Depot repair technicians. Personnel serving in this position do not perform classroom/firing range instructor duties and work exclusively on SA/LW repair maintenance, modifications and refurbishment.	X	
3.2.1.	Civilian Personnel as Combat Arms instructors. <b>Note:</b> The AFSAD may hire civilian gunsmiths based on previous experience and that may not meet the requirements in this paragraph. The AFSAD Section Chief will determine the requirements for civilian gunsmiths.		X
3.3.	Instructor Evaluations. <b>Note:</b> AFSAD Combat Arms personnel do not perform academic instruction and therefore are not required to complete instructor evaluations.		X
3.4.	Weapons Maintenance Evaluations. <b>Note:</b> The AFSAD Section Chief and AFSAD NCOIC will establish a AFSAD Quality Assurance program and will create a quality assurance operation instruction that outlines the weapons maintenance evaluation program.		X
3.4.1.	Maintenance evaluation checklist.	X	
3.4.2.	Maintenance evaluation requirements.	X	
3.4.2.1.	Scheduling inspections.		X
3.4.2.2.	Use of TOs.	X	
3.4.2.3.	Troubleshooting.	X	
3.4.2.4.	Function firing.	X	
3.4.2.5.	Completing required documentation. <b>Note:</b> Weapon maintenance evaluations on AFSAD personnel will include documentation of maintenance in accordance with established procedures and local guidance.		X
3.5.	Documentation of Evaluations.	X	
3.5.1.	Instructor and weapons maintenance evaluation forms.	X	
3.5.2.	Instructor proficiency folders. <b>Note:</b> The AFSAD does not have authorizations for any Combat Arms senior NCOs.		X
3.6.	Firearms qualification. <b>Note:</b> AFSAD personnel will only maintain weapons qualifications for assigned duty weapons.	X	

Paragraph	Title/Requirement	Applies to AFSAD	
3.6.1.	Instructors performing Combat Arms duties.		X
3.6.2.	Personnel assigned to a QFEBL.		X
3.7.	Combat Arms proficiency training. <b>Note:</b> The AFSAD will conduct proficiency firing for weapons that are in the shop for maintenance.	X	
3.8.	Safety and Health Training.	X	
Chapter 4	Firearms Training Procedures and Program Management. <b>Note:</b> AFSAD personnel do not conduct any SA/LW training of Air Force personnel and are therefore exempt from the requirements of this chapter.		X
Chapter 5	Weapons Training. <b>Note:</b> AFSAD personnel do not conduct any SA/LW training of Air Force personnel and are therefore exempt from the requirements of this chapter, except as they apply to AFSAD personnel completing SA/LW qualification training for arming or deployment.		X
6.1.	Purpose and Program Overview. <b>Note:</b> The AFSAD does not inspect or repair base weapons and performs Depot maintenance on Air Force SA/LW. The AFSAD will utilize a Depot maintenance information system in support of SA/LW Depot level maintenance actions to record all maintenance on SA/LW.	X	
6.1.1.	Certified small arms repair. <b>Note:</b> The AFSAD may hire a certified civilian gunsmith to support Depot level repair activities and will record maintenance as noted for <b>paragraph 6.1.</b>	X	
6.1.2.	Air Force TO Additional Authorized List and USAF Authorized Small Arms and Light Weapons (SA/LW).	X	
6.1.2.1.	Allowance Standard Code 538.	X	
6.1.2.2.	GMAT.	X	
6.1.3.	Non-standard commercially purchased items.	X	
6.1.4.	Commercial SA/LW parts. <b>Note:</b> The AFSAD may obtain commercial parts and equipment for weapons repair/modification/refurbishment/prototyping with the approval of the Air Force Small Arms Engineer and AFLCMC/EBRMW. Certified AFSAD civilian gunsmiths may perform Combat Arms duties identified in this paragraph.		X
6.1.5.	Accessories and associated equipment. <b>Note:</b> The AFSAD may obtain accessories and associated equipment for weapons prototyping and development with the approval of the Small Arms Engineer and AFLCMC/EBRMW.		X
6.1.6.	Air Force SA/LW associated equipment requirements.	X	
6.1.6.1.	Capability gaps.	X	
6.1.6.2.	MAJCOM evaluation and validation.	X	
6.2.	SA/LW Modifications.	X	
6.3.	Responsibilities.	X	
6.3.3.	AFLCMC/EBRMW.	X	

Paragraph	Title/Requirement	Applies to AFSAD	
6.3.4.	AF/A4LW, Nuclear Weapons, Missiles and Munitions Division.	X	
6.4.	SA/LW categories and storage definitions.	X	
6.4.1.	Service Weapons.	X	
6.4.2.	Match Grade Weapons.	X	
6.4.3.	Ceremonial Weapons.	X	
6.4.4.	Storage Definitions.	X	
6.4.4.1.	In Use.	X	
6.4.4.1.1.	Active In Use.	X	
6.4.4.1.2.	Inactive In Use.	X	
6.4.4.2.	Extended Storage/preferred Packaging <b>Note:</b> AFSAD weapons will not be stored according to applicable SPI due to the weapons being in an “In Maintenance” status. Weapons will be stored in sealable containers and will be accounted for using applicable supply and Depot guidance.		X
6.5.	Levels of Firearms Maintenance:	X	
6.5.1.	Depot Maintenance. <b>Note:</b> The AFSAD supports weapons modifications, refurbishment and overhaul repair services for the Air Force and performs Depot-level maintenance.	X	
6.5.2.	Field Maintenance.		X
6.5.2.1.	Service Weapons (non-match grade).		X
6.5.2.2.	Match Grade Weapons.	X	
6.5.2.3.	Ceremonial Weapons.	X	
6.5.3.	Operator Maintenance.	X	
6.5.4.	Weapons Cleaning.	X	
6.5.4.1.	Unit preventive maintenance.	X	
6.5.4.2.	Inspection of unit preventive maintenance.		X
6.5.4.3.	Operators manual.	X	
6.6.	Procedures for maintenance of unserviceable weapons.		X
6.6.1.	Weapons requiring Depot maintenance.		X
6.6.2.	Limited parts cannibalization.		X
6.7.	Inspection of weapons. <b>Note:</b> The AFSAD will conduct inspections in accordance with the applicable TO and as applicable for the repair work conducted.		X
6.7.1.	Organization responsibilities for SA/LW inspections. <b>Note:</b> The AFSAD does not support installation weapons and performs these tasks only for weapons serviced by the AFSAD.		X
6.7.1.1.	Coordinate inspections.	X	
6.7.1.2.	DD Form 1574.	X	
6.7.1.3.	SA/LW cleaning.	X	
6.7.2.	Pre-issue Inspection. <b>Note:</b> The AFSAD will conduct inspections in accordance with the applicable TO and as applicable for the repair		X

