

Administrative Changes to AFI 36-2654, *Combat Arms Program*

OPR: HQ USAF/A4SX

References throughout to “AFMAN 36-2227, Volume 1, *Combat Arms Training Programs Individual Use Weapons*, and Volume 2, *Combat Arms Training Programs Crew Served Weapons*,” are hereby changed to “AFMAN 36-2655, *USAF Small Arms and Light Weapons Qualification Programs*.”

References throughout to “AFMAN 31-229, *USAF Weapons Handling Manual*,” are hereby changed to “AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures*.”

The address for recommending changes in the opening paragraph “HQ USAF/A4SX, 1517 Billy Mitchell Blvd, Joint Base San Antonio-Lackland, TX 78236-0119,” is hereby changed to “HQ USAF/A4SX, 1030 Air Force Pentagon Suite 5E1040 Washington DC 20330-1030.”

Delete sentence, “Do not use the Air Force Innovative Development through Employee Awareness (IDEA) Program to suggest changes to Air Force qualification courses of fire” from opening paragraph on page 2.

Change, “Special Operations Weather Team Airmen (1W0X1)/Officers (15WX)” to “Special Operations Weather Team Airmen (1W0X2)” in paragraph 5.5.1.

Delete, “Battlefield Weather Airmen (1W0X1)/Officers (15WX)” from the definition of Battlefield Airmen AFSCs in paragraph 5.5.1.

23 November 2016

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

AIR FORCE INSTRUCTION 36-2654

13 JANUARY 2016



Personnel

COMBAT ARMS PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Department of Defense Directive (DoDD) 5210.56, *Carrying of Firearms and the Use of Force by DoD Personnel Engaged in Security, Law and Order, or Counterintelligence Activities*, Air Force Policy Directive (AFPD) 36-26, *Total Force Development* and supports Air Force Instruction (AFI) 31-117, *Arming and Use of Force by Air Force Personnel*. This publication requires the collection and or maintenance of information protected by the Privacy Act (PA) of 1974. The authorities to collect and or maintain the records prescribed in this publication are Title 10 United States Code Section 8013 (10 USC § 8013), *Secretary of the Air Force*; DoD Instruction (DoDI) 7730.47, *Defense Incident Based Reporting System (DIBRS)*; AFI 31-120, *Security Forces Systems and Administration*; 18 USC §, Section 922 note, *Brady Handgun Violence Prevention Act*; 28 USC, Section 534 note, *Uniform Federal Crime Reporting Act*; 42 USC, Section 10601 et seq., *Victims Rights and Restitution Act of 1990*; and Executive Order 9397 (SSN). System of Records Notice (SORN) F031 AF SF B, *Security Forces Management Information System (SFMIS)*, applies. Forms affected by the PA have an appropriate PA statement. The applicable Privacy Act System Notice is available online at <http://dpcl.d.defense.gov/Privacy/SORNsIndex/tabid/5915/Category/11159/department-of-the-air-force.aspx>. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the Air Force Records Disposition Schedule (RDS) in the Air Force Records Information Management System (AFRIMS). 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 36-2227, Volume 1, *Combat Arms Training Programs Individual Use Weapons*, and Volume 2, *Combat Arms Training Programs Crew Served Weapons*. **Note:**

These publications will be replaced 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 Manpower, Personnel and Services (AF/A1) develops policy for the Air Force Combat Arms Program. This publication may be supplemented at any level; all major command (MAJCOM) level supplements must be approved by the Human Resource Management Strategic Board (HSB) prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. Refer recommended changes and questions about this publication to HQ USAF/A4SX, 1517 Billy Mitchell Blvd, Joint Base San Antonio-Lackland, TX 78236-0119, using AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional’s chain of command. Do not use the Air Force Innovative Development through Employee Awareness (IDEA) Program to suggest changes to Air Force qualification courses of fire. This publication applies to Air Force Reserve Command (AFRC) units and the Air National Guard (ANG).

SUMMARY OF CHANGES

This document is substantially revised and needs to be completely reviewed. This publication replaces AFI 36-2226 and major changes include, addition of waiver authority Tiering and the option for commanders to designate a percentage of arming group B personnel for annual pre-deployment qualification training. Guidance that is more specific was added to assist field units with inspecting small arms ranges and conducting the risk management process to identify the severity of range problems. Responsibilities of MAJCOM Combat Arms Program Managers were removed and realigned under the Air Force Security Forces Center (AFSFC) and some AFSFC responsibilities were moved to HQ USAF/A4SX Combat Arms. **Note:** AFMAN 36-2227, Volume 1, *Combat Arms Training Programs Individual Use Weapons*, and Volume 2, *Combat Arms Training Programs Crew Served Weapons* will be replaced with AFMAN 36-2655, *USAF Small Arms and Light Weapons Qualification Programs*.

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Chapter 1

RESPONSIBILITIES

1.1. Headquarters USAF, Deputy Chief of Staff (DCS) for Logistics, Engineering and Force Protection, Director of Security Forces (HQ USAF/A4S) will:

- 1.1.1. Establish and approve policies related to the USAF Combat Arms Program.
- 1.1.2. Develop field and organizational-level maintenance and repair policies for Air Force small arms and light weapons (SA/LW).
- 1.1.3. Develop and review maintenance policies, procedures and range safety criteria for SA/LW introduced into the Air Force inventory.
- 1.1.4. Manage waiver authority for the USAF Combat Arms Program.
- 1.1.5. Manage Air Force Specialty Code (AFSC) 3P0X1B, SEI 312 and DoD civilian equivalent personnel to ensure sufficient numbers of personnel to support the USAF Combat Arms Program.
- 1.1.6. Assist and coordinate with appropriate Functional Area Managers (FAM) to submit programming initiatives and obtain funding for new or updated SA/LW or related equipment.
- 1.1.7. Recognize and ensure the unique surface combat capabilities of Battlefield Airmen are completely supported in the USAF Combat Arms Program, through facilities, policies and procedures.

1.2. Headquarters USAF, DCS for Logistics, Engineering and Force Protection, Directorate of Security Forces, Strategy, Readiness and Force Development Division, Combat Arms Policy (HQ USAF/A4SX) will:

- 1.2.1. Develop policies, procedures and instructions for the USAF Combat Arms Program consistent with DoD and Air Force Policy Directives.
- 1.2.2. Review for approval all MAJCOM and/or Air Force Installation and Mission Support Center (AFIMSC) supplements to this publication.
- 1.2.3. Develop field and organizational-level maintenance and repair policies for Air Force SA/LW.
- 1.2.4. Develop maintenance policies, procedures and range safety criteria for all Air Force SA/LW.
- 1.2.5. Develop small arms range design requirements and forward to Air Force Civil Engineer Center (AFCEC) for implementation in applicable guidance or master range plan. Approval authority for base/MAJCOM requests for deviation/waiver from Combat Arms facility criteria, after MAJCOM and AFSFC review and concurrence. Coordinates deviation/waiver requests with AFCEC for review.
- 1.2.6. 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.

1.3. Air Force Installation and Mission Support Center (AFIMSC), Air Force Security Forces Center, Weapons Management Branch, Combat Arms (AFSFC/FGWL) will:

- 1.3.1. Develop SA/LW training and qualification programs, establish qualification training criteria/standards and review/approve SA/LW training programs conducted at formal training courses and non-Security Forces (SF), readiness training centers/expeditionary skills training courses (e.g., Common Battlefield Airmen Training, Air Advisor Academy).
- 1.3.2. Coordinate programming for sufficient numbers of SA/LW and munitions to support the USAF Combat Arms Program.
- 1.3.3. Manage Combat Arms training munitions requirements. Provide guidance on the distribution of munitions to support Combat Arms mission requirements.
- 1.3.4. Assist career field managers with training development to support career field SA/LW proficiency/sustainment training programs.
- 1.3.5. Review facility criteria (e.g., firing ranges, offices, classrooms, maintenance rooms, storage areas) and provide guidance to MAJCOMs on firing range rehabilitation, renovation and new construction. Coordinate with MAJCOM/A4S staff on range projects. Approve all new range designs and major renovations (changes to the type or function of the range). This approval also applies to modular, portable or trailer type ranges.
- 1.3.6. Review base requests for deviations/waivers from Combat Arms facility criteria, after MAJCOM review. Coordinate deviation/waiver requests with AFCEC for review and send recommendations to HQ USAF/A4SX, Combat Arms Policy for consideration.
- 1.3.7. Provide technical solutions and recommendations to the SF Equipment and Weapons Configuration Board (EWCB) for security forces SA/LW requirements. Provide technical solutions and recommendations to the Air Force Life Cycle Management Center/Small Arms Program Office, Robins AFB for approval and authorization of SA/LW accessories for Air Force use. Include new accessories in Air Force SA/LW qualification programs. Provide guidance to these organizations for acquisition of new SA/LW.
- 1.3.8. Research and develop innovative SA/LW, accessories and range solutions using existing and emerging technology. Provide recommendations to use existing Air Force or DoD assets to meet mission needs or pursue acquisition of non-developmental item (NDI)/commercial-off-the-shelf (COTS) solutions if they are known and available from industry. Coordinate with the Joint Service Small Arms Synchronization Team (JSSAST) and Joint Service Small Arms Requirements Integration Working Group (JSSARI-WG) to determine if other Services have potential solutions.
- 1.3.9. Serve as the Air Force representative on the Joint Service Small Arms Program (JSSAP), JSSAST and JSSARI-WG. Participate in joint service SA/LW training and equipment activities.
- 1.3.10. Provide periodic trend analyses to the field, MAJCOMs and Air Staff along with ad-hoc reports via the Security Forces Management Information System (SFMIS).
- 1.3.11. Provide technical assistance and guidance to unit Combat Arms sections Air Force-wide.

1.3.12. Advise appropriate Air Force Installation and Mission Support Center (AFIMSC) offices on range status, training facilities, equipment and munitions capability and availability needed to support the MAJCOM force protection and expeditionary programs.

1.4. Headquarters USAF, DCS for Logistics, Engineering and Force Protection, Directorate of Logistics (HQ USAF/A4L) will: Develop policies for logistical support of the USAF Combat Arms Program.

1.5. Headquarters USAF, DCS for Logistics, Engineering and Force Protection, Director of Civil Engineers (HQ USAF/A4C) will: Through AFCEC, provide design, construction and environmental expertise for construction and maintenance of small arms ranges.

1.6. HQ AFMC, Small Arms Program Office, AFLCMC/EBRMW will:

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

1.6.2. Centrally procure SA/LW, parts, tools and Test Measurement Diagnostic Equipment (TMDE) for existing and future items.

1.6.3. Manage the United States Air Force Gunsmith Shop and provide depot maintenance for SA/LW.

1.6.4. Publish and revise SA/LW and TMDE technical orders (TO) in coordination with AFSFC/FGWL.

1.6.5. Advise AFSFC/FGWL by providing engineering risk assessment and cost analysis for proposed SA/LW and equipment when required.

1.6.6. The United States Air Force Gunsmith Shop will:

1.6.6.1. 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.

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

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

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

1.6.6.5. Perform gunsmith services for USAF team shooters at inter-service and national competitions, tryouts for international competitions and security forces annual shooting competitions (such as Defender and Atlantic Challenges).

1.6.6.6. 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.

1.7. Headquarters Air Education and Training Command (HQ AETC) will:

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

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

1.7.3. Ensure HQ AETC/A3T provides oversight for Combat Arms operations performed at the 37th Training Support Squadron (37 TRSS) and the 343d Training Squadron (343 TRS), with assistance from HQ 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.

1.7.4. Ensure the 37th Training Group (37 TRSS Weapons Maintenance/Storage and Marksmanship Flights) provides Combat Arms training and SA/LW maintenance support to HQ AETC/A3T 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.

1.8. MAJCOM/A4S Security Forces Division Chief will:

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

1.8.2. Forward recommendations for changes to SA/LW qualification and/or orientation courses of fire to AFSFC/FGWL for review and approval by HQ USAF/A4SX.

1.9. Installation Commander will:

1.9.1. Ensure funds, manpower and modernized combat arms training facilities are available to meet the installation force protection and expeditionary mission. **(T-2).**

1.9.2. Enforce health and safety standards by ensuring Combat Arms facilities and personnel are periodically evaluated for health and safety risks. **(T-2).**

1.9.3. Ensure the combat arms training complex complies with applicable environmental requirements. **(T-0).**

1.10. Medical Treatment Facility Commander (or Local Equivalent) will:

1.10.1. Provide occupational and environmental health support according to AFI 48-101, *Aerospace Medicine Enterprise*; AFMAN 48-154, *Occupational and Environmental Health Site Assessment*; AFI 48-145, *Occupational and Environmental Health Program*; AFI 91-202, *The US Air Force Mishap Prevention Program* and Air Force Occupational Safety and Health Standard (AFOSHSTD) 48-20, *Occupational Noise and Hearing Conservation Program*. **(T-2).**

1.10.2. Bioenvironmental Engineering (BE) will conduct comprehensive health risk assessment (HRA) in accordance with AFI 48-145.

1.10.3. 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

Chief, Aerospace Medicine (SGP) and Occupational Health Working Group in accordance with AFI 48-146. (T-1).

1.11. Installation Support Agencies:

1.11.1. Civil Engineer (CE) Squadron will:

1.11.1.1. Provide design, construction, repair, environmental clean-up and soil remediation as applicable, and maintenance to range facilities according to installation SA/LW training requirements. (T-1). Use AFCEC Building Information Modeling (BIM) guidance for design of all new small arms range/Combat Arms support facility projects. (T-1). 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.

1.11.1.2. Ensure the installation master plan accurately depicts the firing range boundaries. (T-2). Plot the range Surface Danger Zones (SDZ) on base maps to ensure there is no encroachment of the SDZ. (T-2). Plot the vertical danger zone (VDZ) to ensure aircraft operations (flight path/approach patterns) are not at risk. (T-2). 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-2).

