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Personnel

COMBAT ARMS TRAINING PROGRAMS INDIVIDUAL USE WEAPONS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This manual implements Air Force Policy Directive (AFPD) 36-22*, Air Force Military Training* and Air Force Instruction (AFI) 36-2226, *Combat Arms Program*. It gives guidance and procedures for rifle, handgun, shotgun, grenade launcher, anti-armor weapon, submachine gun and automatic rifle training programs. Use this manual with AFI 36-2226. Process proposed supplements as required by AFI 36-360 V1, *AF Publications and Forms Management Programs--Developing and Processing Publications*. ***Records Management.*** Maintain and dispose of all records created by AFMAN 36-2227 in accordance with AFMAN 37-123*, Management of Records,* and *AFMAN 37-139, Records Disposition Schedule*. Submit recommended changes or clarification requests through MAJCOM channels to HQ AFSFC/SFWC, 1517 Billy Mitchell Blvd, Lackland AFB, TX 78236-0119. Do not use the Air Force Innovative Development Through Employee Awareness (IDEA) Program to suggest changes to Air Force qualification courses of fire. This Air Force Manual applies to Air Force Reserve Command (AFRC) and Air National Guard units.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

This revision updates the Combat Arms Training Programs. It deletes the Specialized Rifle Course and replaces it with the Tactical Rifle Qualification Course (TRQC). It authorizes the use of the Combat Rifle Course as a suitable replacement for the Air Force Qualification Course (AFQC) of fire or the TRQC when fired at Major Command Regional Training Centers. It updates the handgun AFQC. It incorporates the M4 Carbine into all rifle courses of fire. Clarifies the use of Cross-Draw type holsters on the firing line.

Chapter 1—RIFLE/CARBINE TRAINING PROGRAM **7**

1.1. Rifle/Carbine AFQC/TRQC. 7

1.2. Training Overview. 7

1.3. Instructor Guidelines. 8

1.4. Rifle/Carbine Qualification Plan of Instruction. 8

1.5. Training Goal. 8

1.6. Training Objectives (AFQC). 8

Table 1.1. Rifle/Carbine AFQC and TRQC Training Objectives/Intermediate Training Objectives (ITO). 9

1.7. Recommended Sequence of Events. 11

1.8. Administrative Requirements. 12

1.9. Tactical Rifle Qualification Course (TRQC): 14

1.10. Training Objective (TRQC). 14

1.11. Recommended Sequence of Events. 14

1.12. Administrative Requirements. 15

Figure 1.1. Rifle/Carbine Firing Requirements, Rifle/Carbine Air Force Qualification Course 18

1.13. Course Information, Rifle/Carbine AFQC. 19

Figure 1.2. Rifle/Carbine Firing Requirements, TRQC Day Fire 23

1.14. Course Information, TRQC. 24

Figure 1.3. Grip, Rifle Butt, Firing Hand, Stock Weld and Elbow Location: 29

Figure 1.4. Supported Fighting Position. 30

Figure 1.5. Prone Unsupported Position. 31

Figure 1.6. Alternate Prone Position. 32

Figure 1.7. Kneeling Supported Position. 33

Figure 1.8. Standing Position. 34

Figure 1.9. Modified Firing Positions. 35

Figure 1.10. Military Operations in Urban Terrain (MOUT) Firing Positions. 35

Figure 1.11. MOUT Continued. 36

Chapter 2—HANDGUN TRAINING PROGRAM **37**

2.1. Handgun AFQC. 37

2.2. Training Overview. 37

2.3. Instructor Guidelines. 37
2.4. Handgun Qualification Plan of Instruction. 37
2.5. Training Goal. 38
2.6. Training Objectives (AFQC). 38
Table 2.1. Handgun Training Objectives/Intermediate Training Objectives (ITO). 38
2.7. Recommended Sequence of Events. 40
2.8. Administrative Requirements. 41
2.9. Handgun Orientation Course. 43
2.10. Specialized Handgun Training Program. 43
Figure 2.1. Handgun Firing Requirements, Handgun Air Force Qualification Course (AFQC). 43
2.11. Course Information, Handgun AFQC. 44
Figure 2.2. Weaver Stance. 49
Figure 2.3. Weaver Ready Position. 50
Figure 2.4. Handgun Right Barricade Position. 51
Figure 2.5. Handgun Left Barricade Position. 52
Figure 2.6. Handgun Over Barricade Position. 53
Figure 2.7. Circle Template for Handgun Targets. 54