Paragraph	Title/Requirement	Applies to AFSAD	
	work conducted.		
6.7.3.	Inspection of in use SA/LW. <b>Note:</b> The AFSAD will conduct inspections in accordance with the applicable TO and as applicable for the repair work conducted. Legacy weapons retained by the AFSAD do not require gauging and the supporting Combat Arms section will conduct a visual inspection on these weapons annually (every 12 months).		X
6.7.4.	Inspection of Combat Arms Training Weapons.		X
6.7.5.	Inspection of Weapons in Extended Storage/Preferred Packaging.		X
6.7.5.1.	Serviceability inspection of extended storage weapons.		X
6.7.5.2.	Gauging of extended storage weapons.		X
6.7.6.	Pre-embarkation Inspections.		X
6.7.7.	Post Deployment Inspections.		X
6.7.8.	Turn in inspection.		X
6.8.	Packaging weapons. <b>Note:</b> The AFSAD will complete the DD Form 1574 or DD Form 1577-2 (if required) for all weapons that have completed the Depot maintenance process and ensure an AFTO Form 105 accompanies each weapon that is shipped. The AFSAD will annotate each form with “Weapon was completely overhauled.”		X
6.9.	Support Agreements.		X
Chapter 7	Close Combat Mission Capability Kit (CCMCK) Training. <b>Note:</b> AFSAD personnel do not conduct any CCMCK training		X
Chapter 8	Air Force Small Arms Depot (AFSAD)	X	
Attachment 2	Risk Management Evaluation of Existing Range Facilities.	X	
Attachment 3	Small Arms Range Inspection Checklist.	X	

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**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

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### ***Prescribed Forms***

**AF Form 522**, *USAF Ground Weapons Training Data*

**AF Form 710**, *Combat Arms Training Record*

### ***Adopted Forms***

**AF Form 68**, *Munitions Authorization Record*

**AF Form 332**, *Base Civil Engineer Work Request*

**AF Form 469**, *Duty Limiting Condition Report*

**AF Form 483**, *Certificate of Competency*

**AF Form 523**, *USAF Authorization to Bear Firearms*

**AF Form 623**, *Individual Training Record Folder*

**AF Form 679**, *Air Force Publication Compliance Item Waiver Request/Approval*

**AF Form 797**, *Job Qualification Standard Continuation/Command JQS*

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

**AF Form 4437**, *Deliberate Risk Assessment Worksheet*

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

**DD Form 1574**, *Serviceable Tag*

**DD Form 1577-2**, *Unserviceable (Repairable) Tag*

**SF Form 368**, *Product Quality Deficiency Report*



*Abbreviations and Acronyms*

**AETC**—Air Education and Training Command  
**AF**—Air Force  
**AFB**—Air Force Base  
**AFCEC**—Air Force Civil Engineer Center  
**AFCFM**—Air Force Career Field Manager  
**AFECD**—Air Force Enlisted Classification Directory  
**AFI**—Air Force Instruction  
**AFIMSC**—Air Force Installation and Mission Support Center  
**AFLCMC**—Air Force Life Cycle Management Center  
**AFMAN**—Air Force Manual  
**AFMC**—Air Force Materiel Command  
**AFNet**—Air Force Network  
**AFOSI**—Air Force Office of Special Investigations  
**AFOSIMAN**—Air Force Office of Special Investigations Manual  
**AFPAM**—Air Force Pamphlet  
**AFPD**—Air Force Policy Directive  
**AFQC**—Air Force Qualification Course  
**AFRC**—Air Force Reserve Command  
**AFSAD**—Air Force Small Arms Depot  
**AFSC**—Air Force Specialty Code  
**AFSFC**—Air Force Security Forces Center  
**AFSVA**—Air Force Services Activity  
**AFTO**—Air Force Technical Order  
**AIT**—Advanced Individual Training  
**ANG**—Air National Guard  
**AR**—Army Regulation  
**ARIS**—Automated Readiness Information System  
**BAT**—Basic Arms Training  
**BE**—Bioenvironmental Engineering  
**BSM**—Ballistic Sighting Module  
**CC**—Commander

**CCMCK**—Close Combat Mission Capability Kit  
**CCMD**—Combatant Command  
**CE**—Civil Engineer  
**CFETP**—Career Field Education and Training Plan  
**COE**—Contemporary Operating Environment  
**CONUS**—Continental United States  
**COTS**—Commercial Off the Shelf  
**CRO**—Chief Range Officer  
**CY**—Calendar Year  
**DCS**—Deputy Chief of Staff  
**DD**—Department of Defense Form  
**DNS**—Day/Night Sight  
**DoDD**—Department of Defense Directive  
**DoD**—Department of Defense  
**DoDI**—Department of Defense Instruction  
**DOS**—Day Optic Sight  
**DRMO**—Defense Reutilization and Marketing Office  
**DTT**—Doctrine and Tactics Training  
**EIS**—Enterprise Information Services  
**EM**—Emergency Management  
**EST**—Engagement Skills Trainer  
**FLETC**—Federal Law Enforcement Training Center  
**FRT**—Fire Resistant Treated  
**GMAT**—Ground Munitions Authorization Tables  
**HAZMAT**—Hazardous Material  
**HRA**—Health Risk Assessment  
**HVAC**—Heating, Ventilation and Air Conditioning  
**ICE**—Individual Combat Equipment  
**IET**—Initial Entry Training  
**IOC**—Initial Operational Capability  
**ISR**—Intelligence, Surveillance and Reconnaissance  
**JCIDS**—Joint Capabilities Integration and Development System

**KPP**—Key Performance Parameters  
**LAD**—Laser Aiming Device  
**LAW**—Light Anti-armor Weapon  
**LRPR**—Long Range Precision Rifle  
**MAJCOM**—Major Command  
**MANPRINT**—Manpower and Personnel Integration  
**MMB**—Mounted Maneuver Battlespace  
**MPF**—Military Personnel Flight  
**MPS**—Military Personnel Section  
**MPTA**—Manpower, Personnel and Training Assessments  
**MSDS**—Material Safety Data Sheet  
**NCOIC**—Noncommissioned Officer in Charge  
**NCO**—Noncommissioned Officer  
**NET**—New Equipment Training  
**NETT**—New Equipment Training Team  
**NVS**—Night Vision Sight  
**OCONUS**—Outside Continental United States  
**OI**—Operating Instruction  
**OJT**—On-the-Job Training  
**OPR**—Office of Primary Responsibility  
**OR**—Operational Readiness  
**PCS**—Permanent Change of Station  
**PEM**—Program Element Manager  
**PMEL**—Precision Measurement Equipment Laboratory  
**PPC**—PCS Processing Code (Replaces Assignment Instruction Code [AIC])  
**PQDR**—Product Quality Deficiency Report  
**RCO**—Rifle Combat Optic  
**RM**—Risk Management  
**ROTC**—Reserve Officer Training Corps  
**RSO**—Range Safety Officer  
**SA/LW**—Small Arms and Light Weapons  
**SABC**—Self-Aid and Buddy Care

**SAEMR**—Small Arms Expert Marksmanship Ribbon  
**SDS**—Safety Data Sheet  
**SDZ**—Surface Danger Zone  
**SEI**—Special Experience Identifier  
**SF**—Security Forces  
**SMC**—Shoot, Move and Communicate  
**SPI**—Special Packaging Instruction  
**T&E**—Traversing and Elevating  
**T3**—Train the Trainer  
**TADSS**—Training Aides, Devices, Simulations and Simulators  
**TC**—Training Circular  
**TDY**—Temporary Duty  
**TO**—Technical Order  
**TRADOC**—Training and Doctrine Command  
**TWS**—Thermal Weapon Sight  
**UFC**—Unified Facilities Criteria  
**UQ**—Unqualified  
**USAFA**—United States Air Force Academy  
**USAFSIA**—United States Air Force Special Investigations Academy  
**USAF**—United States Air Force  
**USC**—United States Code  
**US**—United States  
**UTA**—Unit Training Assembly  
**UTC**—Unit Type Code  
**VAC**—Volts Alternating Current  
**VDZ**—Vertical Danger Zone  
**VTs**—Virtual Training System

### ***Terms***

**Acquisition Category (ACAT)**—Categories established to facilitate decentralized decision-making, execution and compliance with statutorily imposed requirements. The categories determine the level of review, decision authority and applicable procedures.