1.11.1.3. Review the SDZ and VDZ boundaries before site selection of any new base construction project. **NOTE:** New facilities will be located far enough away from the firing range to prevent projectile impact. In addition, due to the high decibel levels associated with firing ranges, consider noise abatement when planning to build near the range complex. Proper site selections, indoor ranges and new technologies can reduce this hazard. (T-2).

1.11.1.4. Ensure all major range projects, as defined in paragraph 2.9., are coordinated through MAJCOM and AFIMSC CE, security forces, BE and safety FAMs during the 95 percent design review, providing complete plans and job specifications for range repairs/renovations. (T-2).

1.11.1.5. Assist with annual inspections of ranges and facilities used by Air Force personnel. (T-3).

1.11.2. **Communications Squadron will:** Install and maintain communication systems to support range facilities, such as public address systems, computer network connections, emergency communications systems, etc. (T-2).

1.11.3. **Safety Office will:** Assist the Combat Arms Noncommissioned Officer in Charge (NCOIC) in conducting annual inspections of 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-2).

1.11.4. Logistics Readiness Unit/Squadron will:

1.11.4.1. Notify Combat Arms personnel when SA/LW are initially received (either as initial issue from depot or return from deployment) or prior to shipment off the installation for any reason (e.g., turn-in, transfer, deployment). (T-2).

1.11.4.2. Process unserviceable SA/LW parts for turn-in to Defense Reutilization and Marketing Offices (DRMO) IAW logistics guidance and DoD 4160.21-M-1, *Defense Materiel Disposition Manual*. (T-2).

1.11.4.3. Provide assistance for processing Product Quality Deficiency Reports (PQDRs). (T-2).

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

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

1.11.4.6. Jointly with the Security Forces Squadron, develop a process that will accommodate one stop for the customer to comply with equipping and training requirements for pre-deployment training with individual combat equipment (ICE). (T-3).

1.11.4.7. 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.

1.12. Security Forces/Combat Arms Organizational Commander will:

1.12.1. Plan for new Combat Arms range facility construction, range modification/rehabilitation and facility maintenance.

1.12.1.1. 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-2).

1.12.1.2. Submit small arms range and support facility requirements to the base CE using an AF Form 332, *Base Civil Engineer Work Request*. The Work Request Review Board reviews/ coordinates range requirements with applicable wing agencies (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 the AFCEC BIM guidance for small arms ranges, as well as the most current small arms range design engineering technical letter (ETL) or any future published guidance. **NOTE:** All new 25-meter small arms ranges and major renovations are indoor type ranges.

1.12.2. 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 use is based on command and local range instructions, safety restrictions and legal considerations.

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

1.12.4. Review and approve all Security Forces-unit munitions forecasts. **(T-1)**.

1.12.5. 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)**.

1.12.6. 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 needs to be included in the wing mobility plan.

1.12.7. Ensure Combat Arms personnel receive arming and use of force training IAW AFI 31-117, *Arming and Use of Force by Air Force Personnel*, training on theater specific rules of engagement as required and meet all other arming suitability and training requirements directed by AFI 31-117. **(T-0)**.

1.12.8. 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.

1.12.9. When appropriate, 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).

1.12.10. 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/DoD civilian equivalent or others identified in this instruction and task certified to perform Combat Arms activities. **(T-1)**.

1.12.11. Require the Combat Arms NCOIC to review proposed host tenant support agreements when tenant units request SA/LW maintenance, SA/LW qualification training or range use from the host wing. **(T-3)**.

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

1.12.12.1. Provide firearms training for Air Force personnel using the priorities outlined in paragraph 2.2.14.3. of this instruction.

1.12.12.2. Provide SA/LW inspection and repair support for all weapons assigned to the installation and other supported units per agreement.

1.12.12.3. 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. 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.

1.12.13. Ensure the Combat Arms section uses SFMIS IAW AFI 31-120, *Security Forces Systems and Administration*. **(T-2)**.

1.12.14. Provide assigned Combat Arms instructors opportunities to attend advanced SA/LW training courses/programs conducted by other DoD agencies and civilian schools when possible.

1.13. Combat Arms NCOIC or Civilian Equivalent (Combat Arms Manager) will: (refer to the Air Force Enlisted Classification Directory [AFECD] for AFSC qualifications)

1.13.1. Manage the installation Combat Arms Program.

1.13.2. Ensure Combat Arms adheres to all safety precautions during Combat Arms operations. **(T-1)**.

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

1.13.4. Ensure assigned SA/LW and ammunition are properly safeguarded IAW AFI 31-101, *Integrated Defense*, MAJCOM supplements and local instructions. **(T-1)**.

1.13.5. 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-0)**.

1.13.6. Supervise the base SA/LW maintenance and inspection program. **(T-1)**.

1.13.7. 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-2)**.

1.13.8. 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)**.

1.13.9. 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-1)**.

1.13.10. Submit PQDR's through the Deficiency Report Entry and Mail Submitter (DREAMS) program (preferred method). **(T-0)**. If DREAMS is unavailable, submit Standard Form (SF) Form 368, *Product Quality Deficiency Report*, according to TO 00-35D-54, *USAF Material Deficiency Reporting and Investigating System*. In addition, submit PQDR's (within 30 days upon failure notification) on new inspection gauges failing initial calibration. **(T-0)**. Electronic (e-mail) copies of the PQDR need to be forwarded to AFSFC/FGWL for information.

1.13.11. Appoint munitions custodians, if delegated according to AFI 21-201, *Munitions Management*, and account custodians to maintain and account for all SA/LW, equipment,

supplies and SA/LW repair parts according to AFI 23-101, *Air Force Materiel Management*. **(T-3)**. Also appoint a TO monitor for Combat Arms TOs. **NOTE:** Appoint munitions custodians using AF Form 68, Munitions Authorization Record, as directed by AFI 21-201. **(T-1)**. Authority to sign the AF Form 68 may be delegated as outlined in AFI 21-201.

1.13.12. Ensure budget requirements are submitted to applicable authority for consideration into the annual unit budget. **(T-3)**.

1.13.13. Forecast for munitions requirements and validate allocations provided by the AFSFC IAW Air Force Catalog (AFCAT) 21-209, Volume 1, *Ground Munitions*, AFCAT 21-209, Volume 2, *Demolition Munitions* and the Ground Munitions Authorization Tables (GMAT). **(T-1)**.

1.13.14. Develop and publish operating instructions (OI) , installation and unit policies as necessary. **(T-2)**.

1.13.15. Establish and maintain a reference library (either electronic or paper) for the Combat Arms section to include Air Force, MAJCOM, base publications, TOs and other Services publications as needed. **(T-2)**. This library needs to include manufacturer's instructions for all equipment that is associated with the SA/LW/ancillary equipment assigned and /or tools assigned to the section. Electronic records are the media of choice for use, storage and maintenance of this reference library.

1.13.16. 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 SFMIS to accomplish unit scheduling responsibilities.

1.13.17. Develop and publish a Combat Arms training schedule for base organizations. Use of SFMIS for scheduling satisfies this requirement.

1.13.18. Maintain training statistics for all Combat Arms training scheduled and accomplished. Combat Arms will use SFMIS exclusively to maintain records of all training scheduled and conducted. **(T-1)**. No other systems are authorized to maintain these records. SFMIS 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.

1.13.19. Submit requests for deviations to range criteria through the unit commander to the AFSFC, with a courtesy copy to the MAJCOM/A4S, as required. **(T-2)**.

1.13.20. Ensure test-fire and trial operation of base firing range after construction or rehabilitation. **(T-1)**. Document results and receive approval from the installation commander. **(T-2)**. Maintain records of these actions at the Combat Arms facility for the life of the range. **(T-2)**.

1.13.21. Contact BE when changes occur which may alter work practices or when conditions exists that indicate the potential to cause a health risk. **(T-1)**.

1.13.22. 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-1)**.

1.13.23. Ensure assigned personnel receive explosive safety training IAW established policy. **(T-1)**.

1.13.24. Maintain Combat Arms section management information in SFMIS IAW AFI 31-120 and this publication (see paragraph 2.2.2.). **(T-2)**.

1.13.25. Review all proposed and updated support agreements with tenant organizations and agencies requesting Combat Arms support. **(T-2)**.

1.13.26. Establish procedures, IAW Precision Measurement Equipment Laboratory (PMEL) guidelines, to ensure required SA/LW gauges receive calibration inspections within required time-lines. 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-2)**. 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.

1.13.27. 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-2)**. This guidance includes individual or group briefings and a handbook outlining requirements and procedures. Briefings, training and handbooks need to include proper use of SFMIS to accomplish unit weapon custodian responsibilities.

1.13.28. Ensure a sufficient number of personnel are trained and certified to perform block officer duties during live fire when adequate numbers of 3POX1B or SEI 312 personnel are not available. Document training and certification on AF Form 1098, *Special Task Certification and Recurring Training*. **(T-2)**.

1.13.29. 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.

1.13.30. With AFSFC/FGWL approval, plan and conduct Excellence-In-Competition (EIC) matches, also request approval from the Air Force Services Activity, Air Force Shooting Program Manager (AFSVA/SVORF). **(T-3)**.

1.13.31. 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)**.

1.13.32. 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.

1.13.33. With the assistance of the base safety office, conduct annual inspections of ranges and SA/LW training facilities used by Air Force personnel using risk management techniques and report findings in writing to the installation commander. This includes range certification of non-USAF/non-DoD 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:

1.13.33.1. 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)**.

1.13.33.2. Notify the Security Forces/Combat Arms organizational commander of the findings and provide recommendations for corrective action. **(T-2)**.

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

1.13.35. Establish a membership on the USAF Combat Arms, Air Force Network (AFNet), Enterprise Information Services (EIS) website (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>) to obtain the most current guidance and training materials to conduct the base Combat Arms program. **(T-2)**.

1.14. Combat Arms Instructor will: (refer to the Air Force Enlisted Classification Directory [AFECD] for AFSC qualifications)

1.14.1. 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)**.

1.14.2. Train, qualify and certify personnel on Air Force SA/LW and courses. **(T-1)**.

1.14.3. Conduct firing range operations and courses of fire IAW this instruction, AFMAN 36-2227 and local guidance. **(T-1)**. **NOTE:** The guidance in this instruction and AFMAN 36-2227 takes precedence over local guidance.

1.14.4. Evaluate and correct student performance during SA/LW training. **(T-1)**.

1.14.5. Maintain qualifications on all SA/LW and courses, for which they are required to instruct. **(T-2)**.

1.14.6. Maintain and personalize approved Air Force lesson plans with emphasis on enhancing student learning effectiveness. **(T-2)**.

1.14.7. Continuously improve teaching and SA/LW training skills through practice and study. **(T-2)**.

1.14.8. Participate regularly in a proficiency training program to enhance coaching and SA/LW training techniques. **(T-2)**.

1.14.9. Maintain proficiency on SA/LW inspection and maintenance procedures. **(T-1)**.

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

1.15. Waiver requests for this publication (AFI 36-2654). HQ USAF/A4SX, Combat Arms Branch, is the waiver approving authority for non-tiered requirements in this publication. A

copy of any waivers or exceptions issued regarding the publications and forms management requirements found in this publication must be included when submitting products to the Air Force Departmental Publishing Office (AFDPO) for publishing.

Chapter 2

COMBAT ARMS 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 : 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 need to enforce accurate and timely management of their administrative functions to accomplish their mission. Combat Arms will use SFMIS to document daily training and maintenance operations. **(T-1).**

2.2.2. Combat Arms Program Measurement. AFSFC/FGWL measures training, manpower, ammunition expenditure, range facilities and firearm types/quantities on a recurring basis. AFSFC/FGWL obtains this data through SFMIS using the Combat Arms module. These reports cover the fiscal year period 1 Oct through 30 Sep. Combat Arms field units enter data into SFMIS and keep it current.

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-1).** Periodically check Air Force indexes for changes to publications and TO indexes for new or changed manuals covering tools (e.g., hand and power), equipment (e.g., binoculars, scopes, night vision devices [NVD], machinery), gauges, ammunition, SA/LW, mounts, etc. to ensure proper guidance on maintenance, repair, and handling is available. **(T-1).** 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 33-363, *Management of Records* and Air Force Records Information Management System (AFRIMS) records disposition schedule.

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 IAW squadron/base policy. **(T-2).** 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)**.

2.2.5.7. Daily Range Opening and Closing Procedures. Identify all activities necessary for range opening and closing. Include checks of facilities, equipment and communications. Include 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 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 for handling, transporting and storing of munitions and explosives following the guidance in AFMAN 91-201, *Explosives Safety Standards*. Include mishap and reporting procedures. Define personnel limits and protective equipment for each operation.

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. Include 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 needs to 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-1)**. A non-Combat Arms, disinterested NCO will observe and validate this inventory. **(T-1)**.

2.2.5.17. Scheduling. Explain all necessary procedures and activities for scheduling training and range operations. This includes 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. The Combat Arms NCOIC works with the Logistics Readiness Squadron Support Agreements manager on creation and maintenance of support agreements pertinent to Combat Arms support of tenant units and other organizations. **(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-1)**. 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 IAW AFI 21-201 and local Logistics Readiness directives and procedures. **(T-1)**.

2.2.9.2. Ammunition Authorizations and Forecasting. AFI 21-201 outlines standard forecasting procedures. Use AFCAT 21-209, Volume 1, AFCAT 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 (PCAR) forecast using the Forecast and Allocation Module (FAM) of the Agile Munitions Support Tool (AMST). **(T-2)**.

2.2.9.3. Handling of Material Potentially Presenting an Explosive Hazard. Combat Arms will store, handle and process expended munitions residue IAW DoDI 4140.62, *Material Potentially Presenting an Explosive Hazard*, and AFI 21-201. **(T-1)**.

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 SFMIS and should support data entered into SFMIS. Weapons maintenance actions are also documented on the weapon's Air Force Technical Order (AFTO) Form 105, *Inspection Maintenance Firing Data for Ground Weapons*, IAW TO 11W-1-10, *Recording of Historical Data for Small Arms*, using SFMIS.