Chapter 3—SHOTGUN TRAINING PROGRAM 55

3.1. Shotgun AFQC. 55
3.2. Training Overview. 55
3.3. Instructor Guidelines: 55
3.4. Shotgun Qualification Plan of Instruction. 55
3.5. Training Goal. 56
3.6. Training Objectives (AFQC). 56
Table 3.1. Shotgun Training Objectives/Intermediate Training Objectives (ITO). 56
3.7. Recommended Sequence of Events. 57
3.8. Administrative Requirements. 59
Figure 3.1. Shotgun Firing Requirements, Shotgun Air Force Qualification Course (AFQC). .. 60
3.9. Course Information, Shotgun AFQC. 60
Figure 3.2. Shotgun Ready Position. 62
Figure 3.3. Shotgun Standing Position. 63

Figure 3.4. Shotgun Strong Side Barricade Position. 64
Figure 3.5. Shotgun Over Barricade Position. 65

Chapter 4—40MM GRENADE LAUNCHER TRAINING PROGRAM 66

4.1. Grenade Launcher AFQC. 66
4.2. Training Overview. 66
4.3. Instructor Guidelines. 66
4.4. Grenade Launcher Qualification Plan of Instruction. 66
4.5. Training Goal. 67
4.6. Training Objectives (AFQC). 67
Table 4.1. Grenade Launcher Training Objectives/Intermediate Training Objectives (ITO). .. 67
4.7. Recommended Sequence of Events. 68
4.8. Administrative Requirements. 70
Figure 4.1. Grenade Launcher Firing Requirements, Grenade Launcher Air Force Qualification Course (AFQC). 71
4.9. Course Information, Grenade Launcher AFQC. 72
Figure 4.2. Grenade Launcher Prone Supported Position. 73
Figure 4.3. Grenade Launcher Kneeling Supported Position. 74
Figure 4.4. Example of Grenade Launcher Target Arrays. 75

Chapter 5—LIGHT ANTI-ARMOR WEAPONS TRAINING PROGRAM 76

5.1. Light Anti-armor Weapons AFQC. 76
5.2. Training Overview. 76
5.3. Instructor Guidelines: 76
5.4. Light Anti-armor Weapons Qualification Plan of Instruction. 76
5.5. Training Goal. 77
5.6. Training Objectives (AFQC). 77
Table 5.1. Light Anti-armor Weapon Training Objectives/Intermediate Training Objectives (ITO). 77
5.7. Recommended Sequence of Events. 78
5.8. Administrative Requirements. 79
Figure 5.1. Light Anti-armor Weapon Firing Requirements, Air Force Qualification Course. .. 80
5.9. Course Information, Light Anti-armor Weapons AFQC. 81

Figure 5.2. Light Anti-armor Basic Standing Positions. 82
Figure 5.3. Light Anti-armor Modified Standing Positions. 83
Figure 5.4. Light Anti-armor Weapon Kneeling Positions. 84
Figure 5.5. Light Anti-armor Weapon Sitting Positions. 85
Figure 5.6. Light Anti-armor Weapon Prone Position. 86

Chapter 6—SUBMACHINE GUN TRAINING PROGRAM 87

6.1. Submachine Gun AFQC. 87
6.2. Training Overview. 87
6.3. Instructor Guidelines and Ratios. 87
6.4. Submachine Gun Qualification Plan of Instruction. 87
6.5. Training Goal. 87
6.6. Training Objectives (AFQC). 88
Table 6.1. Submachine Gun Training Objectives/Intermediate Training Objectives (ITO). 88
6.7. Recommended Sequence of Events. 89
6.8. Administrative Requirements. 91
Figure 6.1. Submachine Gun Firing Requirements, Air Force Qualification Course. 92
6.9. Course Information, Submachine Gun AFQC. 92
Figure 6.2. Prone Supported Position. 95
Figure 6.3. Standing Shoulder Point and Ready Positions. 96
Figure 6.4. Strong Side Barricade Standing Position. 97
Figure 6.5. Over Barricade Position. 98

Chapter 7—M249 AUTOMATIC RIFLE TRAINING PROGRAM 99

7.1. M249 Automatic Rifle AFQC. 99
7.2. Training Overview. 99
7.3. Instructor Guidelines and Ratios. 99
7.4. M249 Qualification Plan of Instruction. 100
7.5. Training Goal. 100
7.6. Training Objectives (AFQC). 100
Table 7.1. M249 Automatic Rifle Training Objectives/Intermediate Training Objectives (ITO). 101
7.7. Recommended Sequence of Events. 101

7.8. Administrative Requirements. 103

Figure 7.1. M249 Automatic Rifle Firing Requirements, Air Force Qualification Course (AFQC) (Full Distance). 106

7.9. Course Information, M249 AFQC (Full Distance). 106

Figure 7.2. M249 Automatic Rifle Firing Requirements, Air Force Qualification Course (10-Meter). 108