**Armed**—Equipped with a loaded (live ammunition) firearm.

**Authoring**—A structured written approach to developing all elements for a unit of instruction.

**Basis of Issue Plan**—A document that establishes the distribution of new equipment and associated support items of equipment and personnel, as well as reciprocal displacement of equipment and personnel.

**Capability**—The ability to execute a specified course of action. It is defined by an operational user and expressed in broad operational terms in the format of an Initial Capabilities Document.

**Certification**—A formal indication of an individual's ability to perform a task to required standards.

**Commercial Off-The-Shelf (COTS)**—Commercial items that require no unique government modifications or maintenance over the life cycle of the product to meet the needs of the procuring agency.

**Compatibility**—The capability of two or more items or components of equipment or material to exist or function in the same system or environment without mutual interference.

**Contingency Operations**—A military operation that is either designated by the Secretary of Defense as a contingency operation or becomes a contingency operation as a matter of law (10 USC 101[a][13]). It is a military operation that: a. is designated by the Secretary of Defense as an operation in which members of the Armed Forces are or may become involved in military actions, operations, or hostilities against an enemy of the United States or against an opposing force; b. is created by definition of law. Under 10 USC 101 (a)(13)(b), a contingency operation exists if a military operation results in the (1) call up to (or retention on) active duty of members of the uniformed Services under certain enumerated statutes (10 USC Sections 688, 12301(a), 12302, 12304, 12305, 12406, or 331-335); and (2) the call up to (or retention on) active duty members of the uniformed Services under other (non-enumerated) statutes during war or national emergency declared by the President or Congress.

**Contingency**—An emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response and special procedures to ensure the safety and readiness of personnel, installations and equipment.

**Deployment**—The relocation of forces and material to desired areas of operations. Deployment encompasses all activities from origin or home station through destination, specifically including intra-continental United States, inter-theater, intra-theater movement legs, staging and holding areas.

**DoD Civilian with Equivalent Qualification**—A DoD civilian who has graduated from the AFSC awarding Small Arms or Combat Arms Technical School.

**Embedded Instrumentation**—Data collection and processing capabilities integrated into the design of a system for one or more one or more of the following—diagnostics, testing or training.

**Firearm**—Any weapon designed to expel a projectile through a barrel by the action of a propellant or one you can readily convert to this purpose.

**Firing Line Instructor**—The assigned individual(s) on the firing platform who enforces safety procedures/policies and coaches shooters during range training.

**Firing Line**—The line where SA/LW are fired and where no one may move in front/forward of during firing. A red line located as close as possible to the front of the firing position.

**Firing Position**—The point or location where a weapon, other than demolitions, is placed for firing. (For demolitions, the firing position is the point or location where the firing crew is located during demolition operations).

**Functional Manager**—The office of primary responsibility for a particular Air Force specialty. Examples: AF/A4S for Security Forces; AF/A4C for civil engineers; AF/A1 for personnel and education and training specialists.

**GO/NO GO**—The stage where an individual has gained enough skill, knowledge and experience to perform the tasks without supervision. Meeting the task standard. NO-GO indicates they cannot meet the task standard.

**High Threat Area**—Deployment location where the theater commander requires all personnel be fully qualified to participate in the force protection mission based upon the threat condition. Deployment requirements are usually identified in the deployment tasking order.

**Impact Area**—The land area and associated airspace within a training complex intended to capture or contain ammunition, munitions, or explosives as well as resulting debris, fragments and components from various weapon system employments.

**In-Garrison**—Performing duties at home station or on the installation at a non-deployed location.

**Lessons Learned**—Capitalizing on past errors in judgment, materiel failures, wrong timing or other mistakes to ultimately improve a situation or system.

**Operational Requirements**—User or user representative generated validated needs developed to address mission area deficiencies, evolving threats, emerging technologies or weapons system cost improvements.

**Permanent Deviation (Exceptions)**—when a condition cannot be corrected or when correcting a problem would result in exorbitant costs.

**Program Executive Officer (PEO)**—A military or civilian official who has responsibility for directing several Major Defense Acquisitions programs (MDAPs) and for assigned major systems and non-system acquisition process.

**Range**—An area reserved and normally equipped for qualification/practice in SA/LW delivery and/or shooting at targets.

**Ready Line**—The line located behind the firing line. Serves as a “staging” area for shooters to receive pre-fire range commands. Usually identified by a yellow line located behind the firing line.

**Security Forces/Combat Arms Organizational Commander**—The unit commander of the organization performing the base combat arms function or the unit combat arms function. Usually the Security Forces squadron commander.

**Small Arms and Light Weapons**—Small arms and light weapons are defined as man-portable weapons made or modified to military specifications for use as lethal instruments of war that expel a shot, bullet or projectile by action of an explosive. Small arms are broadly categorized as those weapons intended for use by individual members of armed or Security Forces. They include handguns, rifles and carbines, sub-machine guns and light machine guns. Light weapons are broadly categorized as those weapons designed for use by two or three members of armed or Security Forces serving as a crew, although some may be used by a single person. They include heavy machine guns, hand-held under-barrel and mounted grenade launchers, portable anti-aircraft guns, portable anti-tank guns, recoilless rifles, man-portable launchers of missile and rocket systems and mortars.

**Surface Danger Zone**—The area designed on the ground of a training complex (to include associated safety areas) for the vertical and lateral containment of projectiles, fragments, debris and components resulting from the firing, or detonation of weapon systems to include explosives.

**Tower Operator**—The person who monitors the entire range at all times, paying particular attention to the firing line.

**Trainer**—A trained and certified person who teaches personnel to perform specific tasks through OJT methods. In addition, equipment the trainer uses to teach personnel specified tasks.

**Training Complex**—Includes all firing ranges, SA/LW training facilities, associated impact areas and maneuver training areas within the installation/community boundary.