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-1)**. 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. Combat Arms sections will accomplish a SA/LW inspection report for all types of inspections (e.g., Semi-Annual, Pre-Embarkation, Pre-Issue, Turn-In). 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 receive 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://cs3.eis.af.mil/sites/AF-ED-00-29/>) 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 SFMIS. **(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/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-2)**. 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 SFMIS. Although other systems may exist that perform similar functions, SFMIS is the only official database for MAJCOM and Air Staff agencies to access SA/LW qualification training and range utilization data.

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. DoD 5100.76-M, *Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives*, AFPD 24-2, *Preparation and Movement of Air Force Materiel* and AFI 31-101 outline protection standards. Combat Arms also needs to refer to the base integrated defensive plan (IDP) to ensure all local policies are followed.

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 risk management guidance outlined in Attachment 2 of this publication. **(T-1)**.

2.3. USAF 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 safely operate the range; this book will remain on the range while the range is in operation. **(T-2)**.

2.3.1. Air Force units/personnel will not conduct any live-fire training on a range unless it is certified for Air Force use. This certification is not required for ranges managed and operated by other DoD components. **(T-1)**. If required to use non-USAF firing ranges (host nation, DOE, FBI, local civilian, etc.) for SA/LW qualification or proficiency training, the local 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)**. Bases use this guidance, along with the ETL titled “*Small Arms Range Design and Construction*” and any future published guidance, along with 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-1)**. This inspection, at a minimum, covers basic range safety and Air Force training requirements. Non-USAF facility managers are not obligated to install equipment or modify their facilities to accommodate USAF courses. 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. Document the certification and provide a copy to the MAJCOM/A4S and AFSFC/FGWL. **Exception:** HQ AFOSI/XR may approve use of civilian, civilian law

enforcement agency or other non-DoD federal agency ranges by Air Force Office of Special Investigations (AFOSI) personnel for sustainment/proficiency training. These ranges should be certified safe for use by federal, state or local governments.

2.3.2. Military Use. Combat Arms live-fire qualification training 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 (SA) - Training Support. The host Combat Arms section will provide SA/LW qualification training to those AFRC tenant units without their own AFSC 3P0X1B, SEI 312 or DoD civilian equivalent personnel assigned. **(T-2)**. 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 IAW AFCAT 21-209 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-1)**. 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. 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 grade. **(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-1)**. Personnel performing CRO and RSO duties will not perform any other responsibilities during range use. **(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-2)**. 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-1)**. This certification must include evaluation during live-fire. **(T-1)**. Combat Arms personnel must periodically spot check units during range use to ensure they follow proper procedures. **(T-2)**. 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-2)**.

2.3.2.5. Document task certification of Air Force members on AF Form 1098 and all personnel on AF Form 483. Range safety officials must have an AF Form 483, signed by the Combat Arms NCOIC, on their person while operating the range. **(T-2)**. 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-1)**. The Combat Arms NCOIC will revoke certifications if individuals fail to follow established guidance or operate the range in an unsafe manner. **(T-1)**.

2.3.2.7. Range safety officials are responsible for safe range operations and will remain on the firing range until all SA/LW have been cleared and removed from the range. **(T-1)**. Units/individuals using the range for this purpose are liable for damage caused during their use.

2.3.2.8. The requirements in paragraphs 2.3.2.2. through 2.3.2.7. also apply to non-Air Force 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 (POWs) on base firing ranges. **(T-1)**. 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 people are present. **(T-1)**. 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 the other person is 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-1)**. 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-1)**. 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-1)**.

2.3.3.3. Civilian police agencies using Air Force small arms firing ranges must comply with the requirements of paragraphs 2.3.2.2. through 2.3.2.7. **(T-1)**.

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 (POC) 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. Non-DoD civilian shooters and range safety officials must 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-1)**. 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-1)**. 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 IAW AFI 34-101, *Air Force Morale, Welfare and Recreation (MWR) Programs and Use Eligibility*. (T-1).

2.4. Range Safety: Combat Arms and units using the range must apply the RM process before conducting live-fire training. (T-1). 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. 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 and ground baffles rot or become damaged and no longer stop bullets; and electrical wires become frayed and are no longer properly insulated. 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: (T-2)

2.4.3.1. Treat all weapons as if they are loaded.

2.4.3.2. Holster, clear, or secure all weapons when they are not in use.

2.4.3.3. Keep the muzzle of the weapon under control at all times.

2.4.3.4. Never point the weapon at anything you do not intend to shoot.

2.4.3.5. No horseplay while on the range or while handling weapons.

2.4.3.6. Do not handle weapons while personnel are down range.

2.4.3.7. Do not handle weapons until instructed to do so by the range official.

2.4.3.8. No smoking within 50 feet of the firing line.

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 need to have effective communications equipment for emergency notification and communicating with students and instructors.

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. Flagstuffs used to display the streamer can be no less than 20 feet in height. Flagstuffs 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 are used for SA/LW maintenance. Combat Arms will ensure that during range operations, at least one individual is present at the range that has received and can administer SABC. **(T-1)**. 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 wear a red baseball type cap with the words COMBAT ARMS embossed with 1-inch black letters while performing duties on the range complex. **(T-2)**. 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. Combat Arms personnel are authorized two pair of high-quality non-prescription or prescription shooting glasses IAW Allowance Standard Code (ASC) 538, Section J. Prescription shooting glasses are authorized IAW 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 should consider wearing protective fire retardant gloves during live-fire operations for safety and protection from the elements. Thin gloves 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.

2.5. 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-1)**.

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, each phase of fire, positions to be used, time limits, number of rounds, rounds per magazine and number of magazines used. **(T-1)**.

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 is normally 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 (PA) 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-1).** 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-1)**. 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, the Combat Arms NCOIC will conduct a formal range inspection, as outlined in paragraph 2.6. **(T-2)**. The Combat Arms NCOIC should request assistance from base safety, CE environmental, CE maintenance, and BE, as required. Use the risk management 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 ETL titled “*Small Arms Range Design and Construction*” criteria or future published guidance and this instruction. AFSFC/FGWL 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 will be moved to the Air Force Indoor Small Arms Range building information modeling (BIM) facilities criteria documents in the future and this will replace the ETL. Users may obtain the BIM documents via the USAF Combat Arms, Air Force Network (AFNet), Enterprise Information Services (EIS) website (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>).

2.6.3.1. Backstop Condition. Dirt backstops need to 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 needs to pass unimpeded through the 3-foot layer of topsoil. 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-1)**. The Combat Arms NCOIC will ensure this inspection is accomplished and documented. **(T-1)**. 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-1)**.

2.6.3.2. Deterioration of Baffles and Supports. Overhead and canopy baffles need to completely stop all direct-fired rounds of the caliber/type with the greatest penetration authorized for use on the range. 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-1)**.

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 need to remove bullet residue (lead, jacket and other residual material) from the bullet trap. Coordinate with the local CE environmental engineers to ensure compliance with federal, state and local 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-1)**. Use of contractors for these actions is preferred. Inspect and maintain commercial backstops IAW manufacturer guidance. Bullet traps also need to 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.

2.6.3.5. Cracks in Metal Bullet Traps and Support Brackets. If cracks are detected in metal bullet traps or their supports, 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. When making repairs, welds may not be permitted in the impact area directly behind the target, depending on the design and manufacturer's guidance. Welds will be finished and ground to the same angle as the original surface. Constant bullet strikes on a metal trap may cause fatigue cracks in the support brackets. When repairing support brackets, do not change the angle of the trap from the original design.

2.6.3.6. Impact ranges need to possess an adequate SDZ from any location that shooters fire from to ensure rounds fired remain within range boundaries. 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 and upkeep of the range and support facilities. This may include items such as 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-1)**.

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-1)**. The Combat Arms NCOIC coordinates these operations and training with the base BE flight/element. Some operations performed by Combat Arms personnel may require special personal protective equipment and associated training, such as protective suits and respirators. These items require specialized training/fitting and the Combat Arms NCOIC needs to obtain guidance and support from base BE personnel.

2.7.3. The Combat Arms NCOIC needs to include time for this maintenance in the monthly schedule. 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-1)**. 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 need to 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.

2.7.5. Mining of Backstops and Bullet Residue Removal from Bullet Traps. The CE environmental flight advises on environmental protection requirements for de-leading and/or cleaning bullet traps and backstops. BE advises government personnel on health risk management/health hazard exposure controls, for de-leading and/or cleaning bullet traps and backstops. Compliance with environmental cleanup and residue disposal is mandatory. Contract service for cleanup is preferred. The frequency of de-leading and residue removal depends upon the amount of lead accumulated, and the potential for unsafe conditions/health risks due to excessive lead build up. Additionally, for commercial bullet traps, Combat Arms needs to reference the manufacturer's guidance. Combat Arms personnel will not attempt to perform de-leading projects. **(T-1)**. Specific hazards are associated with exposure to lead and bullet residue.

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/A4S and AFSFC/FGWL by memorandum, e-mail, or message (during MINIMIZE, use mail). **(T-2).** At a minimum, coordinate with base safety, CE, BE and other applicable base/wing agencies. Include the following information as well as updating the range status in SFMIS:

- 2.8.1. Date closed or planned closure date.
- 2.8.2. Estimated length of closure.
- 2.8.3. Projected reopening date.
- 2.8.4. Reason for closure (if possible include costs of repairs).
- 2.8.5. Type of training and number of people due training during period of closure.
- 2.8.6. Nearest military and civilian installation with available range facilities.
- 2.8.7. Actions taken to continue training.
- 2.8.8. Date and length of time the range was last closed and reason.

2.9. Range Design and Support Facilities Criteria: Use the most current ETL titled “*Small Arms Range Design and Construction*” criteria and any future published guidance, as well as the AFCEC Building Information Modeling (BIM) guidance when planning, constructing and rehabilitating any type of range or range complex. The BIM guidance includes Facilities Criteria and a Dynamic Prototype Design for a standardized indoor small arms range and Combat Arms support facilities. The ETL is directive in nature. MAJCOMs or AFIMSC agencies may require additional criteria before projects are approved. Range construction should take into account the need to fire tracers (as part of a course or accidentally in repacked ammo), target positions/distances (e.g., 10 meters for machine gun (M/G), 7, 15, 25 meters for others), target width (e.g., M/G 10 meter target), and shooters 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 block officials and the tower operator an unobstructed view of the firing line and shooters. Ranges will not be designed for exclusive use of frangible ammunition and must be designed to contain operational (ball) ammunition. AFSFC/FGWL and the Engineer and Programs Support Division, Engineer Support Branch, AFCEC/COSC, must approve all new range designs and major renovations (changes to the type or function of the range). For example, changing a partially contained range to a fully contained range or changing from an earthen backstop to a bullet trap constitutes major renovations. MAJCOMs/Units should contact AFSFC/FGWL for clarification on individual renovation projects to determine if they require AFSFC review. This approval also applies to modular, portable or trailer type ranges. **(T-1).** HQ USAF/A4SX is the approval authority for deviations or waivers from design criteria and will coordinate requests with AFCEC/COSC.

2.10. Facility Certification: Certify new and rehabilitated range facilities as meeting required specifications. Conduct and document this certification and trial operation per the small arms range design and construction ETL or any future published guidance. Certification documentation consists of the facility acceptance inspection, test fire report and trial operation report. The Combat Arms section must load all certified non-USAF firing ranges into the SFMIS range module. **(T-1).** If this cannot be completed at base level, contact AFSFC/FGWL for assistance. Combat Arms sections maintain this certification for the life of the range or until

the next certification is accomplished. The Combat Arms section must update SFMIS with the status of all ranges at least annually and within five duty days after changes occur. **(T-2)**.

Chapter 3

TRAINING MANAGEMENT OF COMBAT ARMS PERSONNEL

3.1. Purpose: This chapter explains requirements for all Combat Arms instructors.

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 will ensure all assigned Combat Arms personnel are trained, evaluated, maintain skill proficiency, and participate in continuation training. **(T-1).** For upgrade training, unit-training managers enter newly assigned 3P031B personnel into the appropriate upgrade training status code 36-2201, *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-1).** If not a prior 3P0X1B/SEI 312, they must attend the Combat Arms Apprentice Course once hired, regardless of previous experience. **(T-1).** USAF/A4S manages the Combat Arms civilian force as part of the Security Forces civilian police job series 083. HQ Air Force Personnel Center (AFPC) 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-1).** Thereafter they must have regular evaluations to maintain training standards. **(T-1).** Use the instructor evaluation checklist posted on the USAF Combat Arms, AFNet, EIS website (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>). Modifications to the checklist are not allowed without approval of HQ USAF/A4SX. **(T-1).**

3.3.1. Lead Instructor Evaluations. The Combat Arms NCOIC will evaluate lead instructors once the individual has successfully completed two training evaluations. **(T-1).** 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.

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-1).**

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-1).**

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-1)**.

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-1)**. 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-1)**. 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 AFSFC/FGWL approval when necessary to meet mission needs. Other instructors may perform informal evaluations on any instructor to provide additional feedback on their performance. Higher HQ 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-2)**. 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 [ARC] 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-1)**.

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 (AFTR).

3.4. Weapons Maintenance Evaluations: The Combat Arms NCOIC also needs to establish 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-1)**. The individual’s trainer or any Combat Arms member who is task certified to perform maintenance on the SA/LW may conduct the evaluation.

3.4.1. Use the weapons maintenance checklist posted on the USAF Combat Arms AFNet, EIS website (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>). **(T-2)**. Modifications to the checklist are not allowed without approval of HQ USAF/A4SX.

3.4.2. Weapons maintenance evaluations include, but are not limited to, accomplishing and identifying procedures for: 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, *Inspection Maintenance Firing Data for Ground Weapons* information into SFMIS 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 AFTR. Combat Arms sections may use SFMIS 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 AFSFC/FGWL and posted on the USAF Combat Arms AFNet, EIS website (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>). **(T-2)**. Modifications to the checklists are not allowed without approval from HQ USAF/A4SX. In Security Forces squadrons, the unit Standardization-Evaluation section will track Combat Arms instructor and SA/LW maintenance evaluations and add them to trend analysis reports as outlined in AFI 36-2646, *Security Forces Training and Standardization Evaluation Programs*, for duty position evaluations. **(T-2)**.