7.10. Course Information, M249 AFQC (10-Meter). 108

Figure 7.3. M249 Prone Position (Left Side, Right Side and Frontal View). 111

Figure 7.4. Sample Air Force Form 522 113

Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION 115

Chapter 1

RIFLE/CARBINE TRAINING PROGRAM

1.1. Rifle/Carbine AFQC/TRQC. The AFQC provides Air Force members with the minimum training; tactics, techniques and procedures, and performance evaluations required for qualification with M16 series rifles/carbines, (M16, M16A1, M16A2, M4, GAU, GUU-5P, etc). The TRQC is an advanced/specialized course fired by Group A personnel during recurring training. Security Forces will normally fire the TRQC unless they meet the requirements in paragraph **1.2.4.** below. However, Commanders with Group A members within their units may temporarily authorize the AFQC in lieu of the TRQC to meet mission needs. MAJCOM/SF may implement the preferred full distance firing for SF personnel provided the training meets or exceeds the objectives of this AFMAN. MAJCOM/SF will forward a copy of the proposed full distance course of fire to HQ AFSFC for approval prior to implementation.

1.2. Training Overview.

1.2.1. Initial Training. This is the trainee's first participation in the rifle/carbine qualification-training program. Initial training consists of in-depth classroom instruction, qualification on the Air Force Qualification Course (AFQC) and passing mechanical evaluations. Objective 5 and Intermediate Training Objectives 5.1 - 5.7 in **Table 1.1.** are not required for AFQC qualification.

1.2.2. Recurring Training. This is qualification training after initial qualification. It consists of classroom instruction (Group A personnel may be given performance evaluations prior to classroom instruction to determine appropriate level of classroom instruction required), passing performance evaluations and qualifying on the appropriate course of fire. Frequency of this training is outlined in AFI 36-2226, *Combat Arms Programs*.

1.2.2.1. AFQC. Initial training on the AFQC is a prerequisite before proceeding to more advanced specialized training courses. Objective 5 and Intermediate Training Objectives 5.1-5.7 in **Table 1.1.** are not required for AFQC qualification.

1.2.2.2. TRQC. If the night fire portions of the TRQC cannot be fired due to range design or equipment limitations, MAJCOM functional managers may waive this requirement until the range has been updated and necessary equipment received to allow the course of fire to be conducted. If the complete course of fire is required, both the day and night fire portions should be fired as a complete course during the same training session. Designated Marksman (DM) personnel will fire the entire course of fire using the Day Optical Scope. Intermediate Training Objective 3.3 in **Table 1.1.** is not required for TRQC qualification.

1.2.3. Remedial Training. This is the minimum training needed to correct deficiencies causing an individual to fail an evaluation. This training is given to all personnel who fail an evaluation.

1.2.4. Combat Rifle Course (CRC). If logistical support is available to support this type training, MAJCOMs should develop combat rifle training programs and identify personnel who would most benefit from this course. This course is best administered at MAJCOM approved regional training centers and would fulfill the qualification requirement for the course of fire (AFQC or TRQC) currently in cycle. All courses of fire must be implemented IAW AFI 36-2226, paragraph 2.16.4.

1.2.5. Unit Training. Refresher training on operator skills and knowledge provided by units to help maintain the individual's proficiency. Units should conduct this training before exercises and deployments.

1.3. Instructor Guidelines.

1.3.1. Classroom. Instructors will supervise, assist and evaluate trainees during all “hands on” weapons training. All trainees must meet the applicable objectives contained in **Table 1.1.**. See AFI 36-2226 for student to instructor ratios and exceptions. Instructors will “connect” the various skills taught during training to “real life” scenarios. This ensures students understand the tactics, techniques and procedures used to effectively utilize their weapons.

1.3.2. Range. Instructors will supervise, coach and teach trainees, as needed, during grouping, zeroing, practice and between evaluation orders of fire. See AFI 36-2226 for student to instructor ratios.

1.3.3. Tower Operator. The tower operator has responsibility and authority for safe and effective range operations during range training sessions. See AFI 36-2226 for exceptions.

1.4. Rifle/Carbine Qualification Plan of Instruction. The plan in the following paragraphs is intended to provide instruction standardization. This program is mandatory for initial and recurring training. Remedial training is in-depth instruction, concentrating on known problems. Trainees must meet and be evaluated to the performance standards of these training objectives. Approximate training times for this program are:

1.4.1. 7 to 9 hours for AFQC and TRQC and as needed for remedial and CRC.

1.5. Training Goal. The training goal is to instill confidence in the trainee to develop and maintain the ability to use the rifle effectively against enemy targets.