## Attachment 2

### RISK MANAGEMENT EVALUATION OF EXISTING RANGE FACILITIES

**A2.1. Overview.** Air Force RM is a tool used to assess the risks associated with continued use of existing firing ranges that do not satisfy the minimum criteria outlined in this publication and UFC 4-179-02. For further information on RM, refer to AFI 90-802 and AFPAM 90-803. Combat Arms and base agencies use the guidance and processes for RM along with the criteria identified in this publication and UFC 4-179-02 to determine the condition and corrective actions needed when inspecting Air Force small arms ranges. Additionally, the small arms range inspection checklist in **Attachment 3** provides a listing of some key areas of small arms ranges that should be inspected for potential safety, health or environmental problems. **Note:** All Air Force range criteria is now contained in UFC 4-179-02. Users may obtain UFC 4-179-02 via the USAF Combat Arms, Air Force Network (AFNet), Enterprise Information Services (EIS) website (<https://cs2.eis.af.mil/sites/12150>).

**A2.2. 5-Step RM Process.** RM is a continuous, systematic decision-making tool consisting of five primary steps that define the formal RM process associated with deliberative RM considerations. The five steps of the process are listed and broken down into several sub-steps called “actions” as follows:

A2.2.1. [Step 1] Identify the Hazard. This step has three actions:

A2.2.1.1. Mission/task analysis. (e.g., training personnel to fire weapons)

A2.2.1.2. Listing the hazards. (e.g., fired rounds leaving the range)

A2.2.1.3. Listing the causes. (e.g., baffles are of insufficient thickness)

A2.2.1.3.1. Listing the causes of the hazards is the action where deficiencies or discrepancies are items found to not satisfy the UFC 4-179-02 criteria. A tabular method for recording these actions and steps is prescribed in **paragraph A2.2.2**

A2.2.2. [Step 2] Assess the Risk. This step has four actions:

A2.2.2.1. Assess hazard exposure. Exposure is measured in terms of time, proximity, volume or repetition. (e.g., 1,000 rounds fire weekly)

A2.2.2.2. Assess hazard severity. Determine severity of the hazard in terms of potential impact on personnel, equipment or mission/activity. Hazard severity is determined by the following severity categories:

A2.2.2.2.1. Category I: Catastrophic (i.e., mission failure, death, system loss)

A2.2.2.2.2. Category II: Critical (i.e., major mission degradation, severe injury, or major system damage)

A2.2.2.2.3. Category III: Moderate (i.e., minor mission degradation, injury or system damage)

A2.2.2.2.4. Category IV: Negligible (i.e., little mission degradation, injury, or system damage)



A2.2.2.3. Assess probability. Determine the probability that the hazard will cause a negative event of the severity assessed. Probability may be determined through estimates or actual numbers (if available).

A2.2.2.3.1. Probability A – Frequent, daily, often,  $10^{-1}$  or greater frequency.

A2.2.2.3.2. Probability B – Likely, three weeks, occurs several times,  $10^{-1}$  (10%) to  $10^{-2}$  (1%).

A2.2.2.3.3. Probability C – Occasional, six months, will occur,  $10^{-2}$  (1%) to  $10^{-3}$  (.1%).

A2.2.2.3.4. Probability D – Seldom, five years, could occur,  $10^{-3}$  (.1%) to  $10^{-6}$  (.0001%).

A2.2.2.3.5. Probability E – Unlikely, past five years has not occurred, rarely,  $10^{-6}$  (.0001%) or less.

A2.2.2.4. Complete risk assessment: Combine severity & probability estimates to form a risk assessment for each hazard. Assign a risk assessment level based on the combination of procedures in steps [A2.2.2.2](#) and [A2.2.2.3](#) See [Figure A2.1](#)

Figure A2.1. Sample Risk Assessment Matrix.

Risk Assessment Matrix			PROBABILITY					
			Frequency of Occurrence Over Time					
			A	B	C	D	E	
			Frequent (Continuously experienced)	Likely (Will occur frequently)	Occasional (Will occur several times)	Seldom (Unlikely; can be expected to occur)	Unlikely (Improbable; but possible to occur)	
SEVERITY	Effect of Hazard	Catastrophic (Death, Loss of Asset, Mission Capability or Unit Readiness)	I	EH	EH	H	H	M
		Critical (Severe Injury or Damage, Significantly Degraded Mission Capability or Unit Readiness)	II	EH	H	H	M	L
		Moderate (Minor Injury or Damage, Degraded Mission Capability or Unit Readiness)	III	H	M	M	L	L
		Negligible (Minimal Injury or Damage, Little or No Impact to Mission Readiness or Unit Readiness)	IV	M	L	L	L	L
			Risk Assessment Levels					
			EH=Extremely High   H=High   M=Medium   L=Low					

A2.2.3. [Step 3] Develop controls and make decisions. Effective control measures reduce or eliminate one of the three components (probability, severity or exposure) of risk. Decision makers at the appropriate level choose the best control or combination of controls based on the analysis of overall costs and benefits. This step has five actions:

A2.2.3.1. Identify control options: Each control measures should eliminate or mitigate the risk of a hazard. Controls may be applied using multiple means engineering, physical, administrative or operational methods.

A2.2.3.2. Determine control effects: Select the control options desired for consideration. With controls identified, the hazard should be re-assessed, taking into consideration the effect the control will have on the severity and/or probability. The new estimated value(s) for severity and/or probability and the change in overall risk assessed from the Risk Assessment Matrix should be recorded.

A2.2.3.3. Prioritize the control measures: For each hazard, prioritize those risk controls that will reduce the risk to an acceptable level. The best controls will be consistent with mission objectives and optimize use of available resources (manpower, material, equipment, funding and time).

A2.2.3.4. Select risk controls: For each identified hazard, select those risk controls that will reduce the risk to an acceptable level. The best controls will be consistent with mission/activity objectives and optimum use of available resources (manpower, material, equipment, funding and time).

A2.2.3.5. Make Risk Decisions. Analyze the level of risk for the operation or activity with the proposed controls in place. Determine if the benefits of the operation/activity now exceed the level of risk the operation/activity presents. When a decision is made to assume risk, the factors (cost versus benefit information) involved in this decision should be recorded.

A2.2.4. [Step 4] Implement Controls. Implementation requires commitment of time and resources. Once the risk control decision is made and an implementation plan developed for initiating the controls, assets must be made available to implement the specific controls. This step has three actions:

A2.2.4.1. Make the implementation clear to all parties.

A2.2.4.2. Establish accountability and responsibility for implementing risk-control measures. The accountable person is the one who makes the decision (approves the control measures) and hence, the right person (appropriate level) must make the decision.

A2.2.4.3. Provide support to those tasked to implement the control measures.

A2.2.5. [Step 5] Supervise and Evaluate. This step involves the determination of the effectiveness of risk controls throughout the operation. There are three actions in this step:

A2.2.5.1. Supervise the implementation of the control measures to ensure controls are effective and remain in place; identify changes requiring further RM; and action is taken to correct ineffective risk controls.

A2.2.5.2. Evaluate the effectiveness of the control measures risk reduction and cost implication. Process evaluation should be systematic. Establish metrics/tools to accurately measure effectiveness.

A2.2.5.3. Provide feedback to continually make improvements to the RM process. Feedback informs all involved as to how the implementation process is working and whether or not the controls were effective. The feedback loop completes the circular RM process and validates successful risk reduction or identifies the need for additional mitigation actions.