3.5.2. Establish instructor proficiency folders to maintain evaluations for senior non-commissioned 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-1).** They will also maintain qualification on any weapon for which they have an armed duty/UTC requirement. **(T-1).**

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-1).**

3.6.2. Personnel assigned to a QFEBL will accomplish task certification on all SA/LW designated by the QFEBL Mission Capability Statement (MISCAP). **(T-1).** 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 AFCAT 21-209, Volume 1 and the GMAT.). **(T-2).** 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-1).**

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 36-2227. 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 HQ USAF/A4SX) 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) to prevent "information overload."

4.2.3. Instructors need to 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 (PI). The lead instructor must possess either a Primary AFSC (PAFSC) 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 PAFSC of 3P051B, be a task certified 3P031B, SEI 312, or DoD civilian equivalent. **(T-1).**

4.3. Assistant Instructors (AI): AIs 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 AI ratios for classroom and range activities.

4.3.1. AIs 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-1)**. 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:** AFSFC/FGWL maintains a Firing Line Official lesson plan on the USAF Combat Arms AFNet, EIS website (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>) 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-2)**. Combat Arms will maintain a copy of approval letters at the Combat Arms section. **(T-2)**. 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-1)**. 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 at the USAFA, after

Combat Arms accomplishes 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).

| R U L E | If the weapon is | Then one classroom AI per: | With the exception of paragraph 4.3.3., one tower operator per firing line is required. In addition, one firing line official per: |
|----------------------------|--|-----------------------------------|---|
| 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 |

NOTES: A minimum of one AI is required for all classroom instruction. If class size dictates a need for multiple AI's, additional AIs 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).

4.3.3. During live-fire training sessions, Combat Arms may supervise up to three students for semi-automatic day fire phases for SA/LW specified under rule 1 in Table 4.1. without the presence of a tower operator. A tower operator must be present when four or more students are on the line. **(T-1)**. This only pertains to rifle, pistol and shotgun training programs. Instructors must be task certified AFSC 3P031B, 3P051B, SEI 312 or DoD civilian equivalent. All other safety requirements apply. When Combat Arms (B shred, SEI 312 or civilian equivalent) personnel are firing their own instructor qualification training or proficiency ammunition, the Combat Arms NCOIC may establish written procedures to

conduct firing of up to six Combat Arms personnel using only a tower operator. Line officials are required for Combat Arms Apprentice Course graduates in 5-level upgrade training until task certified on the weapon and course.

4.4. Instructor Skill Level: Certified instructors are responsible for the safety of all personnel participating in SA/LW qualification training. Table 4.2. outlines instructor skill level requirements.

Table 4.2. Instructor Skill Level.

| R U L E | If duty is: (See Note) | The individual possesses Air Force Specialty code (3P0X1B/SEI 312 includes DoD civilian equivalent) | | | | |
|------------------|---------------------------|--|--|---|---------------------------------------|---|
| | | Non-Task Certified 3P000 3P091 3P071 with (SEI 312) | Task Certified 3P000 3P091 3P071 with (SEI 312) | Non-Task Certified 3P051B 3P031B | Task Certified 3P051B 3P031B | Qualified 5-Skill Level Group A Personnel (IAW para 4.3.1. and/or 4.3.2.) |
| 1 | Lead Instructor | | X | | X | |
| 2 | AI | X | X | X | X | X |
| 3 | Tower Operator | | X | | X | |
| 4 | Firing Line Official | X | X | X | X | X |

NOTES: Non-Combat Arms personnel may only perform firing line official duties for rifle, carbine, shotgun, and sub-machine gun training. Non-Combat Arms personnel may not perform firing line official duties on other weapons such as, grenade launchers, anti-armor weapons, machine guns, automatic rifles and heavy machine guns. For OJT purposes, a non-task certified 3P031B may perform as lead instructor and/or tower operator under the direct supervision of a task certified 3P051B, SEI 312 or DoD civilian equivalent until task certified.

4.5. Weapons Safety: Combat Arms personnel will ensure a safe SA/LW handling environment at all times. **(T-1).** Refer to AFMAN 31-229, *USAF Weapons Handling Manual*, for additional guidance. **Note:** AFMAN 31-229 will be replaced with AFMAN 31-129, *USAF Small Arms and Light Weapons Handling Procedures*.

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 AIs and if necessary due to limited manpower, AIs 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).** 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-1)**.

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-1)**.

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 31-229. **(T-2)**.

4.6. Lesson Plans: Maintain a hard or electronic master copy of all AFSFC 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 [FM]) are required. **(T-1)**. Instructors will maintain their own updated personalized lesson plans to use during instruction. **(T-2)**. 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 year or whenever changes (AFSFC, TO, or FM) occur. **(T-1)**. 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-1)**. This is part of their evaluation. Combat Arms will instruct them on how to properly maintain their firearm(s) IAW 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)**.

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 need to be available to students upon request.

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 IAW 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 SFMIS. Students need to perform all tasks without assistance to pass evaluations.

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 SFMIS to document all firearms training. **(T-1)**. If SFMIS is offline, all entries are made in ink or typed electronically on the most current Information Management Tool (IMT) versions of AF Form 710 and AF Form 522. Combat Arms enters the data from manually completed documents into SFMIS 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 SFMIS versions. The IMT versions are almost identical and will be completed using the same guidance. When AF Forms 710 and 522 information are entered into SFMIS, 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 SFMIS 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. Students will initial next to their printed name after training is completed and the rounds used, score, and status blocks are completed (not required for SFMIS version).

(T-1). The lead instructor will sign in the “Certificate of Expenditures” block after all students have initialed and ammunition expenditures are finalized. **(T-1).** In SFMIS, the lead instructor verifies that all information is entered for the class and that it is accurate before closing out the class. If copies of the form are needed after closing out the class in SFMIS, enter “//SIGNED//” in this block. This form is not to be used as a SA/LW issue roster/hand receipt. File manually completed (IMT) AF Forms 710 in the Combat Arms office as the primary record of ammunition expended and training conducted.

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 SFMIS for validation of qualification, previous training or pre-deployment training. A completed SFMIS, AF Form 710, AF Form 522, or manually completed (IMT) version signed by Combat Arms (3POXIB, SEI 312, DoD civilian equivalent), are the only allowable source documents for current or past qualifications. Complete AF Form 522 according to Figure 4.3. The form may be initiated during the first period of training. Annotate rounds fired, score, status, and both 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 SFMIS generated version of the form, as the system enters “SFMIS 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 SFMIS 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 SFMIS, 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/FGWL and request them to be included in SFMIS. Locally developed/modified courses for qualification training are not authorized.

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 SFMIS and cite the authority for the variance. **(T-1).** For example, if Headquarters AF, AFIMSC, AFSFC 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-1).** An example would be, “Member did not fire Phase VI: CWDE Firing Techniques, of the Rifle/Carbine AFQC based on HQ USAF/A4SX deviation, 25 Sep 14.”

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 SFMIS: “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 SFMIS 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, SFMIS Version (Page 1).

| GROUND WEAPONS TRAINING RECORD | | | | | | | | | | |
|--------------------------------|----------------------|--------------------|------|-------------------------|------------------------------|---|----------------|--------------|--------|------|
| WEAPON MODEL N/A | | | | DATE 2015 03 05 | TIME 0800 | COURSE OF FIRE M4/M16 AFQC (T1 - T3) | | | | |
| LOT NUMBERS USED | | AMMUNITION CALIBER | | | TYPE | | DODIC | ROUNDS FIRED | | |
| Lot Number 1 | LC04B103-021 | 5.56 mm | | | Pistol, Rifle | | AA40 | 1507 | | |
| NO | NAME | INITIALS | RANK | ORGANIZATION REASON | BUTT NUMBER SERIAL NUMBER | TARGET NUMBER | ROUNDS USED | SCORE | STATUS | GRP |
| 1 | ESELGROTH, JAMES D | | MSgt | AFSFC PRE-DEPLOYMENT | 2 234567 | 1 | 254 | 78 | EXP | A |
| 2 | HODGES, AARON B | | MSgt | AFSFC DUTY | 3 234568 | 2 | 254 | 80 | EXP | A |
| 3 | MCKENNEY, RAYMON J | | MSgt | AFSFC PRE-DEPLOYMENT | 4 234569 | 3 | 254 | 80 | EXP | A |
| 4 | SHEEHAN, JOHN A | | MSgt | AFSFC DUTY | 8 234566 | 4 | 237 | 72 | QUAL | A |
| 5 | JONES, JEFF L | | MSgt | AFSFC DUTY | 12 234565 | 5 | 254 | 57 | UNQ | A |
| 6 | ABERCROMBIE, JASON K | | MSgt | AFSFC DUTY | 14 234560 | 6 | 254 | 75 | EXP | B |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |
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| 27 | | | | | | | | | | |
| 28 | | | | | | | | | | |
| 29 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| TOTAL ROUNDS FIRED STUDENT 1-6 | | | | | | | | | | 1507 |

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 unqualified “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 SFMIS and does not use any locally developed courses.

Figure 4.2. AF Form 710, SFMIS Version (Page 2).

| | | | | | | | | | | | |
|--|--|--|-----|------|--------------|--|-----|------------|------|-------------------|------|
| TOTAL ROUNDS FIRED STUDENT | | | | | | | | | | 1.6 | 1507 |
| DEMONSTRATION ROUNDS | | | | | | | | | | 0 | |
| GRAND TOTAL FIRED | | | | | | | | | | 1.6 | 1507 |
| <p align="center">CERTIFICATE OF EXPENDITURES</p> <p>I CERTIFY 1507 ROUNDS OF 5.56 mm Pistol, Rifle AMMUNITION, WERE EXPENDED IN TRAINING THE 6 PERSONNEL LISTED ON THIS FORM. AN ADDITIONAL 0 ROUNDS WERE EXPENDED FOR DEMONSTRATIONS AND REFIRE. THE TOTAL NUMBER OF ROUNDS FIRED FOR THE TRAINING OF THIS CLASS WAS 1507 ROUNDS.</p> | | | | | | | | | | | |
| DATE | | PRINTED NAME AND GRADE OF PRIMARY CLASSROOM INSTRUCTOR | | | | | | SIGNATURE | | | |
| MAR 06, 2015 | | ROTH, ROLLAND H N/A | | | | | | //SIGNED// | | | |
| ORGANIZATION | | SCH | TRN | QUAL | ORGANIZATION | | SCH | TRN | QUAL | CLASS BREAKDOWNS | |
| AFSEC | | 5 | 6 | 5 | | | | | | BY GROUPS | |
| | | | | | | | | | | TOT | |
| | | | | | | | | | | GROUP A-SF PISTOL | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | GROUP A-SF | |
| | | | | | | | | | | 5 | |
| | | | | | | | | | | GROUP A-OSI | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | GROUP A-SFA | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | GROUP A-IMA | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | GROUP A-OTHER | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | GROUP B | |
| | | | | | | | | | | 1 | |
| | | | | | | | | | | GROUP C | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | UNKNOWN | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | TOTAL | |
| | | | | | | | | | | 6 | |
| | | | | | | | | | | BY REASON | |
| | | | | | | | | | | TOT | |
| | | | | | | | | | | AEF | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | MOBILITY | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | PCS | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | TDY | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | DUTY | |
| | | | | | | | | | | 4 | |
| | | | | | | | | | | PROFICIENCY | |
| | | | | | | | | | | 0 | |
| | | | | | | | | | | OTHER | |
| | | | | | | | | | | 2 | |
| | | | | | | | | | | TOTAL | |
| | | | | | | | | | | 6 | |
| <p>COURSE WAIVERS 05 MAR 15: AF/AASO deviation for Rifle/Carbine AFQC Phase VI</p> <p>SPECIAL EQUIPMENT (1) AN/PEQ-15: ABERCROMBIE, JASON K; ESELGROTH, JAMES D; HODGES, AARON B; JONES, JEFF L; MCKENNEY, RAYMON J; SHEEHAN, JOHN A (2) Individual Fired Wearing ICE: ABERCROMBIE, JASON K; ESELGROTH, JAMES D; HODGES, AARON B; MCKENNEY, RAYMON J; SHEEHAN, JOHN A (3) MXX Tactical Illuminator: ABERCROMBIE, JASON K; ESELGROTH, JAMES D; HODGES, AARON B; JONES, JEFF L; MCKENNEY, RAYMON J (4) Qualified on M4 and M16A2: ABERCROMBIE, JASON K; ESELGROTH, JAMES D; HODGES, AARON B; MCKENNEY, RAYMON J; SHEEHAN, JOHN A</p> <p>REMARKS SHEEHAN, JOHN A required an additional 3 rounds for zero.</p> | | | | | | | | | | | |

AF Form 710 20041215 (SFMIS Generated)

NOTES:

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 4.3. AF Form 522, SFMIS Version.