1.6. Training Objectives (AFQC). The training objectives needed for successful completion of this course are found in **Table 1.1.**. Objective 5 and Intermediate Training Objectives 5.1 - 5.7 in **Table 1.1.** are not required for AFQC qualification.

1.6.1. Intermediate Training Objectives. The trainees must be familiar with:

1.6.1.1. Safety procedures.

1.6.1.2. Characteristics, nomenclature and general data.

1.6.1.3. Types, care, handling and preserving ammunition.

1.6.1.4. Range firing procedures.

Table 1.1. Rifle/Carbine AFQC and TRQC Training Objectives/Intermediate Training Objectives (ITO).

	Objective	Condition	Standard
		Given:	
1.	Operate rifle/carbine.	Rifle/carbine, dummy ammunition and required equipment.	Operate rifle/carbine.
ITO			
1.1	Load magazine.	Two magazines, filler and dummy ammunition.	Load two magazines.
1.2	Load rifle/carbine.	Rifle/carbine and loaded magazine.	Load rifle/carbine.
1.3	Unload and clear rifle/carbine.	Rifle/carbine loaded with dummy ammunition.	Unload and clear rifle/carbine.
1.4	Reload rifle/carbine.	Rifle/carbine with empty magazine, on semi, bolt to rear.	Reload rifle/carbine from the fastened pouch.
1.5	Apply immediate and remedial actions.	Rifle/carbine and dummy ammunition with “staged” stoppage.	Apply immediate actions.
1.6	Perform function check.	Rifle/carbine.	Perform function check.
2.	Apply rifle/carbine fundamentals.	Rifle/carbine, dummy ammunition and equipment.	Apply fundamentals to demonstrate ability to consistently place shots on target.
ITO			
2.1	Demonstrate positions and techniques of holding rifle/carbine with and without the gas mask.	Rifle/carbine and gas mask as appropriate.	Demonstrate correct firing positions and techniques to properly hold the rifle or carbine with or without the gas mask.
2.2	Apply aiming techniques with and without the gas mask.	Rifle/carbine, gas mask as appropriate, sighting and aiming bar and/or other devices.	Obtain correct sight alignment/picture.
2.3	Apply breath control.	Rifle/carbine.	Apply breath control without disturbing sight alignment/picture.
2.4	Apply trigger control.	Rifle/carbine.	Apply trigger control without disturbing sight alignment/picture.

	Objective	Condition	Standard
		Given:	
3.	Meet/exceed minimum score on AFQC.	Rifle/carbine and required ammunition/equipment.	Qualify on AFQC.
	ITO		
3.1	Zero rifle/carbine.	Rifle/carbine and required ammunition/equipment.	Fire one 4-centimeter shot group.
3.2	Fire teaching phase.	Rifle/carbine and required ammunition/equipment.	75-meter target should have 7 hits. 175-meter target should have 5 hits. 300-meter target should have 3 hits.
3.3	Qualify on AFQC evaluation phase.	Rifle/carbine and required ammunition/equipment.	Qualify on appropriate course of fire.
4.	Perform operator maintenance.	Rifle/carbine and required equipment.	Clean, inspect, and lubricate rifle/carbine and pass function check.
ITO			
4.1	Disassemble rifle/carbine.	Rifle/carbine and required equipment.	Disassemble rifle/carbine to authorized level.
4.2	Clean rifle/carbine.	Rifle/carbine and proper cleaning equipment.	Properly clean rifle/carbine.
4.3	Lubricate rifle/carbine.	Rifle/carbine and required lubricating supplies.	Lubricate rifle/carbine.
4.4	Assemble rifle/carbine.	Rifle/carbine and required equipment.	Assemble rifle/carbine.
4.5	Perform function check.	Rifle/carbine.	Function check rifle/carbine.
5.	Meet/exceed minimum TRQC qualifying scores.	Rifle/carbine and required ammunition/equipment.	Qualify on TRQC evaluation phases.
	ITO		
5.1	Fire TRQC battle sight zero phase.	Rifle/carbine and required ammunition/equipment.	Fire one 4-centimeter shot group.
5.2	Qualify on TRQC Day Rapid Fire phases.	Rifle/carbine and required ammunition/equipment.	Qualify on appropriate course of fire.
5.3	Qualify on TRQC Day Burst phase.	Rifle/carbine and required ammunition/equipment.	Qualify on appropriate course of fire.
5.4	Qualify on TRQC CWDE phase.	Rifle/carbine and required ammunition/equipment.	Qualify on appropriate course of fire.