**A2.3. Formal Risk Assessment.** A formal risk assessment succinctly documents the results of the deliberate 5-Step RM process and supports follow-on decision-making processes. Decision options typically involve determining whether one or more particular course of action should be pursued (e.g., implementing equipment improvements, safety or warning device improvements, operational improvements, technical improvements, policy/procedure improvements) and whether a risk should be accepted, mitigated or rejected. A risk assessment supports decision-making processes by objectively identifying a hazard, assessing its risk, thoroughly analyzing potential options for mitigation and making a recommendation. The AF Form 4437 can be used to conduct the formal risk assessment. Refer to [Table A2.1](#) and [Figures A2.2](#) through [A2.5](#), for examples of the 5-Step RM process with some common small arms range discrepancies and a completed AF Form 4437. Unit commanders should include the formal risk assessment resulting from their RM process when submitting requests for deviation from design criteria.

**Table A2.1. Small Arms Range RM Process Example.**

Discrepancy	RM STEP 1	RM STEP 2			RM STEP 3		RM STEP 4	RM STEP 5
	Hazard	Severity	Probability	Risk	Control Options	Decision (from Risk Assessment Matrix)	Implement	Supervise/ Evaluate
Vertical baffles are not faced with at least 30mm of fire retardant/pressure treated plywood.	Potential to shoot through the baffle and bullets ricochet leave the range containment.	I	D	H	Face Vertical Baffles with 30mm of fire retardant/pressure treated plywood.	Install correct plywood. I,E=M	Install 30mm of fire retardant/pressure treated plywood.	Ensure repairs and materials are in accordance with UFC 4-179-02.
Projectiles impacting sidewalls creating large craters.	Ricochets towards firing line.	II	C	H	Re-position firing points to minimize the projectiles impacting the sidewalls.	Firing points repositioned. in accordance with UFC 4-179-02. Will yield: II,E=L	Reposition firing points in accordance with UFC 4-179-02.	Verify projectiles no longer impact the sidewalls.
Sidewall berm has an opening that is visible to some firing positions.	Bullets leave the range containment.	I	A	EH	Fill in the opening or establish a procedure to not use those firing positions.	Fill opening. Will yield: IV,D=L.	Fill in opening.	Re-inspect to verify opening has been closed and projectiles are longer leaving range containment.

Sidewall berm has an opening that is visible to some firing positions.	Lead pollution, outside of containment.	II	A	EH	Fill in the opening or establish a procedure to not use those firing positions; lead-free ammunition.	Fill opening. will yield: IV,D=L;	Fill in opening. Prevent rounds from leaving and lead pollution.	Re-inspect to verify opening has been closed and lead pollution is no longer occurring.
Surface water runoff can leave the range.	Lead pollution, outside of containment.	II	C	H	Water monitoring program, including surface water samples and groundwater monitoring wells or use lead-free ammunition.	Lead Free Ammo. will yield: IV, E=L	Use lead free ammunition.	Ensure lead-free ammunition is used and continue to monitor results from Water Monitoring program.

Figure A2.2. Sample AF Form 4437 (Page 1).

DELIBERATE RISK ASSESSMENT WORKSHEET (Page 1)					
1. Mission / Task Description: Small Arms Qualification Training for In-Garrison/Contingency/Permanent Change of Station Requirements			2. Date (DD/MM/YYYY) 8 Apr 2015		
3. Prepared By					
A. Last Name /First Name / Middle Initial Browning, John		B. Rank / Grade MSgt		C. Duty Title / Position NCOIC, Combat Arms	
D. Unit 123 Security Forces Squadron		E. Work Email john.browning.8@us.af.mil		F. Phone DSN /COMM DSN: 945-5424/COMM: (210) 925-5424	
G. UIC / CIN (as required)		H. Training Support / Lesson Plan or OPORD (as required)		I. Signature of Preparer	
5-STEPS OF RM: (1) IDENTIFY HAZARDS (2) ASSESS HAZARDS (3) DEVELOP CONTROLS & MAKE DECISIONS (4) IMPLEMENT CONTROLS (5) SUPERVISE & EVALUATE					
4. Sub-task / Sub-Step of Mission / Task	5. Hazard	6. Initial Risk Level	7. Control	8. How to Implement / Who will Implement	9. Residual Risk Level
RM Range Checklist item B.2. IAW ETL 11-18, para 7.5.5.2.	Ricochets/Backsplash: Vertical baffles are not faced with at least 30mm of fire retardant/pressure treated plywood.	EH (I, A)	Vertical Baffles are faced with 30mm of untreated plywood. Unit is purchasing fire retardant plywood. Submitting 332 to install in Sept 15.	How: Submit 332 Who: NCOIC, Combat Arms	High (II, A)
RM Range Checklist item B.11. IAW ETL 11-18 para 7.5.6.	Ricochets towards firing line: Projectiles impacting sidewalls have creating large craters.	EH (I, A)	Interim: Position shooters on firing line to minimize the projectiles impacting the sidewalls.	How: Instructor directed/brief students Who: NCOIC, Combat Arms	High (II, B)
RM Range Checklist item B.13.	Ricochets: Vertical steel support poles are not faced with at least 30mm of fire retardant/pressure treated plywood.	EH (I, A)	Support poles are faced with 30mm of untreated plywood. Unit is purchasing fire retardant plywood. Submitting 332 to install in Sept 15.	How: Submit 332 Who: NCOIC, Combat Arms	High (III, A)
RM Range Checklist item H.10. IAW ETL 11-18, para 7.1.5.7.	The firing platform does not have clear distances for the length of the firing line. Obstruction include: support beams and the control tower.	M (III, C)	Instructor will use additional caution when operating in the vicinity of tower and support beams. Students will be briefed on these obstructions.	How: Brief instructors/students Who: NCOIC, Combat Arms	Medium (III, C)
RM Range Checklist item D.5. IAW ETL 11-18 para 7.2.12.3.	Barriers are not in place to prevent unauthorized access to range complex.	M (II, D)	Longterm: Install warning signs based AMW/CC signed RM IAW ETL 11-18.	How: Install warning signs IAW 11-18 Who: 123 CES	Low (II, E)
Additional entries for Items 5-9 are provided on Page 2					
10. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED:					
<input type="checkbox"/> Extremely High <input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low					
11. OVERALL SUPERVISION PLAN and RECOMMENDED COURSE OF ACTION (COA)					
12. APPROVAL / DISAPPROVAL of MISSION / TASK					
<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE		ADDITIONAL GUIDANCE:			
A. Last Name /First Name / Middle Initial Colt, Samuel		B. Rank / Grade Colonel		C. Duty Title / Position Commander, 123 ABW	
D. Signature of Decision Authority					

Figure A2.3. Sample AF Form 4437 (Page 2).