| USAF GROUND WEAPONS TRAINING DATA | | | | | | |
|--|------------|--|---|-----------------------|-------------------|--|
| PRIVACY ACT STATEMENT | | | | | | |
| PRIVACY ACT-1974 as Amended applies - This memo may contain information which must be protected IAW DOD 5400.11, and it is For Official Use Only (FOUO) | | | | | | |
| AUTHORITY: 10 U.S.C 8013, and Executive Order 9397(SSN) | | | | | | |
| PRINCIPAL PURPOSES: Used to record results of small arms qualification training. Services as the official source document for proof of firearms qualification. | | | | | | |
| ROUTINE USES: None | | | | | | |
| DISCLOSURE: Disclosure is voluntary. SSN may be used by arming authority officials to positively identify the individual for suitability to bear arms. | | | | | | |
| LAST NAME HODGES | | FIRST NAME AARON | | MIDDLE INITIAL B | RANK MSgt | SSN XXXXXXXXXX |
| ORGANIZATION AFSFC | | OFFICE SYMBOL SFXW | BASE JBASA-Lackland | DSN NUMBER 9457040 | ARMING GROUP A | PRIMARY DUTY WEAPON M4 Carbine, M9 Pistol |
| COMBAT ARMS SECTION HQ USAF / A4SO | | DSN NUMBER 210-925-5659 | COMBAT ARMS EMAIL ADDRESS rolland.roth@us.af.mil | | | ARMING GROUP RESTRICTION None |
| DATE TRAINED | WEAPON | COURSE | ROUNDS FIRED | STATUS | SCORE | DATE EXPIRES |
| 2015 03 05 | M4 Carbine | M4/M16 AFQC (T1 - T3) Live Fire | 254 | E | 80 | 2016 03 31 |
| SHOOTER'S SIGNATURE | | | | | | |
| PRINTED NAME AND RANK OF INSTRUCTOR ROTH, ROLLAND H, N/A | | | | | | |
| *** SFMIS AUTHENTICATED *** ROTH, ROLLAND H, N/A | | | | | | |
| 2015 03 05 | M9 Pistol | M4/M16 AFQC (T2, PH1) HG Live Fire | 10 | S | 0/ 0/ 0 | 2016 03 31 |
| SHOOTER'S SIGNATURE | | | | | | |
| PRINTED NAME AND RANK OF INSTRUCTOR ROTH, ROLLAND H, N/A | | | | | | |
| *** SFMIS AUTHENTICATED *** ROTH, ROLLAND H, N/A | | | | | | |
| 2013 11 01 | M9 Pistol | M9-AFQC Live Fire | 90 | E | 45/ 29/ 6 | 2014 11 30 |
| SHOOTER'S SIGNATURE | | | | | | |
| PRINTED NAME AND RANK OF INSTRUCTOR MCKENNEY, RAYMON J, MSgt | | | | | | |
| *** SFMIS AUTHENTICATED *** ROTH, ROLLAND H, N/A | | | | | | |
| SHOOTER'S SIGNATURE | | | | | | |
| PRINTED NAME AND RANK OF INSTRUCTOR | | | | | | |
| *** SFMIS AUTHENTICATED *** | | | | | | |
| COURSE WAIVERS 05 MAR 15 (M4/M16 AFQC (T1 - T3)): AF/A4SO deviation for Rifle/Carbine AFQC T1 Phase VI | | | | | | |
| SPECIAL EQUIPMENT 05 MAR 15 (M4/M16 AFQC (T1 - T3)): AN/PEQ-15 Individual Fired Wearing ICE M3X Tactical Illuminator Qualified on M4 and M16A2 | | | | | | |
| 01 NOV 13 (M9-AFQC): Safariland 6004/6005 Holster | | | | | | |
| REMARKS 5 Mar 15-Member did not fire Table I, Phase VI based on HQ USAF/A4SO deviation, 25 Sep 14. Member did not fire Phase IV of Table III. | | | | | | |

AF Form 522 20041215 (SFMIS Generated)

For Official Use Only

Page 1 of 1

PRIVACY ACT-1974 as Amended applies - This memo may contain information which must be protected IAW DOD 5400.11, and it is For Official Use Only (FOUO)

NOTES: Combat Arms uses only the standardized courses from SFMIS 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 SFMIS 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-1)**.

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 safely and effectively employ the weapon. 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 36-2227 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, non-mission essential SA/LW training is prohibited. This includes activities such as, weapons demonstrations and allowing non-DoD personnel to fire Air Force SA/LW. It is incumbent on the requesting unit commander to ensure only personnel with an arming requirement attend Combat Arms qualification training. Combat Arms sections need to establish a practice of coordinating this validation 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-1)**.

5.2.6. AFSFC/FGWL must approve all SA/LW training courses, such as those conducted at formal training courses and non-Security Forces, readiness training centers/expeditionary skills training courses (e.g., Common Battlefield Airmen Training, Air and Space Basic Course). **(T-1)**. This does not include unit-level sustainment training courses, which the local Combat Arms NCOIC approves. Additionally, if HQ USAF/A4SX approves use of other Service courses for qualification of Airmen, AFSFC/FGWL 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 USC § 922(d)(9) and (g)(9)/Lautenberg Amendment), as outlined in AFI 31-117. 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 AFSFC/FGWL and available on the USAF Combat Arms, AFNet, EIS website (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>) to conduct this training. **(T-1)**.

5.2.9. Combat Arms personnel will also provide training on individual SA/LW accountability and security requirements during all qualification training classes. **(T-2)**. 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 AFSFC/FGWL and available on the USAF Combat Arms AFNet, EIS website to conduct this training. **(T-1)**.

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. For information on items included in the listing or for guidance on requesting items to be added to the listing, contact AFSFC/FGWL.

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:** HQ AFOSI/XR directs holster types for AFOSI personnel for operational use; however, AFOSI personnel use holsters from the USAF Authorized Small Arms and Light Weapons (SA/LW) Accessories listing when completing Air Force qualification training.

5.3.3. When commanders authorize the use of a concealed carry holster, from the USAF Authorized 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 (if not shoulder or cross draw) if using multiple holsters, 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 and Security Forces investigators 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-2).**

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 (IBA), load bearing apparatus, magazine pouches (if not incorporated in a vest), holster/ magazine pouches for the handgun if applicable and protective (gas) mask. Deployed 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. 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 IAW 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 these items 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 and AFI 31-117 identify the minimum training requirements and frequency of qualification training needed to arm personnel. These guidelines govern peacetime/in-garrison arming and specifically state requirements do not apply to contingencies and designated hostile fire zones. 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.

5.4.2. Computer based training (CBT) modules for the M16 rifle and M9 pistol may be available on the AETC Advanced Distributed Learning System website and individuals are encouraged to complete these courses prior to attending Combat Arms qualification training. Commander's and unit training personnel may also use this training to augment qualification training and as part of unit sustainment training programs.

5.4.3. Mechanical SA/LW training is a highly effective way to increase SA/LW familiarity and should be accomplished at unit level by personnel qualified on the weapon. AFMAN 10-100, *Airman's Manual*, also contains a weapon skills section that unit NCOs can use to provide unit level training to their personnel.

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, any specialized training. If an AFCFM wishes to change the arming group of personnel under their functional area, they must coordinate their request with HQ USAF/A4SX for approval. All Air Force personnel are categorized into the following arming groups. If an individual changes arming groups from Group B to Group A, they must meet all Group A requirements in the qualification training program before being armed. (T-1). All qualifications expire on the last day of the month.

5.5.1. Air Force personnel who are armed to perform their in-garrison duties or as a requirement of their PAFSC are Group A. As an example, this group includes Security Forces, Security Forces augmenters, AFOSI agents, CE personnel (directed by their AFCFM) and Battlefield Airmen AFSCs. Battlefield Airmen AFSCs include Combat Rescue Officers (13DXA), Special Tactics Officers (13DXB), Pararescue Airmen (1T2X1), Combat Control Airmen (1C2X1), Tactical Air Control Personnel (1C4X1), Special Operations Weather Team Airmen (1W0X1)/Officers (15WX), Battlefield Weather Airmen (1W0X1)/Officers (15WX) and Air Liaison Officers (13LXX). AFSFC/FGWL maintains a listing of Group A career fields, functions, agencies, and those requiring unit live-fire sustainment training on the USAF Combat Arms AFNet, EIS web site (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>). 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. Security Forces, Battlefield 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 with the carbine/rifle complete the Security Forces Shoot, Move, and Communicate (SMC) Course to meet this requirement. Unit 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, 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 Battlefield 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 AFSFC/FGWL 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 08, their expiration date will be 31 Mar 09).

5.5.1.2. Exceptions to the above frequencies are personnel who qualify as Designated Marksman (DM), Advanced Designated Marksman (ADM), Sharpshooter 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 DM 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, DM personnel should complete unit live-fire sustainment training during alternating quarters (between qualification training).

5.5.1.2.2. Advanced Designated Marksman and Sharpshooter 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 USAF Sharpshooter AFQC and ADM AFQC. **(T-1)**. For example, if the member completes initial qualification in Feb 14 (first quarter of CY) they must complete sustainment training by 30 Jun 14 (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 14. 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 36-2227.

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 need to train more frequently with the particular SA/LW type they routinely carry.

5.5.1.4. Credentialed Security Forces investigators are assigned, as a minimum, the current Security Forces service pistol as their primary duty weapon. Security Forces investigators 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)**. Security Forces investigators must qualify on the AFOSI BAT Course prior to being authorized to carry a concealed firearm. **(T-1)**. If mission requirements dictate an immediate need for an authorization for concealed carry, investigators fire the AFOSI BAT Course prior to carrying the pistol concealed without regard to the previous AFQC qualification date. 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 pistol. 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. Do not fire personnel out of cycle to meet the intent of advanced/specialized programs.

5.5.1.6. Security Forces Apprentice Course (SFAC) and Basic Officer Course (BOC) students complete the Rifle/Carbine AFQC, firing Table I only and not including Phase VI, CWDE Firing Techniques. This qualification is not valid for arming. Commanders must have new SFAC and BOC accessions complete Tables II and III of the Rifle/Carbine AFQC upon assignment and before arming them with the rifle/carbine. **(T-2)**. The SFAC and BOC qualification is also not valid for deployment and individuals tasked to deploy must complete the entire training program (academic training and live-fire on Tables I – III) as outlined in the Rifle/Carbine AFQC course of fire guidance. **(T-1)**. Additionally, SFAC and BOC qualifications are not valid for award of the AF Small Arms Expert Marksmanship Ribbon, regardless of the score, since individuals did not complete the entire course.

5.5.1.7. AFOSI agents will qualify annually with the AFOSI issue handgun. **(T-1)**. Agents fire the AFOSI BAT Course using the handgun AFQC objectives in addition to

the AFOSI BAT Course objectives. Agents must fire the unit sustainment training course as specified in AFOSIMAN 71-113, *Firearms, Use of Force and Apprehension Tactics*. **(T-1)**.

5.5.1.7.1. All AFOSI Regular Air Force (RegAF), 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.

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

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

5.5.1.7.4. Combat Arms units with range and maintenance capability are to provide support for specialized/specific AFOSI SA/LW and courses coordinated and approved by AFSFC/FGWL. 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.

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

5.5.1.7.6. Joint Drug Enforcement Teams (J-DETs), while assigned to AFOSI, qualify on the AFOSI BAT Course. J-DETs 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-1)**. J-DETs will only make the transition to the M11 (or AFOSI handgun) if there is no possibility of recall to their Security Forces unit.

5.5.1.7.7. 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-1)**. 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 IAW this instruction will certify completion of live-fire sustainment training. **(T-1)**. This training is documented within the AFOSI Learning Management System (LMS) as prescribed by AFOSIMAN 71-113. Agents will complete quarterly sustainment training with their chosen duty pistol as required by AFOSIMAN 71-113. **(T-1)**.

5.5.1.8. 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 IAW AFCAT 21-209 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, AFSFC/FGWL 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-1)**. This is also highly recommended for deployed locations, at the discretion of the deployed commander.

5.5.1.9. Aircrew members armed for air operations security (e.g., antihijacking) or other aircrew arming missions are classified as Group A. 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. Aircrew SA/LW qualifications may be linked to their appropriate airframe-specific ground cycle training program identified in the applicable AFI 11-2 series aircrew training publication. Combat Arms personnel enter an expiration date 24 months after the month of qualification on the AF Form 522 in SFMIS. This option only applies to handgun qualification. 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.

5.5.1.10. All personnel assigned (including support personnel) to a Tactical Air Control Party (TACP), Air Support Operations Center (ASOC), or Control and Reporting Center (CRC) 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-1)**. Personnel assigned to Combat Camera squadrons are classified as Group A.

5.5.2. Individuals/AFSCs who are not armed in-garrison or identified as Group A and are only armed for contingencies are Group B. These individuals 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). Group B individuals must qualify on the rifle/carbine or handgun AFQC 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. 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, Group B 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 14, their expiration date will be 31 Mar 15).

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 maintain firearms qualification unless designated for armed duty or deployment tasking. However, the staff agency director may establish qualification training requirements.

5.6. Firearms Training Programs: The Air Force courses listed in AFMAN 36-2227 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 IAW paragraph 5.10.3. of this AFI. **(T-2)**. 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. 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.

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 Cadets 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 enlisted accessions during basic military training and USAFA Cadets/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 as outlined in the Rifle/Carbine AFQC. 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. AFSFC/FGWL may implement M240 and M249 initial 10-meter (10m) 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/A4S when they are using initial 10-meter qualification. **(T-2).**

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-1).** Officer accessions at the are to receive initial handgun and rifle live-fire qualification. Officer accessions at 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 SFMIS 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 36-2227, 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-2).**

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-1)**. 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 SFMIS. 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 need to 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 and final 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 final 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 a remedial class with no more than two attempts at qualifying. **(T-2)**.

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 needs to make a determination regarding the individual's suitability for armed duty or contingency deployment. **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 AFI 31-117 for qualification extensions. 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 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 SFMIS, 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. Personnel requesting SA/LW qualification training for a PCS need to provide proof of the impending assignment along with their out-processing worksheet.

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. For deployment, individuals complete all tables/phases/orders as required in the course of fire without deviation or waiver for the required weapon(s). Home station waivers may not apply without approval from the combatant command (CCMD). **NOTE:** The CCMD may also impose requirements that are more stringent and unit deployment managers need to verify reporting instructions to ensure their personnel receive required training within the specified time.

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. Group B 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. **(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 signed by their unit commander when reporting for training.

5.13.2. Due to more frequent and advanced training, Group A personnel who have successfully completed live-fire qualification training, wearing ICE, within 180 days (for all type SA/LW) of deployment final out-processing are considered deployment weapons qualified and do not require any additional qualification training. This qualification is valid for 12 months or the entire duration of the deployment, regardless of length. 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-1)**.