	Objective	Condition	Standard
		Given:	
5.5	Qualify on TRQC Night Semiautomatic Fire phase.	Rifle/carbine and required ammunition/equipment.	Qualify on appropriate course of fire.
5.6	Qualify on TRQC Night Burst Fire phase.	Rifle/carbine and required ammunition/equipment.	Qualify on appropriate course of fire.
5.7	Night Vision Devices.	Rifle/carbine and required ammunition/equipment.	Qualify on appropriate course of fire.

1.7. Recommended Sequence of Events.

1.7.1. First Period -- Orientation and Mechanical Training. Approximately 3 hours are needed for this training.

1.7.1.1. Prepare all required forms and documents.

1.7.1.2. Teach the basic rules of weapons safety.

1.7.1.3. Issue each trainee a rifle or carbine, magazines, web belt, magazine pouch, magazine filler, dummy rounds and other required equipment.

1.7.1.4. Introduce subject, motivate trainees and express importance for US Air Force personnel to handle weapons safely and efficiently.

1.7.1.5. Describe characteristics of the rifle/carbine.

1.7.1.6. Describe exterior nomenclature of the rifle/carbine.

1.7.1.7. Describe the functions of the rifle/carbine.

1.7.1.8. Types of ammunition used.

1.7.1.9. Explain, demonstrate and conduct practical exercises on:

1.7.1.9.1. Clearing the rifle/carbine.

1.7.1.9.2. Disassembling, assembling and function checking the rifle/carbine.

1.7.1.9.3. Caring, cleaning and lubricating the rifle/carbine and magazine for home station and possible deployment climatic conditions (the preferred method is to teach this during cleaning as a demonstration and performance lesson).

1.7.1.9.4. Loading and unloading the magazine.

1.7.1.9.5. Loading, charging, unloading and reloading the rifle/carbine.

1.7.1.9.6. Teach stoppage, immediate action and remedial action procedures.

1.7.1.9.7. Conduct immediate action practical exercises.

1.7.2. Second Period -- Preparatory Marksmanship Training. Approximately 2 hours are needed for this training.

1.7.2.1. Explain and demonstrate:

1.7.2.1.1. Firing positions (**Figure 1.3.** - **Figure 1.11.**).

1.7.2.1.2. How marksmanship fundamentals help ensure hits on target at all ranges.

1.7.2.1.3. Aiming to include sight alignment, sight picture and focus of the eye.

1.7.2.2. Correct sight alignment and sight picture by using sighting and aiming training aids as needed.

1.7.2.3. Conduct practical exercises on proper techniques of holding the rifle/carbine and breath and trigger control.

1.7.2.4. Principles of battle sight zero, wind effect and bullet trajectory.

1.7.2.5. Conduct sight adjustment exercises.

1.7.3. Third Period -- Live Fire Practice. The objective is to prepare the student to confidently fire the rifle/carbine before evaluation. Approximately 1.5 hours are needed for this training.

1.7.3.1. Explain safety requirements for live firing.

1.7.3.2. Explain range procedures.

1.7.3.3. Review marksmanship fundamentals.

1.7.3.4. Review all factors of aiming to include the importance of good sight alignment.

1.7.3.5. Review procedures for clearing stoppages during live firing.

1.7.3.6. Conduct exercises in assuming firing positions and dry firing from these positions.

1.7.3.7. Conduct practice fire training.

1.7.3.8. Use ball and dummy exercises, if needed.

1.7.4. Fourth Period -- Evaluation. Approximately 1.5 hours are needed for this training (required evaluations may be accomplished anytime during the training).

1.7.4.1. Brief trainees on evaluation criteria.

1.7.4.2. Conduct qualification evaluation according to **Figure 1.1.**.

1.7.4.3. Instructors will score evaluation phases.

1.7.4.4. Evaluate the trainee's proficiency in operator maintenance (the preferred method to teach operator maintenance is to teach this during cleaning as a demonstration and performance lesson) and function check procedures.

1.7.4.5. Trainees must correctly perform function check.

1.7.4.6. Documents Needed: AF Forms 522, **USAF Ground Weapons Training Data** and AF Form 710, **Combat Arms Training Record**.

1.7.4.7. Instructors will provide remedial training for those who fail to qualify (live fire or performance evaluation). Instructors may provide immediate refires or notify unit-training sections of failures.