DELIBERATE RISK ASSESSMENT WORKSHEET (Page 2 of 3)					
4. Sub-task / Sub-Step of Mission / Task	5. Hazard	6. Initial Risk Level	7. Control	8. How to Implement / Who will Implement	9. Residual Risk Level
RM Range Checklist item D.6. IAW ETL 11-18 para 7.2.12.3	Fencing is not in place to prevent unauthorized access to range complex.	M (II, D)	Longterm: Install warning signs based AMWICC signed RM IAW ETL 11-18.	How: Install warning signs IAW Who: 123 CES	Low (II, E)
RM Range Checklist item H.7.	The control tower is not placed to the rear of the 14 foot firing platform.	L (III, D)	Longterm: Brief instructors and students of the tripping hazard.	How: Brief instructors/students Who: NCOIC, Combat Arms	Low (III, D)
RM Range Checklist item H.10. IAW ETL 11-18 para 7.2.11.1.3.	The tower does not have an unrestricted view of the firing line.	M (III, B)	Longterm: Submit work order to install windows to allow panoramic view of firing line.	How: Install Window Who: 123 CES or Contractor	Low (IV, E)
RM Range Checklist item H.11.	The overhead baffles are not 8 feet above the firing line/range floor.	H (III, A)	Longterm: Submit a work order to install angled baffling 8 feet above the range floor.	How: Install angled baffling Who: 123 CES or Contractor	Low (IV, E)
RM Range Checklist item I.2.	The exhaust fan system is being impacted by ricochets.	M (IV, A)	Longterm: Place a work order to install angled baffling.	How: Install angled baffling Who: 123 CES or Contractor	Low (IV, E)
				How: Who:	
				How: Who:	
				How: Who:	
				How: Who:	
				How: Who:	
				How: Who:	
				How: Who:	
				How: Who:	
				How: Who:	
				How: Who:	

Figure A2.4. Sample AF Form 4437 (Page 3).

DELIBERATE RISK ASSESSMENT WORKSHEET (Page 3 of 3)							
RISK ASSESSMENT MATRIX			PROBABILITY				
			Frequency of Occurrence Over Time				
			A Frequent (Continuously experienced)	B Likely (Will occur frequently)	C Occasional (Will occur several times)	D Seldom (Unlikely; can be expected to occur)	E Unlikely (Improbable; but possible to occur)
SEVERITY OF HAZARD	Catastrophic (Death, Loss of Asset, Mission Capability or Unit Readiness)	I	EH	EH	H	H	M
	Critical (Severe Injury or Damage, Significantly Degraded Mission Capability or Unit Readiness)	II	EH	H	H	M	L
	Moderate (Minor Injury or Damage, Degraded Mission Capability or Unit Readiness)	III	H	M	M	L	L
	Negligible (Minimal Injury or Damage, Little or No Impact to Mission Capability or Unit Readiness)	IV	M	L	L	L	L
			Risk Assessment Levels				
			EH=Extremely High H=High M=Medium L=Low				
13. Risk Assessment Review—To be conducted when risk assessment applies to on-going operations / activities							
A. Date	B. Last Name	C. Rank / Grade	D. Duty Title / Position	E. Signature of Reviewer			
14. Feedback and Lessons Learned							
15. Additional Comments or Remarks							
Checklist Item B.2. Longterm Control: Close range 1-30 Sep 14 to reface baffles IAW ETL 11-18. 123 CES or Contractor. Low (IV, E) Checklist Item B.11. Longterm Control: Submit a work order to reface the sidewalls IAW ETL 11-18. 123 CES or Contractor. Low (IV, E) Checklist Item B.13. Longterm Control: Close range 1-30 Sep 14 to reface support poles or remove if possible. 123 CES or Contractor. Low (IV, E)  NOTE: Current overall risk level is High (III, A), however when all longterm controls are implemented the overall risk level will be Low (IV, E).							

Figure A2.5. Sample AF Form 4437 (Page 4).

Instructions for Completing Form	
1. <b>Mission/Task Description:</b> Briefly describe overall Mission, or Task that the Risk Assessment is being conducted for.	9. <b>Residual Risk Level:</b> After controls are implemented, determine resulting probability, severity, and revised Risk Level.
2. <b>Date (DD/MM/YYYY):</b> Self Explanatory.	10. <b>Overall Risk After Controls are Implemented:</b> Assign an overall Risk Assessment Level. This is the highest Residual Risk Level (Block 9).
3. <b>Prepared By:</b> This section is self explanatory and will be filled out by the individual conducting the training/operation and deliberate risk assessment; (UIC = Unit Identification Code, CIN = Course ID Number)	11. <b>Supervision Plan and Recommended Course of Action (COA):</b> Completed by preparer. Identify specific tasks/levels of responsibility for supervisory personnel and provide the decision authority with a recommend COA for approval or disapproval based upon the overall risk assessment and impact to mission and personnel.  "Risk vs. Reward" consideration based on real-time issues.
4. <b>Sub-task/Sub-Step of Mission/Task:</b> Briefly describe any Sub-Tasks associated with Primary Task that warrant risk mitigation consideration.	12. <b>Approval Disapproval of Mission/Task:</b> Items A-D are self explanatory. Final approval authority provides approval or disapproval for Mission/Task based upon overall risk assessment and supervisory plan. Additional guidance included as necessary.
5. <b>Hazard:</b> Enter specific hazards related to the Sub-Task.	13. <b>Risk Assessment Review:</b> Should be conducted on a regular basis. Reviewers should have sufficient oversight of the mission/activity and controls to make valid remarks and inputs regarding needed changes or adjustments (as necessary). Once Residual Risk rises above that already approved, operations should cease until the appropriate approval authority is contacted and approves continued operations.
6. <b>Initial Risk Level:</b> Using the Risk Assessment Matrix, determine probability, severity and associated Risk Level; enter level into column.	14. <b>Feedback and Lessons Learned:</b> Provide specific inputs on the effectiveness of risk controls and their contribution to mission success or failure. Feedback—recommendations for new/revised controls, actionable solutions or alternate actions is essential for effective RM. Ensure valid lessons learned are submitted and briefed as necessary to affected personnel.
7. <b>Control:</b> Enter risk mitigation resources/controls identified to abate or reduce risk relevant to the hazard identified in Block 5.	15. <b>Additional Comments or Remarks:</b> Provide any additional comments, remarks or information as required to support the risk assessment. If this section is to be used as a continuation of Block 14, strike through the block number and title.
8. <b>How to Implement/Who Will Control:</b> Provide brief description of sub-task means of employment (IE... OPORD, Briefing, Rehearsal) and the name of the individual, unit or office that has primary responsibility for control implementation.	<b>Additional Guidance:</b> Block 4-9 continuance page may be reproduced as necessary for processing of all sub-tasks / sub-steps of mission / asks. If a complete page is not utilized, "NOTHING FOLLOWS" should be written into the first unused row in order to identify the last sub-task / sub-step.



## Attachment 3

## SMALL ARMS RANGE INSPECTION CHECKLIST

**A3.1. Overview.** Combat Arms and other base agencies use the range inspection checklist in [Table A3.1](#), along with AFI 90-802, AFPAM 90-803, the current Small Arms Range Design and Construction Engineering Technical Letter/Air Force Small Arms Range Facility Criteria, as well as this publication, to conduct range safety inspections and to verify compliance with design criteria. This checklist is not all-inclusive and units should reference the other sources listed above, along with any guidance provided by manufacturers, to ensure all pertinent items are inspected and maintained. Use RM principles and procedures to determine appropriate actions when problems are identified.