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 SFMIS as outlined in paragraph 5.15.

5.13.4. Short Notice Deployments:

5.13.4.1. Unit commanders with arming group B personnel assigned to a unit type code (UTC) with a designed operational capability (DOC) 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 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/A4S and AFSFC/FGWL to ensure supportability.

5.13.4.2. When arming group A or B 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 that the short-notice prevented Combat Arms from providing training on the individual's AF Form 522. **(T-1)**. The CCMD may impose requirements that are more stringent and unit deployment managers need to 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. If the deployment departure is delayed, for any reason, the individual will remain deployment qualified.

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, DM, ADM and Sharpshooter 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-1)**. 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-1)**. 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 this requirement. If they have an aircrew arming requirement, their live-fire qualification has to be current before deployment departure. This provision only applies to handgun qualification.

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/FGWL for guidance on alternate methods of accomplishing the training. The AFSFC coordinates with HQ USAF/A4SX 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. 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. 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): Virtual Training Systems (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.

5.14.2. VTS firearm simulators should:

5.14.2.1. Perform in all respects like the actual weapon. The intent of the simulator is to allow realistic training to increase survival skills and to ensure instinctive reactions when needed.

5.14.2.2. Have adjustable noise and recoil simulation to make the experience as real as possible.

5.14.2.3. Make the student use the same physical skills and actions needed to fire the actual weapon.

5.14.2.4. Include a firing line that mimics a live-fire range firing line.

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 SFMIS. **(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 in 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-1)**.

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 AFSFC/FGWL 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 36-2227. **(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-1)**.

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 need to be open-minded and creative without sacrificing safety. Combat Arms needs to 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 AFCAT 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-1)**.

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-1)**.

5.18.6. The unit training section can establish a unit level proficiency SA/LW training program at the discretion of the unit commander IAW 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 AFMAN 10-100, 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. AFCAT 21-209, Volume 1 and the GMAT provides allowances for matches conducted as outlined in AFI 34-227, *Excellence-In-Competition*, 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 AFQC (see AFMAN 36-2227), or the AFOSI BAT Course and meet all other course objectives.

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. AFSFC/FGWL 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. AFI 36-2803, *Individual and Unit Awards and Decorations*, 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 36-2227. **(T-1).** Non-lethal qualification training is documented as a separate qualification in SFMIS 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, they are not required to maintain firearms qualification strictly for these events. Individual units will provide their own training to emphasize safe handling, weapon operation, use of blank ammunition and operator maintenance as directed in AFMAN 31-229. **(T-1).** This training should be documented on AF Form 1098 or AF Form 797. Additionally, units/personnel will follow the guidance in the *AFSFC Close Combat Mission Capability Kit (CCMCK) Training Concept of Operations (CONOPS)* when planning/conducting CCMCK training. **(T-1).** This publication is available on the USAF Combat Arms AFNet, EIS web site (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>).

5.22.1. Bird/wildlife Aircraft Strike Hazard (BASH) 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 BASH 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 BASH 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 needs to address the following:

5.23.2.1. Specify the reasons why a deviation is needed.

5.23.2.2. Explain what is being done to lessen the impact and meet criteria.

5.23.2.3. Include plans to correct the situation.

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).

5.24.2. Students attending technical training courses at 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).** Guidance for SFAC and BOC graduates is outlined in paragraph 5.5.1.6.

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 insufficient 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 need to be trained and evaluated by a task certified Combat Arms instructor whenever possible.

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 36-2227 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 IAW 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 SFMIS. (T-2). All inspections and repairs of Air Force SA/LW must be entered into SFMIS on the weapon AFTO Form 105. (T-1).

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 on the other shotgun conducted by Combat Arms. Combat Arms will document mechanical training as a separate qualification in SFMIS or on the individual's AF Form 522. (T-1). 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 (3POXIB, 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 authorized IAW AFI 31-117.

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/A4S and AFSFC/FGWL 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/FGWL and courtesy copy the MAJCOM/A4S.

5.27. AFSFC Deviations: The AFSFC can:

5.27.1. Approve qualification extensions IAW AFI 31-117.

5.27.2. AFSFC/FGWL may 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 AFSFC/FGWL.

5.27.3. HQ USAF/A4SX approves all deviations to all courses of fire contained in AFMAN 36-2227, after review by AFSFC/FGWL.

5.27.4. After coordination with MAJCOM and AFIMSC CE, safety and BE the MAJCOM/A4S submits small arms range/support facility deviation/waiver requests to AFSFC/FGWL if local installation deviations cannot be resolved within 12 months or a permanent deviation is necessary. Base level Security Forces units coordinate requests through safety, CE and other base agencies responsible for facility criteria. Provide a coordinated copy of the waiver request to AFSFC/FGWL for approval consideration and coordination with AFCEC.

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 (TCTO), Technical Manuals (TM) and applicable safety messages. Combat Arms will enter all SA/LW inspections and maintenance on the AFTO Form 105 in SFMIS for each SA/LW inspected or repaired. **(T-1).** For SA/LW with existing, hard copy, AFTO Forms 105, Combat Arms transfers the information from the paper form into SFMIS 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. Personnel assigned to the Air Force Gunsmith Shop 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. Modification of any kind to Air Force SA/LW is not authorized without approval from AFLCMC/EBRMW, Small Arms Program Office and AFSFC/FGWL. 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 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, AFSFC/FGWL may approve use of other Service qualified (Combat Arms equivalent) personnel to inspect and repair Air Force SA/LW. The Small Arms Program Office, AFLCMC/EBRMW, may approve or establish repair of Air Force SA/LW through contracts when requested by the unit. 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 SFMIS. **(T-1).**

6.1.2. Air Force TOs specify the Additional Authorization List (AAL) items and authorized munitions for each type of firearm.

6.1.2.1. The ASC 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 (GACP) 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, ASC 538, the USAF Authorized Small Arms and Light

Weapons Accessories listing or the GMAT, follow the guidance in the following paragraphs. **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 GACP (AFLCMC/EBHM), at Hill AFB UT, approves procurement of non-Air Force military and commercial ammunition requests and units must follow the guidance in AFI 21-201 and AFI 91-205, *Nonnuclear Munitions Safety Board*, for the request and approval of COTS ammunition. **(T-1)**. The Air Force Small Arms Program Office (AFLMC/EBRMW), at Robins AFB GA, approves procurement of commercial weapons parts and accessories and users request approval for these items from this 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 (NNMSB) and the Air Force Small Arms Program Office (for use in the weapon) must approve all commercial munitions and users must follow the guidance in AFI 91-205, *Nonnuclear Munitions Safety Board*, 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://cs3.eis.af.mil/sites/AF-ED-00-29/>). Most items on the listing are obtained through the Air Force supply system. The Small Arms Program Office and AFSFC/FGWL 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 6.2. 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., 6.1.4.1., 6.1.4.2. or 6.2. 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 solid need 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. As such, the modification of SA/LW systems is addressed in AFI 63-131, *Modification Management*. A modification is defined as an alteration to a configuration item (CI) 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 the Small Arms Program Office, and coordinated with AFSFC/FGWL. **(T-1)**. Users/managers must request any proposed modifications to Air Force SA/LW following the guidance in AFI 63-131 and using AF Form 1067, *Modification Proposal*. **(T-1)**

6.3. Responsibilities:

6.3.1. **HQ USAF/A4PY, Base Physical Security Systems Program Element Manager (PEM):** Overall Air Force Small Arms Executive Office representative for procurement dollars and program support dollars and Air Staff representative for program management and oversight.

6.3.2. **AFSFC/FGWL, 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. Represents Air Force SA/LW users at joint committees and works with US Army Program Executive Officer offices. Monitors research, development, acquisition programs and testing to incorporate Air Force requirements.

6.3.3. **AFLCMC/EBRMW, Small Arms Program Office:** Provides overall life cycle logistic management of Air Force SA/LW and takes funding direction from HQ USAF/A4PY (PEM). Responsible for acquisition and sustainment of all Air Force SA/LW. Supports warfighter needs based on funding, direction, and valid requirements. Works closely with HQ USAF/A4PY and AFSFC/FGWL.

6.3.4. **HQ USAF/A4LW, Nuclear Weapons, Missiles and Munitions Division:** Responsible for policies and procedures for management of munitions accountability, forecasting, and logistics support under the USAF Combat Ammunition System (CAS).

6.4. SA/LW Categories and Storage Definitions:

6.4.1. Service Weapons. Any hand, shoulder 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 operate. 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 assigned to their installation from Base Supply (refer to paragraph 6.7.). **(T-1)**. This listing includes types and quantities of firearms, owning organizations (account codes), and points of contact.

6.4.2. Match Grade Weapons. Any hand or shoulder 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. HQ USAF/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 Small Arms Program Office. The Air Force Gunsmith Shop 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. Combat Arms personnel must ensure all SA/LW parts are properly secured when not in use. **(T-1)**. 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 and GLOCK 19 pistols, M16A2 rifles and M4 carbines. An example of unique weapons would be some sub-machine guns purchased by AFOSI in the past as COTS items that do not have any Air Force maintenance support. Combat Arms will ensure PMEL inspections are performed on gauges procured for these SA/LW. **(T-1)**. 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, IAW applicable TOs and this instruction. **(T-1)**. 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 Gunsmith Shop 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, DSN 969-7352 or commercial (210) 395-7352, for shipment of SA/LW. The mailing address of the Gunsmith Shop is , Lackland 78236-5722. All other requests for match grade specialized inspection/repair go through the Small Arms Program Office, AFLCMC/EBRMW.

6.5.2.3. Ceremonial Weapons. Combat Arms personnel must perform inspections, to include gauging, IAW applicable TOs 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 Garands, 1903 Springfields) 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 Small Arms Program Office, 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 applicable TOs. 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 (PM) cleaning and lubrication program (to include magazines, spare barrel kits, tripods, etc.) IAW SA/LW TOs 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 PM. 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-1)**.

6.5.4.3. IAW 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 Form 105 (if not already in SFMIS) 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 to complete repairs is 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-1)**. Combat Arms will maintain a permanent SA/LW maintenance log of all maintenance performed on SA/LW. **(T-1)**. 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 SFMIS IAW TO 11W-1-10, *Recording of Historical Data for Ground Weapons*. **(T-1)**. Combat Arms will transfer all existing information on the hard copy AFTO Form 105 into SFMIS. **(T-1)**. Process unserviceable parts/scrap material for turn-in IAW local supply or DRMO procedures. 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 DoD 4160.21-M-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 the Small Arms Program Office, 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 TO or other guidance.

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 (CA/CRL) during all types of inspections and report any discrepancies to the Base Supply Equipment Management Section (EMS). **(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 EMS 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 IAW 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-1)**. 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 SFMIS 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 IAW applicable TOs.

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-1)**. This inspection consists of disassembly, gauging, proper assembly and function check. If required, Combat Arms personnel assist owning organizations in completing the SF 368, as outlined in TO 00-35D-54. Combat Arms personnel enter "Pre-issue Inspection/Gauged" on the weapon's AFTO Form 105 in SFMIS.

6.7.3. Inspection of In-Use SA/LW. In-use SA/LW are those not in extended storage packaging IAW 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-1)**. 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-1)**. 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-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. At least 25 percent of the SA/LW are to receive full gauging IAW maintenance TOs. AFSFC/SFXW 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-1)**. 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-1)**. 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 SFMIS and “Semi-Annual Inspection/Gauged” or “Annual Inspection/Gauged” (for inactive in-use SA/LW) on those receiving full gauging. **(T-1)**. 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 IAW maintenance TOs semi-annually (ANG and AFRC units will inspect Combat Arms rifles and pistols annually). **(T-1)**. 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. AFSFC/FGWL may change this requirement to a percentage less than 100 percent, for USAFA, Regional Training Centers and AETC bases conducting BMT/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 SFMIS. **(T-1)**.

6.7.5. Inspection of Weapons in Extended Storage/Preferred Packaging. Units should not remove SA/LW from extended storage for use during exercises unless absolutely necessary and authorized by the installation commander. 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 return the SA/LW to extended storage, IAW 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-1)**. Combat Arms will also conduct this inspection on all SA/LW removed from packaging, prior to them being placed into operational use, deployed or repackaged for extended storage. **(T-1)**. Pre-deployment inspections and/or post-deployment inspections satisfy the requirements of this paragraph if conducted within the specified times. Obtain SPI’s for weapon system at <https://spires.wpafb.af.mil/>; enter NSN for weapon in “Quick Search.”

6.7.5.1. Combat Arms will perform a serviceability inspection of 100 percent of weapons removed from extended storage/preferred packaging during periodic (every 18 months) hands-on serialized inventories before units return the weapons to extended storage packaging. **(T-1)**. Owning units will ensure all weapons are cleaned and lubricated prior to the Combat Arms inspection and before the weapons are returned to extended storage packaging. **(T-1)**. 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-1)**.

6.7.5.2. Combat Arms will gauge a minimum of 20 percent of each model weapon during this 18-month inspection and ensure that weapons gauged during previous 18-month 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. **(T-1)**. If Combat Arms finds unsatisfactory conditions on these weapons, they will gauge 50 percent of the same type weapon and if any unsatisfactory conditions are found on these weapons, they will gauge 100 percent of the same model weapons. **(T-1)**. Combat Arms personnel will enter "Extended Storage Inspection/Gauged" or "Extended Storage Inspection" as applicable on the weapon's AFTO Form 105 in SFMIS. **(T-1)**. Weapons removed from extended storage/preferred packaging for deployment must receive a full serviceability inspection, including gauging, within 120 days of deployment. **(T-1)**. Extended storage inspections, including gauging, conducted within this time meet the Pre-embarkation Inspection requirements.