1.8. Administrative Requirements.

1.8.1. Reference Material:

1.8.1.1. AFI 36-2226, *Combat Arms Program.*

1.8.1.2. T.O. 11W3-5-5-1, *Operator, Maintenance, Repair and Replacement Parts, Rifle 5.56mm M16, Rifle 5.56mm M16A1, Bipod Assembly M3, and Launcher Grenade 40mm XM148.*

1.8.1.3. T.O. 11W3-5-5-1-1, *Maintenance and Repair, Sub-machinegun, 5.56mm GAU-5A, GAU-5A/A, and GUU-5/P.*

1.8.1.4. T.O. 11W3-5-5-31, *Operator's and Organizational Maintenance Manual, M2 Bolt.*

1.8.1.5. T.O. 11W3-5-5-41, *Operator's Manual, Rifle, 5.56mm, M16A2.*

1.8.1.6. T.O. 11W3-5-5-61, *Operator's Manual for Rifle, 5.56mm, M16, M16A1.*

1.8.1.7. T.O. 11W3-5-5-81, *Rifle Marksmanship, M16A, M16A2, M16A3, M16A4, and M4 Carbine Rifle Marksmanship (Army FM 23-9).*

1.8.2. Facilities Needed (See current Engineering Technical Letter [ETL] on the Air Force Civil Engineer Support Agency WWW site at: **http://www.afcesa.af.mil/CES/** for specific facility guidance).

1.8.2.1. Classroom equipped with chalk or dry erase board, tables and one chair per trainee.

1.8.2.2. Range with 25-meter target distance capable of accommodating the ammunition used for training.

1.8.2.3. Care and cleaning area.

1.8.3. Training Aids and Equipment:

1.8.3.1. Rifle or carbine (one per trainee).

1.8.3.2. For Designated Marksman, the Trijicon Day Optical Scope will be used. For all others firing the M4 carbine, the M68 Close Combat Optic and Back Up Iron Sight will be provided and used as required during the course.

1.8.3.3. 30-round magazines, web gear, ammo pouches and, if applicable, issued Load Bearing Equipment (LBE) or Load Bearing Vest (LBV).

1.8.3.4. Dummy ammunition, magazine filler, empty bandoleer and empty ammunition can/box.

1.8.3.5. Sighting and aiming bars, devices and charts as needed.

1.8.3.6. Training charts (optional).

1.8.3.7. Overhead projector/computer system with visual slide capability (optional) .

1.8.3.8. Slide projector (optional).

1.8.3.9. Video cassette recorder and monitor (optional) .

1.8.3.10. Slides and transparencies (optional).

1.8.3.11. Zero targets.

1.8.3.12. Public address system.

1.8.3.13. Sound suppressors and/or ear plugs (one set per trainee and one set per instructor).

1.8.3.14. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel; dual hearing protection is required for Combat Arms personnel (unless electronic headsets are being used).

1.8.3.15. Care and cleaning equipment.

1.8.3.16. Slow and timed fire targets.

1.8.3.17. Student handout material.

1.8.3.18. First aid kit.

1.8.3.19. Brass deflectors.

1.8.3.20. Combat Arms Training Simulators (optional) meeting the requirements identified in AFI 36-2226.

1.8.4. Course ammunition. Cartridge, 5.56mm Ball, 5.56mm Plastic Practice Cartridge, 5.56mm Frangible or other authorized ammunition as required.

1.8.5. Documents Needed: AF Forms 522 and 710.

1.9. Tactical Rifle Qualification Course (TRQC): The TRQC is an advanced (specialized) course designed to train personnel on rapid fire, burst fire, night fire, quick reaction drills, weak hand firing and firing while wearing Chemical Warfare Defense Ensemble (CWDE). The TRQC meets or exceeds AFQC objectives. Designated Marksman personnel will fire the entire course of fire using the Day Optical Scope. Approximate training time is 7 to 9 hours. Intermediate Training Objective 3.3 in **Table 1.1.** is not required for TRQC qualification.

1.10. Training Objective (TRQC). The training objectives needed for successful completion of this course are found in **Table 1.1.**.

1.10.1. Intermediate Training Objectives. The trainee must be familiar with:

1.10.1.1. Safety procedures.

1.10.1.2. Characteristics, nomenclature and general data.

1.10.1.3. Types, caring and preserving 5.56mm ammunition.

1.10.1.4. Range firing procedures.

1.11. Recommended Sequence of Events.

1.11.1. First Period -- Orientation and Preparatory Marksmanship Training for Chemical Warfare Defense, Rapid, Weak Hand and 3-round Burst Fire Training. Approximately 2 hours are needed for training.

1.11.1.1. Prepare all required forms and documentation.

1.11.1.2. Review the basic rules of weapons safety.

1.11.1.3. Discuss the potential need to fire in a nuclear, biological or chemical (NBC) environment.

1.11.1.4. Explain the tactical advantages and disadvantages of rapid and automatic/burst fire.

1.11.1.5. Explain, demonstrate and conduct practical exercises:

1.11.1.5.1. Proper CWDE firing techniques.

1.11.1.5.2. Rapid and automatic/burst marksmanship fundamentals.

1.11.2. Second Period -- Preparatory Marksmanship Training for Night Fire Training. Approximately 2 hours are needed for training.