**A3.2. Development of Local Checklist.** With the assistance of other base agencies (e.g., CE environmental, safety, BE), Combat Arms modifies this checklist to identify items that apply to their specific range, add items that are not already on the list and remove items that are not needed. Combat Arms should update the local checklist annually and when changes occur that may alter work practices or when conditions exist that indicate the potential to cause a health, safety or environmental risk.

**Table A3.1. Small Arms Range Inspection Checklist.**

Small Arms Range Inspection Checklist
<b>Section A. Range Information.</b>
<b>Range Name/Location:</b>
<b>Range Type (Partially Contained, Fully Contained, etc.):</b>
<b>Target Distance(s):</b>
<b>Calibers/Types of Rounds Approved for Use:</b>
<b>Section B. Category I: Catastrophic Hazard Severity (Projectile Containment).</b>
<p><b>B.</b> Range construction/design should ensure projectiles do not leave the range or range SDZ and should ensure rounds do not produce hazardous ricochets within the range. Answering “No” to the questions in this section indicates a <b>Category I (Catastrophic)</b> hazard severity. Range closure until the discrepancy is resolved is highly recommended. <b>Note:</b> Some older ranges were designed to allow non-direct fired projectiles (ricochets) to leave the range at steep angles because the associated Surface Danger Zone (SDZ) was large enough to contain the bullets, mitigating the risk. For partially contained baffled ranges, if the range has an adequate SDZ, some of the risks associated with non-direct fired projectiles leaving the range, may have already been mitigated. Direct-fired rounds should never escape the range on any type of baffled range.</p>

		Yes	No	N/A
1.	On a baffled range, is the range constructed to prevent any “Blue Sky” visible from all firing points and positions?			
2.	On a baffled range with vertical baffles, are the baffles faced with at least 30 mm of fire resistant treated (FRT) soft wood?			
3.	On a fully contained baffled range with angled overhead baffles with bottom edges point toward the target line, do the baffles overlap by minimum of 6 inches?			
4.	On a range with an earthen backstop, is the backstop designed to stop a direct fired round by embedding it into the backstop, or by deflecting a ricochet into a bullet “catch”?			
5.	On a range with an earthen backstop, that uses a bullet catch, does the bullet catch contain all ricochets?			
6.	If a range has vehicle access points or gates down-range, are these areas constructed in such a way as to not allow access to areas subject to direct-fired rounds?			
7.	Are armor piercing, intentional incendiary munitions, bullets weighing greater than 500 grains, or bullets traveling faster than 980 meters per second prohibited from being fired on ranges using metal backstops?			
8.	At indoor ranges, when using a pre-existing building, are all pre-existing openings filled with bricks or masonry?			
9.	On a machine gun tube range, do rounds fired at the maximum elevation permitted by the tube intersect the backstop at least 2 meters from the top?			
10.	If the range floor is concrete, is it constructed of smooth concrete and does it slope toward the target line to eliminate ricochet hazards to personnel firing on the firing line?			
11.	If side containment walls are in place, are they constructed with a surface that prevents ricochets back towards the firing line?			
12.	Are concrete block sidewalls filled solid with grout?			
13.	On a range with vertical, steel support poles, are the poles faced with at least 30 mm of FRT soft wood?			
14.	On an M203 range, when metal targets are positioned on multi-bay ranges, are targets positioned to ensure they do not create a ricochet hazard for other ranges?			
15.	On a range with a bullet trap system, are exposed vertical support structures within the backstop, faced with angled steel facings to ensure bullets are deflected into the deceleration chamber and not back to the firing line?			
<b>Section C. Category II: Critical Hazard Severity (Projectile Containment).</b>				
<b>C.</b> Range construction/design should ensure projectiles do not leave the range and should ensure rounds do not produce hazardous ricochets within the range. Answering “No” to the				

questions in this section indicates a <b>Category II (Critical)</b> hazard severity. Range closure until the discrepancy is eliminated or immediate mitigation should be considered.				
1.	Are large rocks removed from the firing range floor to eliminate ricochet hazards?			
2.	Are ranges built to ensure ground baffles are not used? (Short of complete removal of ground baffles, their presence may be mitigated by ensuring they are faced with at least 30 mm of FRT soft wood.)			
3.	On a baffled range with angled baffles, are overhead baffles angled at 12 to 32 degrees to eliminate ricochet rounds from leaving the range?			
4.	On a baffled range, are the canopy baffles constructed to extend down range far enough to prevent rounds from escaping the range between the first overhead baffle and the canopy?			
5.	On a baffled range, does the steel used on overhead and canopy baffles meet the minimum standards for the largest caliber being fired on the range?			
6.	On a range with an earthen backstop, is the backstop faced with soil where 100 percent passes the #4 sieve test for a depth of 2 meters?			
7.	On a baffled range that includes an earthen backstop, does a line drawn from the leading edge of the firing line to the bottom edge of the last down-range baffle, intersect the earthen backstop at least two meters from the top?			
8.	Does the protective construction on continuous walls extend both down range and to the rear of the firing line to match the canopy baffle extension?			
9.	On a range with earthen side berms, are the berms constructed with material (sand, silty sand, or clayey sand) to a depth of 2 meter, with a maximum particle size allowed by the #4 sieve test and a maximum 40% passing the #200 sieve test?			
10.	On a machine gun tube range, are the tubes positioned correctly so the muzzle of the weapon is placed at least 6 inches into the tube?			
11.	On a machine gun tube range, are the tubes designed to ensure the muzzle of the gun is as close to the center of the tube as possible?			
12.	When using a bullet catch on a machine gun tube range, do rounds fired from the gun, at the maximum elevation permitted by the tube, intersect the backstop at least 2 feet below the bullet catch?			
13.	On a range with a steel baffles or steel bullet trap system, have all steel plate joints been ground to ensure there are no gaps exceeding 1.6 mm between them or have joints been covered with lap plates of the same material?			
14.	If barricades are made of steel or concrete, are they covered with a soft wood to prevent ricochets?			
15.	If the range floor is pea gravel, is the gravel at least 6 inches deep with less than 10 % of the gravel exceeding 3/8 inch in diameter			