6.7.5.3. If the owning unit does not remove weapons from extended storage to conduct hands-on serialized inventories, Combat Arms does not open containers to conduct any periodic inspections. However, Combat Arms will conduct a complete serviceability inspection, including gauging, of all weapons when they are removed from extended storage/preferred packaging before they are placed into use and/or immediately before they are returned to extended storage packaging. **(T-1)**. This paragraph refers to weapons removed from extended storage for reasons other than those discussed in paragraphs 6.7.5.1. and 6.7.5.2. Combat Arms personnel will enter "Extended Storage Inspection/Gauged" on the weapon's AFTO Form 105 in SFMIS. **(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 need to 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 SFMIS. 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 SFMIS. **(T-1)**. Ensure the unit sends the SFMIS 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 IAW 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 SFMIS 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. 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 SFMIS. **(T-1)**. Combat Arms will notify the unit of damaged or missing accessories required for complete end item turn-in. **(T-1)**. 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 SFMIS generated AFTO Form 105 must accompany the weapon in shipment through supply channels if the weapon is being returned to depot. **(T-1)**. 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 NSN 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 needs to 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.

ALLEN J. JAMERSON, Brig Gen, USAF
Director of Security Forces, DCS/DCS Logistics,
Engineering and Force Protection

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References.***

- AFCAT 21-209, Volume 1, *Ground Munitions*, 9 November 2007**
- AFECD, *Air Force Enlisted Classification Directory*, 19 September 2014**
- AFH 23-123, Volume 1, *Materiel Management Reference Information*, 8 August 2013**
- AFH 23-123, Volume 2, Part 1, *Integrated Logistics System-Supply (ILS-S), Materiel Management Operations*, 8 August 2013**
- AFH 23-123, Volume 2, Part 2, *Integrated Logistics Supply-System (ILS-S), Standard Base Supply System Operations*, 8 August 2013**
- AFH 23-123, Volume 2, Part 3, *Integrated Logistics System-Supply (ILS-S), Standard Base Supply System Reference*, 8 August 2013**
- AFH 23-123, Volume 2, Part 4, *Integrated Logistics System-Supply (ILS-S), Ancillary Components*, 8 August 2013**
- AFH 23-123, Volume 3, *Air Force Equipment Management*, 8 August 2013**
- AFI 10-2501, *AF Emergency Management (EM) Program Planning and Operations*, 24 January 2007**
- AFI 10-403, *Deployment Planning and Execution*, 20 September 2012**
- AFI 10-601, *Operational Capability Requirements Development*, 6 November 2013**
- AFI 21-201, *Munitions Management*, TBD**
- AFI 23-101, *Air Force Materiel Management*, 8 August 2013**
- AFI 25-201, *Intra-Service, Intra-Agency, and Inter-Agency Support Agreements Procedures*, 18 October 2013**
- AFI 31-101, *Integrated Defense*, 8 October 2009**
- AFI 31-117, *Arming and Use of Force by Air Force Personnel*, 17 March 2015**
- AFI 31-120, *Security Forces Systems and Administration*, 1 April 2015**
- AFI 32-9002, *Use Of Real Property Facilities*, 22 November 1993**
- AFI 33-360, *Publications and Forms Management*, 25 September 2013**
- AFI 34-101, *Air Force Morale, Welfare and Recreation (MWR) Programs and Use Eligibility*, 28 March 2013**
- AFI 34-143, *Excellence-In-Competition (EIC)*, 21 February 2012**
- AFI 36-2201, *Air Force Training Program*, 15 September 2010**
- AFI 36-2646, *Security Forces Training and Standardization Evaluation Programs*, 6 March 2014**

AFI 36-2803, *The Air Force Military Awards and Decorations Program*, 18 December 2013

AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*, 18 July 2011

AFI 41-106, *Medical Readiness Program Management*, 22 April 2014

AFI 48-101, *Aerospace Medicine Enterprise*, 8 December 2014

AFI 48-145, *Occupational and Environmental Health Program*, 22 July 2014

AFI 63-131, *Modification Management*, 19 March 2013

AFI 90-802, *Risk Management*, 11 February 2013

AFI 90-821, *Hazard Communication (HAZCOM) Program*, 27 January 2014

AFI 91-202, *The US Air Force Mishap Prevention Program*, 5 August 2011

AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, 15 June 2012

AFI 91-205, *Nonnuclear Munitions Safety Board*, 12 April 2012

AFMAN 23-122, *Materiel Management Procedures*, 8 August 2013

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

AFMAN 32-1084, *Facility Requirements*, 20 April 2012

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

AFMAN 36-2227, Volume 1, *Combat Arms Training Programs Individual Use Weapons*, 21 May 2004

AFMAN 36-2227, Volume 2, *Combat Arms Training Programs Crew Served Weapons*, 1 January 2004

AFMAN 36-2234, *Instructional System Development*, 1 November 1993

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

AFMAN 48-154, *Occupational and Environmental Health Site Assessment*, 28 March 2007

AFMAN 48-155, *Occupational and Environmental Health Exposure Controls*, 1 October 08

AFMAN 91-201, *Explosives Safety Standards*, 12 January 2011

AFOSHSTD 48-20, *Occupational Noise and Hearing Conservation Program*, 10 May 2013

AFPAM 10-100, *Airman's Manual*, 1 March 2009

AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*, 11 February 2013

AFPD 24-2, *Preparation and Movement of Air Force Materiel*, 27 April 2011

AFPD 25-2, *Support Agreements*, 28 August 2014

AFPD 36-26, *Total Force Development*, 27 September 2011

CFETP 3P0X1/X1A/X1B, *Security Forces Specialty, Military Working Dog Handler, Combat Arms Specialty*, 11 March 2013

DoDI 4140.62, CH 1, *Material Potentially Presenting an Explosive Hazard*, 19 February 2014

DoD 4160.21-M-1, *Defense Materiel Disposition Manual*, 18 August 1997

DoD 5100.76-M, *Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives (AA&E)*, 17 April 2012

DoDD 5210.56, *Carrying of Firearms and the Use of Force by DoD Personnel Engaged in Security, Law and Order, or Counterintelligence Activities*, 1 April 2011

DoDI 7730.47, *Defense Incident-Based Reporting System (DIBRS)*, 23 January 2014

ETL 11-18, *Engineering Technical Letter: Small Arms Range Design and Construction*, 19 April 2011

MIL-HDBK-1013/1A, *Military Handbook Design Guidelines for Physical Security of Facilities*, 15 December 1993

TM 750-244-7, *Procedures for Destruction of Equipment in Federal Supply Classifications 1000, 1005, 1010, 1015, 1020, 1025, 1030, 1055, 1090, and 1095, To Prevent Enemy Use*, 29 October 1970

TO 11A-1-10, *Air Force Munitions Surveillance Program and Serviceability Procedures*, 21 July 2014

TO 11A-1-42, *General Instructions for Disposal of Conventional Munitions*, 10 May 2006

TO 11A-1-47, *Ammunition and Explosive Hazard Classification Procedures*, 30 July 2012

TO 11A-1-53, *General Instructions for Ammo Color Coding Identification of Empty and Inert Loaded Ammunition Items and Components and Assignment of Version Numbers to Training and Dummy Ammunition Items*, 4 April 2012

TO 11A-1-60, *Inspection of Reusable Munitions Containers and Scrap Material Generated from Items Exposed to or Containing Explosives*, 15 May 2014

TO 11A13-6-7, *Specialized Storage and Maintenance Procedures Cartridges, 40mm*, 5 February 2014

TO 11A13-10-7, *Specialized Storage and Maintenance Procedures Small Arms Ammunition*, 10 February 2015

18 United States Code (USC) § 922(d)(9) and (g)(9), *The Domestic Violence Amendment to the Gun Control Act of 1968 (“the Lautenberg Amendment”)*

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 797, *Job Qualification Standard Continuation/Command JQS*

AF Form 847, *Recommendation for Change of Publication*

AF Form 1067, *Modification Proposal*

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.

AAL—Additional Authorization List

ABU—Airman Battle Uniform

ADM—Advanced Designated Marksman

AEF—Aerospace Expeditionary Force

AETC—Air Education and Training Command

AF—Air Force

AFB—Air Force Base

AFCAT—Air Force Catalog

AFCEC—Air Force Civil Engineer Center

AFCFM—Air Force Career Field Manager

AFECD—Air Force Enlisted Classification Directory

AFH—Air Force Handbook

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

AFOSHSTD—Air Force Occupational Safety and Health Standard

AFOSI—Air Force Office of Special Investigations

AFOSIMAN—Air Force Office of Special Investigations Manual

AFPAM—Air Force Pamphlet

AFPC—Air Force Personnel Center

AFPD—Air Force Policy Directive

AFQC—Air Force Qualification Course

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AFSC—Air Force Specialty Code

AFSFC—Air Force Security Forces Center

AFSVA—Air Force Services Activity

AFTO—Air Force Technical Order

AFTR—Air Force Training Record

AI—Assistant Instructor

AIC—Assignment Instruction Code

ALC—Air Logistics Center

AMST—Agile Munitions Support Tool

ANG—Air National Guard

ARC—Air Reserve Component

ASC—Allowance Standard Code

ASOC—Air Support Operations Center

BASH—Bird/wildlife Aircraft Strike Hazard

BAT—Basic Arms Training

BE—Bioenvironmental Engineering

BEEF—Base Engineer Emergency Force

BIM—Building Information Modeling

BMT—Basic Military Training

BOC—Basic Officer's Course

CA—Combat Arms

CA/CRL—Custodian Authorization/Custody Receipt Listing

CBSS—Combat Sustainment Squadron

CBT—Computer Based Training

CC—Commander

CCMCK—Close Combat Mission Capability Kit
CE—Civil Engineer
CFETP—Career Field Education and Training Plan
CI—Configuration Item
CCMD—Combatant Command
CONOPS—Concept of Operations
CONUS—Continental United States
COTS—Commercial Off the Shelf
CRC—Control and Reporting Center
CRO—Chief Range Officer
CWDE—Chemical Warfare Defense Ensemble
CY—Calendar Year
DCS—Deputy Chief of Staff
DD—Department of Defense Form
DIBRS—Defense Incident Based Reporting System
DOC—Designed Operational Capability
DoD—Department of Defense
DoDD—Department of Defense Directive
DoDI—Department of Defense Instruction
DOE—Department of Energy
DREAMS—Deficiency Report Entry And Mail Submitter
DRMO—Defense Reutilization and Marketing Office
DSN—Defense Switching Network
EIC—Excellence In Competition
EIS—Enterprise Information Services
EM—Emergency Management
EMS—Equipment Management Section
EOD—Explosive Ordnance Disposal
ETL—Engineering Technical Letter
EWCB—Equipment and Weapons Configuration Board
FAM—Functional Area Manager
FBI—Federal Bureau of Investigation

FITP—Firearms Instructor Training Program

FLETC—Federal Law Enforcement Training Center

FM—Field Manual

FOUO—For Official Use Only

GMAT—Ground Munitions Authorization Tables

HAZCOM—Hazardous Communication

HAZMAT—Hazardous Material

HDBK—Handbook

HQ—Headquarters

HQ AETC—Headquarters Air Education and Training Command

HQ AFMC/XRW—Headquarters Air Force Materiel Command, Munitions, Logistics, Systems, and Program

HQ AFOSI—Headquarters Air Force Office of Special Investigations

HQ AFOSI/XR—Headquarters Air Force Office of Special Investigations, Directorate of Strategic Programs and Requirements

HQ USAF/A4L—Headquarters United States Air Force, Deputy Chief of Staff for Logistics, Installations and Mission Support, Directorate of Logistics

HQ USAF/A4LR—Headquarters United States Air Force, Directorate of Logistics, Logistics Readiness Division

HQ USAF/A4LW—Headquarters United States Air Force, Directorate of Logistics, Nuclear Weapons, Missiles and Munitions Division

HQ USAF/A4S—Headquarters United States Air Force, Director of Security Forces

HRA—Health Risk Assessment

IAW—In Accordance With

IBA—Individual Body Armor

ICE—Individual Combat Equipment

IDEA—Innovative Development through Employee Awareness

IDP—Integrated Defense Plan

IG—Inspector General

IMA—Individual Mobilization Augmenter

IMT—Information Management Tool

JDET—Joint Drug Enforcement Team

JQS—Job Qualification Standard

JSSAP—Joint Service Small Arms Program

JSSARI—WG—Joint Service Small Arms Requirements Integration-Working Group

JSSAST—Joint Service Small Arms Synchronization Team

LAW—Light Anti-armor Weapon

LEITP—Law Enforcement Instructor Training Program

LG—Logistics Group

MAJCOM—Major Command

MISCAP—Mission Capability Statement

MOB—Main Operating Base

MPF—Military Personnel Flight

MPS—Military Personnel Section

MSDS—Material Safety Data Sheet

MUNSS—Munitions Support Squadron

NCO—Noncommissioned Officer

NCOIC—Noncommissioned Officer in Charge

NDI—Non Developmental Item

NNMSB—Nonnuclear Munitions Safety Board

NSN—National Stock Number

NVD—Night Vision Device

OI—Operating Instruction

OJT—On-the-Job Training

OPR—Office of Primary Responsibility

OSHA—Occupational Safety and Health Administration

OTS—Officer Training School

PA—Privacy Act

PAFSC—Primary Air Force Specialty Code

PCAR—Peacetime Conventional Ammunition Requirements

PCS—Permanent Change of Station

PDO—Publications Distribution Office

PEM—Program Element Manager

PI—Primary Instructor

PM—Preventive Maintenance

PMD—Program Management Directive

PMEL—Precision Measurement Equipment Laboratory

POC—Point Of Contact

POM—Program Objective Memorandum

POW—Privately Owned Weapon

PPC—PCS Processing Code (Replaces Assignment Instruction Code [AIC])

PQDR—Product Quality Deficiency Report

RDS—Records Disposition Schedule

RDT&E—Research Development Test and Evaluation

RM—Risk Management

ROTC—Reserve Officer Training Corps

RSO—Range Safety Officer

SA—Support Agreement

SA/LW—Small Arms and Light Weapons

SABC—Self-Aid and Buddy Care

SAEMR—Small Arms Expert Marksmanship Ribbon

SBSS—Standard Base Supply System

SDS—Safety Data Sheet

SDZ—Surface Danger Zone

SEI—Special Experience Identifier

SF—Security Forces

SFAC—Security Forces Apprentice Course

SFMIS—Security Forces Management Information System

SMC—Shoot, Move and Communicate

SORN—System of Records Notice

SPI—Special Packaging Instruction

SQ—Squadron

SSN—Social Security Number

STD—Standard

TACP—Tactical Air Control Party

TBD—To Be Determined

TCTO—Time Compliance Technical Order

TDY—Temporary Duty

TM—Technical Manual

TMDE—Test Measurement Diagnostic Equipment

TO—Technical Order

TT—Technical Training

UFITP—Use of Force Instructor Training Program

UQ—Unqualified

US—United States

USAF—United States Air Force

USAFA—United States Air Force Academy

USAFE—United States Air Forces in Europe

USAFSIA—United States Air Force Special Investigations Academy

USAFSIA/FT—United States Air Force Special Investigations Academy, Firearms and Tactics

USC—United States Code

UTA—Unit Training Assembly

UTC—Unit Type Code

VDZ—Vertical Danger Zone

VTS—Virtual Training System

WR—Warner Robins

WR ALC—Warner Robins Air Logistics Center

Terms.