1.11.2.1. Discuss firing in a limited visibility environment.

1.11.2.2. Explain, demonstrate and conduct practical exercises:

1.11.2.2.1. In the principles and techniques of night firing.

1.11.2.2.2. On operating and zeroing night vision goggles, scopes and other aiming devices.

1.11.3. Third Period -- Live Fire and Evaluation. Approximately 3 hours are needed for training.

1.11.3.1. Review live firing safety requirements.

1.11.3.2. Review range procedures.

1.11.3.3. Review procedures for clearing stoppages during live firing.

1.11.3.4. Brief trainees on evaluation criteria.

1.11.3.5. Conduct live fire and evaluation phases.

1.11.3.6. Conduct exercises in assuming firing positions and dry firing from those positions (**Figure 1.3.-Figure 1.11.**).

1.11.3.7. Instructor will score evaluation phases.

1.11.3.8. Evaluate trainee's proficiency in operator maintenance and function check. Trainees must correctly perform function check.

1.11.3.9. Instructors will provide remedial training for those who fail to qualify (live fire or performance evaluation). Instructors may provide immediate refires or notify unit training sections of failures.

1.11.3.10. Complete applicable blocks on AF Forms 522 and 710. Butt numbers and/or serial numbers are sufficient to document training on the AF Form 710.

1.12. Administrative Requirements.

1.12.1. Reference Material:

1.12.1.1. AFI 36-2226, *Combat Arms Program.*

1.12.1.2. T.O. 11W3-5-5-1, *Operator, Maintenance, Repair and Replacement Parts, Rifle 5.56mm M16, Rifle 5.56mm M16A1, Bipod Assembly M3, and Launcher Grenade 40mm XM148.*

1.12.1.3. T.O. 11W3-5-5-1-1, *Maintenance and Repair, Sub-machinegun, 5.56mm GAU-5A, GAU-5A/A, and GUU-5P.*

1.12.1.4. T.O. 11W3-5-5-31, *Operator's and Organizational Maintenance Manual, M2 Bolt.*

1.12.1.5. T.O. 11W3-5-5-41, *Operator's Manual, Rifle, 5.56mm, M16A2, M16A3, M16A4, M4 and M4A1.*

1.12.1.6. T.O. 11W3-5-5-42, *Unit and Direct Support Maintenance Manual, Rifle 5.56mm, M16A2 W/E, M16A3 W/E, M16A4 W/E, Carbine 5.56mm M4, and Carbine 5.56mm M4A1.*

1.12.1.7. T.O. 11W3-5-5-61, *Operator's Manual for Rifle, 5.56mm, M16, M16A1.*

1.12.1.8. T.O. 11W3-5-5-81, *M16A1 and M16A2 Rifle Marksmanship (Army FM 23-9).*

1.12.1.9. TM 11-5855-213-10, *Operator's Manual Night Vision Sight Individual Served Weapon AN/PVS-4.*

1.12.1.10. TM 11-5855-238-10, *Operator's Manual for Night Vision Goggles Ground Use: AN/PVS-5, AN/PVS-5A, AN/PVS-5B, AN/PVS-5C.*

1.12.1.11. TM 11-5855-262-10-1, *Operator's Manual Night Vision Goggle, AN/PVS-7A.*

1.12.1.12. T.O. 12S10-2PVS7-11, *Operator's Manual Night Vision Goggle AN/PVS-7D.*

1.12.1.13. TM 11-5855-297-12&P, *Operator's and Unit Maintenance Manual Aiming Light Infrared AN/PAQ-4A.*

1.12.1.14. TM 11-5855-301-12&P, *Operators and Unit Maintenance Manual, Light, Aiming, Infrared AN/PAQ-4B, AN/PAQ-4C.*

1.12.1.15. AP90100, *Operator's Manual, LALPS* (manufacturer's publication).

1.12.1.16. TM 750-244-2, *Procedures for Destruction of Electronics Material to Prevent Enemy Use.*

1.12.1.17. TM 11-5855-306-10, *Operator's Manual AN-PVS 14 Monocular Night Vision Device.*

1.12.1.18. TM 9-1240-403-12&P, *M68 Close Combat Optic.*

1.12.1.19. SW370-B5-OPI-010 REV A, *Operator's Manual Day Optical Scope with Adapter to Fit the M4A1 Carbine* (manufacturer's publication).

1.12.2. Facilities Needed:

1.12.2.1. Classroom equipped with chalk or dry erase board, tables and one chair per trainee.

1.12.2.2. Range with 25-meter/yards capable of accommodating the type of ammunition used for training. Where facilities allow, units are highly encouraged to utilize full distance ranges to fire SF personnel. Other Group A personnel may fire full distances if they desire.