	and does the pea gravel extend from the firing line to the backstop?			
16.	Has the excessive lead test (rod test) been conducted within the last 12 months?			
17.	If the backstop fails the excessive lead test, have steps been taken, such as mining or adding additional soil, to eliminate the ricochet hazard?			
18.	On an M203 range, are metal targets constructed to ensure rounds do not ricochet back towards the firing line?			
19.	On a range with earth backstop deflector plates, are the backstop deflector plates placed at angles of at least 30 to 42 degrees from horizontal?			
20.	On an impact range, are targets used for other weapon systems positioned so they do not interfere with other training or pose a ricochet hazard?			
21.	On a range with a backstop deflector plates, are exposed steel plate edges chamfered to a 45-degree angle or to a fillet approximately 4mm thick?			
<b>Section D. Category II: Critical Hazard Severity (Exterior Range Safety).</b>				
<b>D.</b> Range construction/design should ensure personnel exterior to the range are as safe as possible. Answering “No” to the questions in this section indicates a <b>Category II (Critical)</b> hazard severity. Range closure until the discrepancy is eliminated or immediate mitigation should be considered.				
1.	On an impact range, is the SDZ equal to 100 percent of the maximum range of the most powerful ammunition authorized for the range?			
2.	On a machinegun tube range, is the SDZ at least 700 meters?			
3.	On a partially contained baffled range, is the SDZ equal to 50 percent of the maximum range of the most powerful ammunition authorized for the range?			
4.	Does the vertical danger zone (VDZ) meet the minimum required height for the most powerful ammunition used on the range?			
5.	Are barriers in place to prevent unauthorized access into the firing range SDZ?			
6.	Are fences placed to prevent unauthorized personnel access into the firing range complex?			
7.	Are the range complex and the SDZ(s) reflected on the base master plan map?			
8.	Is the maximum range/caliber of the most powerful ammunition authorized for use on the firing range clearly posted for all personnel to see?			
9.	If fire doors are required, are all doors equipped with hardware to allow for opening from the inside only?			

10.	On a new range, are all doors or windows prohibited forward of the firing line?			
11.	At an indoor range, when using a pre-existing building, are all pre-existing doors and windows bolted from the inside and protected by baffles?			
<b>Section E. Category III: Moderate Hazard Severity (Environmental).</b>				
<p><b>E.</b> Range construction/design should eliminate, reduce or mitigate environmental hazards such as lead, heavy metal and other contaminants/hazards that are produced during the operation of small arms ranges. Answering “No” to the questions in this section indicates a <b>Category III (Moderate)</b> hazard severity and risk of environmental contamination. Range closure may be considered until the discrepancy is eliminated, but immediate mitigation should be accomplished.</p>				
1.	Are fired rounds, lead dust, lead fragments and other residue contained to ensure they do not land in waterways, wetlands, or others areas where the water is unprotected or processed through non-filtered drains (primary impact area and/or range fan)?			
2.	Is the range floor graded properly to ensure standing water does not collect?			
3.	On a range using a water trap system, does the water trap have a water supply, drain, circulation pump and a filtration system?			
4.	Is surface water runoff from the range floor prevented from entering surface water bodies?			
<b>Section F. Category III: Moderate Hazard Severity (Occupational Health).</b>				
<p><b>F.</b> Range construction/design should eliminate, reduce or mitigate occupational lead contamination and exposure to health hazards. Answering “No” to the questions in this section indicates a <b>Category III (Moderate)</b> hazard severity and risk of occupational health hazards/unacceptable exposure to hazards for shooters and range personnel. Range closure may be considered until the discrepancy is eliminated, but immediate mitigation should be accomplished.</p>				
1.	Has the Combat Arms NCOIC coordinated with BE to ensure an evaluation of the ventilation system has been accomplished and that the system is operating properly to adequately control potential hazards?			
2.	When enclosing the firing line on baffled ranges is the airflow and quantity tested to ensure sufficient airflow and ventilation is still maintained?			
3.	Are the range floors, wall and surfaces free of carpet or other material (i.e. blown on acoustical material) where lead dust can be trapped or which is not conducive to lead dust removal?			
4.	Perform smoke test to validate the air flows down range away from the firing line.			
5.	Check all range floor cracks and joints for sealant.			

<b>G. Category III: Moderate Hazard Severity (Sound/Noise Exposure).</b>			
<p><b>G.</b> Ranges should be located where environmental nuisance noise is as low as possible and constructed to mitigate occupational noise exposure. The BE Flight/Element determines the level of hearing protection required, based on range conditions and sound levels during firing. Answering “No” to the questions in this section indicates a <b>Category III (Moderate)</b> hazard severity and occupational health risk for shooters and range personnel. Range closure may be considered until the discrepancy is eliminated, but immediate mitigation should be accomplished.</p>			
1.	Is ambient noise level below 85 dBA?		
2.	Is impulse (gunfire) noise below 160 dBA?		
3.	When constructing a new facility, are down range block walls left unpainted?		
4.	Is the range located where environmental nuisance noise impact adjacent facilities and their mission?		
5.	Are instructors and shooters required to wear hearing protection during range live-fire operations?		
6.	Has the Combat Arms NCOIC implemented/enforced the BE HRA recommendations to ensure hearing protection of all personnel?		
7.	Has the Combat Arms NCOIC coordinated with BE to ensure that hearing protection provides adequate protection?		
8.	Is sound absorption material in indoor ranges installed to reduce the reverberation rate to below 1.5 seconds?		
9.	Inspect the condition of interior sound absorbing materials.		
<b>H. Category III: Moderate Hazard Severity (Ground/Range Safety).</b>			
<p><b>H.</b> Range construction/design should eliminate, reduce or mitigate potential for injuries to range personnel or shooters. Answering “No” to the questions in this section indicates a <b>Category III (Moderate)</b> hazard severity and increased risk of safety mishaps. Discrepancies should be eliminated or mitigated as soon as possible.</p>			
1.	Is the depth of the firing platform at least 14 feet?		
2.	Is there 5 feet of space between the outermost shooting lanes (first and last firing point) and the sidewalls?		
3.	Are lighting levels provided as specified in UFC 4-179-02?		
4.	Is the firing line constructed to eliminate tripping hazards?		
5.	Does the range floor slope to the target line to ensure proper drainage?		
6.	Are firing positions on the range 5 feet from center to center?		

7.	Is the firing range control tower/booth placed to the rear of the firing platform to eliminate firing platform encroachment?			
8.	Is the centerline of targets between 6 inches and 60 inches above the firing platform?			
9.	Are targets for each firing lane fully visible from all shooting positions on the designated firing point?			
10.	Does the placement of the control tower allow for an unrestricted view of all firing positions on the firing line, as well as the entire down range area of the range?			
11.	Is the bottom of the canopy baffle and overhead baffles at least 8 feet above the firing line/range floor to allow a clear and unobstructed view of the targets?			
12.	On a machine gun tube range, are the tubes at least 50 inches inside diameter and 24 feet long?			
13.	On a machine gun tube range, are the tubes separated a minimum of 12.14 feet from center to center?			
14.	On a machine gun tube range, are the tubes sloped approximately 6 inches toward the target line for proper drainage?			
15.	On a machine gun tube range, are the tubes positioned so a recess of 3 inches deep can be provided to accept a tripod?			
<b>I. Category IV: Negligible Hazard Severity (Utilities).</b>				
<b>I.</b> Range construction/design should ensure utilities are protected from damage. Answering “No” to the following questions indicates a <b>Category IV (Negligible)</b> hazard severity and risk of facility damage. Discrepancies should be eliminated or mitigated as soon as possible.				
1.	Are all utilities that are located down range, protected from direct-fired rounds and ricochets?			
2.	Are the openings for heating, ventilation and air conditioning located behind baffles to prevent damage caused by bullets?			
3.	Are new buildings constructed to ensure all pipes and conduits are concealed in the walls, above ceilings, under floors, or behind protective baffles?			