Armed—Equipped with a loaded (live ammunition) firearm.

Certification—A formal indication of an individual's ability to perform a task to required standards.

Certification Official—A person whom the commander assigns to determine an individual's ability to perform a task to required standards.

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.

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 United States Code (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) callup 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 callup 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.

Core Task—Tasks the Air Force Career Field Manager (AFCFM) identifies as minimum qualification requirements within an AFSC, regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. Guidance for using core tasks can be found in the applicable Career Field Education and Training Plan (CFETP) narrative.

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, inter-theater, and intra-theater movement legs, staging, and holding areas.

Permanent Deviation (Exceptions)—when a condition cannot be corrected or when correcting a problem would result in exorbitant costs.

Temporary Deviations (Waivers)—when a correctable condition exists. Conditions approved as temporary deviations require compensatory measures. Grant temporary waivers for no more than one year.

Technical Deviations (Variances)—when a condition exists that are different from established requirements. Conditions approved as technical deviations do not require compensatory measures or corrective actions. Approve technical deviations for an indefinite time.

DoD Civilian with Equivalent Qualification—A DoD civilian who has graduated from the AFSC awarding Small Arms or Combat Arms Technical School.

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—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 Line Instructor—The assigned individual(s) on the firing platform who enforces safety procedures/policies and coaches shooters during range training.

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: HQ USAF/A4S for security forces; HQ USAF/A4C for civil engineers; HQ USAF/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.

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.

Installation Commander—The individual responsible for all operations performed by an installation.

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.

On—the-Job Training—Hands-on, “over-the-shoulder” training a duty location uses to certify personnel in both upgrade (skill-level award) and job qualification (position certification) training.

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.

Standard—An exact value, a physical entity, or an abstract concept the appropriate authority, custom, or common consent sets up and defines to serve as a reference, model, or rule in measuring quantities or qualities, developing practices or procedures, or evaluating results.

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.

Training Complex—Includes all firing ranges, SA/LW training facilities, associated impact areas and maneuver training areas within the installation/ community boundary.

Theater—The geographical area outside the continental United States a commander of a combatant command has been assigned responsibility.

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 Provider—An organization that develops or conducts training.

Tower Operator—The person who monitors the entire range at all times, paying particular attention to the firing line.

Unauthorized Firearms Discharge—Intentionally or accidentally discharging a firearm without authorization.

Unit Commander—An officer who commands a designated unit assigned, attached or tenant to an installation and whose administrative orders identify them as a “commander.”

Attachment 2

RISK MANAGEMENT (RM) EVALUATION OF EXISTING RANGE FACILITIES

A2.1. Overview. Air Force Risk Management (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 AFI 36-2654, *Combat Arms Program* and Engineering Technical Letter (ETL) 11-18, *Small Arms Range Design and Construction* (and future versions). For further information on RM, refer to AFI 90-802, *Risk Management*, and AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*. Combat Arms and base agencies use the guidance and processes for RM along with the criteria identified in AFI 36-2654 and ETL 11-18 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 to AFI 36-2654 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 will be moved to the Air Force Indoor Small Arms Range building information modeling (BIM) facilities criteria documents in the future and this will replace the ETL. Users may obtain the BIM documents via the USAF Combat Arms, Air Force Network (AFNet), Enterprise Information Services (EIS) website (<https://cs3.eis.af.mil/sites/AF-ED-00-29/>).

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 ETL criteria. A tabular method for recording these actions and steps is prescribed in 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 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 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 | 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 must be systematic. Establish metrics/tools to accurately measure effectiveness.

A2.2.5.3. Provide feedback to continually make improvements to the risk management 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 COAs 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, *Deliberate Risk Assessment Worksheet*, 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.

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/ricochets 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 IAW ETL. |
| 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. IAW ETL Will yield: II,E=L | Reposition firing points IAW ETL. | Verify projectiles no longer impact the sidewalls. |
| Side wall 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. |
| Side wall 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 (III, 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 AMW/CC 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: | |

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) | |
| S E V E R E I T Y | E F F E C T O F H A Z A R D | 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 | | | | |
| | | | | | | | | |
| | | | | | | | | |
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| 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 | |
|---|--|
| <p>1. <u>Mission/Task Description:</u> Briefly describe overall Mission, or Task that the Risk Assessment is being conducted for.</p> | <p>9. <u>Residual Risk Level:</u> After controls are implemented, determine resulting probability, severity, and revised Risk Level.</p> |
| <p>2. <u>Date (DD/MM/YYYY):</u> Self Explanatory.</p> | <p>10. <u>Overall Risk After Controls are Implemented:</u> Assign an overall Risk Assessment Level. This is the highest Residual Risk Level (Block 9).</p> |
| <p>3. <u>Prepared By:</u> 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)</p> | <p>11. <u>Supervision Plan and Recommended Course of Action (COA):</u> 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.</p> <p>"Risk vs. Reward" consideration based on real-time issues.</p> |
| <p>4. <u>Sub-task/Sub-Step of Mission/Task:</u> Briefly describe any Sub-Tasks associated with Primary Task that warrant risk mitigation consideration.</p> | <p>12. <u>Approval Disapproval of Mission/Task:</u> 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.</p> |
| <p>5. <u>Hazard:</u> Enter specific hazards related to the Sub-Task.</p> | <p>13. <u>Risk Assessment Review:</u> 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.</p> |
| <p>6. <u>Initial Risk Level:</u> Using the Risk Assessment Matrix, determine probability, severity and associated Risk Level; enter level into column.</p> | <p>14. <u>Feedback and Lessons Learned:</u> 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.</p> |
| <p>7. <u>Control:</u> Enter risk mitigation resources/controls identified to abate or reduce risk relevant to the hazard identified in Block 5.</p> | <p>15. <u>Additional Comments or Remarks:</u> 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.</p> |
| <p>8. <u>How to Implement/Who Will Control:</u> 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.</p> | <p><u>Additional Guidance:</u> 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.</p> |

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, *Risk Management*, AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*, the current Small Arms Range Design and Construction Engineering Technical Letter/Air Force Small Arms Range Facility Criteria, as well as AFI 36-2654, *Combat Arms Program*, to conduct range safety inspections and to verify compliance with design criteria. This checklist is not all-inclusive and units need to reference the other sources listed above, along with any guidance provided by manufacturers, to ensure all pertinent items are inspected and maintained. Use risk management 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 will 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. (T-2).

Table A3.1. Small Arms Range Inspection Checklist.

| Small Arms Range Inspection Checklist | | | |
|--|---|------------|-----------|
| Section A. Range Information. | | | |
| Range Name/Location: | | | |
| Range Type (Partially Contained, Fully Contained, etc.): | | | |
| Target Distance(s): | | | |
| Calibers/Types of Rounds Approved for Use: | | | |
| Section B. Category I: Catastrophic Hazard Severity (Projectile Containment). | | | |
| <p>B. Range construction/design must ensure projectiles do not leave the range and must ensure rounds do not produce hazardous ricochets within the range. Answering “No” to the questions in this section indicates a Category I (Catastrophic) hazard severity. Range closure until the discrepancy is resolved is highly recommended. NOTE: 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 must 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 range with angled overhead baffles, are they angled so the bottom edge points toward the target line? | | |
| 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 <u>prohibited</u> from being fired on ranges using | | |

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| | 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? | | | |

Section C. Category II: Critical Hazard Severity (Projectile Containment).

C. Range construction/design must ensure projectiles do not leave the range and must ensure rounds do not produce hazardous ricochets within the range. Answering “No” to the questions in this section indicates a **Category II (Critical)** hazard severity. Range closure until the discrepancy is eliminated or immediate mitigation should be considered.

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| 1. | On a machine gun tube range, is the backstop no further away than 150 feet (45.7 meters) from the firing line to the centerline of the backstop? | | | |
| 2. | Are large rocks removed from the firing range floor to eliminate ricochet hazards? | | | |
| 3. | 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.) | | | |
| 4. | On a baffled range with angled baffles, are overhead baffles angled at 12 to 32 degrees to eliminate ricochet rounds from leaving the range? | | | |
| 5. | 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? | | | |
| 6. | On a baffled range, does the steel used on overhead and canopy baffles meet the minimum standards for the largest caliber being | | | |

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| | fired on the range? | | | |
| 7. | 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? | | | |
| 8. | 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? | | | |
| 9. | On a range with an earthen backstop, are the slopes of the backstops stabilized with vegetation to reduce erosion and to prevent ricochet hazards (other than bullet impact areas)? | | | |
| 10. | 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? | | | |
| 11. | On a range with earthen side berms, are the berms constructed with material (sand, silty sand, or clayey sand) to a depth of 1 meter, with a maximum particle size allowed by the #4 sieve test and a maximum 40% passing the #200 sieve test? | | | |
| 12. | 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? | | | |
| 13. | 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? | | | |
| 14. | 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? | | | |
| 15. | On an impact range, does the firing line overhead canopy structure contain direct-fired rounds? | | | |
| 16. | On a range with a bullet trap system, have all steel plate joints been ground to ensure there are no gaps exceeding 1.6 mm between them? | | | |
| 17. | On a range with a bullet trap system, are steel plates positioned to ensure the welds are no closer than 18 inches to the center of the target position? | | | |
| 18. | On a range with a bullet trap system, are steel plates jointed and supported on structural steel supports to ensure spot-welds are no closer than 3 inches on center? | | | |
| 19. | If barricades are made of steel or concrete, are they covered with a soft wood to prevent ricochets? | | | |
| 20. | 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? | | | |
| 21. | Has the excessive lead test (rod test) been conducted within the last 12 months? | | | |
| 22. | If the backstop fails the excessive lead test, have steps been taken, such as mining or adding additional soil, to eliminate the ricochet | | | |

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| | hazard? | | | |
| 23. | On an M203 range, are metal targets constructed to ensure rounds do not ricochet back towards the firing line? | | | |
| 24. | On a range with a bullet trap system, are the backstop deflector plates placed at angles of at least 30 to 42 degrees from horizontal? | | | |
| 25. | 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? | | | |
| 26. | 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? | | | |
| 27. | If a water trap is used, does it cover the entire area under the backstop and is the water level maintained at a level not less than 12 inches deep? | | | |
| Section D. Category II: Critical Hazard Severity (Exterior Range Safety). | | | | |
| D. Range construction/design must ensure personnel exterior to the range are as safe as possible. Answering “No” to the questions in this section indicates a Category II (Critical) 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 complex? | | | |
| 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. | Are M203 grenade ranges constructed to ensure range support facilities are not encroaching into the M203 range (to include the M203 SDZ and range fan)? | | | |

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| 11. | On a new range, are all doors or windows prohibited forward of the firing line? | | | |
| 12. | 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? | | | |
| Section E. Category III: Moderate Hazard Severity (Environmental). | | | | |
| <p>E. Range construction/design must 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 Category III (Moderate) 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. | For new construction, has the local BE approved the range construction plan? | | | |
| 4. | On a range using a water trap system, does the water trap have a water supply, drain, circulation pump, and a filtration system? | | | |
| 5. | Is the range designed to ensure endangered species are not threatened? | | | |
| 6. | Is surface water runoff prevented from entering surface water bodies? | | | |
| Section F. Category III: Moderate Hazard Severity (Occupational Health). | | | | |
| <p>F. Range construction/design must eliminate, reduce or mitigate occupational lead contamination and exposure to health hazards. Answering “No” to the questions in this section indicates a Category III (Moderate) 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 outdoor baffled ranges, is the construction coordinated through the base BE section 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? | | | |

G. Category III: Moderate Hazard Severity (Sound/Noise Exposure).

G. Ranges should be located where environmental nuisance noise is as low as possible and constructed to mitigate occupational noise exposure. Additionally, all personnel who occupy a range must wear hearing protection when the range is in operation and live-fire is in progress. 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 **Category III (Moderate)** 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.

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| 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 is kept as low as possible? | | | |
| 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? | | | |

H. Category III: Moderate Hazard Severity (Ground/Range Safety).

H. 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 **Category III (Moderate)** hazard severity and increased risk of safety mishaps. Discrepancies should be eliminated or mitigated as soon as possible.

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| 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 the Small Arms Range Design and Construction ETL? | | | |
| 4. | Is the firing line constructed to eliminate tripping hazards? | | | |
| 5. | Does the firing line slope to the rear 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 a tripping hazard? | | | |

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| 8. | Is the centerline of targets between 6 in and 60 in 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? | | | |
| I. Category IV: Negligible Hazard Severity (Utilities). | | | | |
| <p>I. Range construction/design should ensure utilities are protected from damage. Answering “No” to the following questions indicates a Category IV (Negligible) hazard severity and risk of facility damage. Discrepancies should be eliminated or mitigated as soon as possible.</p> | | | | |
| 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? | | | |