1.12.2.3. Care and cleaning area.

1.12.3. Training Aids and Equipment:

1.12.3.1. Rifle/carbine (one per trainee).

1.12.3.2. Day Optical Scope (Designated Marksman only), Close Combat Optic, Back Up Iron Sight or Carrying Handle. Sighting system used is based on arming group and operational need.

1.12.3.3. 30-round magazines, web gear, ammo pouches, gas masks, and if applicable, issued Load Bearing Equipment (LBE) or Load Bearing Vest (LBV).

1.12.3.4. Dummy ammunition, magazine filler, empty bandoleer and empty ammunition can/box.

1.12.3.5. Sighting and aiming bars, devices and charts.

1.12.3.6. Training charts (optional).

1.12.3.7. Overhead projector/computer system with visual slide capability (optional).

1.12.3.8. Slide projector, video cassette recorder and monitor (optional).

1.12.3.9. Slides and transparencies (optional).

1.12.3.10. Zero targets.

1.12.3.11. Public address system.

1.12.3.12. Headsets (sound suppressors) and/or ear plugs (one set per trainee and one set per instructor).

1.12.3.13. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel; dual hearing protection is required for Combat Arms personnel (unless electronic headsets are being used).

1.12.3.14. Care and cleaning equipment.

1.12.3.15. Slow and timed fire targets.

1.12.3.16. Student handout material as needed.

1.12.3.17. First aid kit.

1.12.3.18. Brass deflectors as needed.

1.12.3.19. Combat Arms Training Simulator (optional) meeting the requirements identified in AFI 36-2226.

1.12.4. Course Ammunition. Cartridge, 5.56mm Ball, 5.56mm Tracer, 5.56mm Plastic Practice Cartridge or 5.56mm Frangible.

1.12.5. Documents Needed: AF Forms 522 and 710. Butt numbers and/or serial numbers are sufficient to document training on the AF Form 710.

1.12.6. AF Form 522 Documentation Procedures (see **Figure 7.4.**): If a student passes all phases of the AFQC or the TRQC, a single entry on the AF Form 522 is sufficient. However, if a student fails any phase of the TRQC, multiple line entries on the AF Form 522 will be required. If a student achieves an expert score in Phase V and fails any other required phase, the student must pass required phases before receiving expert status.

Figure 1.1. Rifle/Carbine Firing Requirements, Rifle/Carbine Air Force Qualification Course

ORDER	POSITION	ROUNDS	TIME (SEC)	DISTANCE M/YDS	TARGET
Phase I: Battle Sight Zero and Grouping (See 1.13.3.2. for M68 and BUIS procedure)					
1.	Prone Supported	5 (1, 5-rd mag)	N/A	25	Z
2.	Prone Supported	5 (1, 5-rd mag)	N/A	25	Z
3.	Prone Supported	5 (1, 5-rd mag)	N/A	25	Z
4.	Prone Supported	5 (1, 5-rd mag)	N/A	25	Z
		20 Total Rounds			
Phase II: Practice					
1.	Prone Supported	6 (2, 3-rd mag)	50	25	SF
2.	Prone Supported (with gas mask)	6 (2, 3-rd mag)	90	25	SF
3	Prone Unsupported	6 (2, 3-rd mag)	50	25	SF
4.	Kneeling Supported	6 (2, 3-rd mag)	50	25	SF
5.	Foxhole/Over Barricade Supported	6, (2, 3-rd mag)	50	25	SF
		30 Total Rounds			
Phase III: Evaluation					
1.	Prone Supported	10 (1, 4-rd & 2, 3-rd mags)	90	25	TF
2.	Prone Supported (with gas mask)	10 (1, 4-rd & 2, 3-rd mags)	120	25	TF
3.	Prone Unsupported	10 (1, 4-rd & 2, 3-rd mags)	90	25	TF
4.	Kneeling Supported	10 (1, 4-rd & 2, 3-rd mags)	90	25	TF
5.	Foxhole/Over Barricade Supported	10 (1, 4-rd & 2, 3-rd mags)	90	25	TF
		50 Total Rounds			

100 Total Rounds for Course

1.13. Course Information, Rifle/Carbine AFQC.

1.13.1. Course Targets:

1.13.1.1. Target "Z" is the 25-meter zero target National Stock Number (NSN) 6920-01-167-1392 for the M16, GAU-5A, GAU-5A/A and NSN 6920-01-253-4005 for the M16A2, GUU-5P and M4 or full distance silhouette NSN 6920-00-795-1806 (or suitable substitute).

1.13.1.2. Target SF is the 25-meter scaled silhouette, slow fire target (NSN 6920-01-167-1391) or full distance silhouette NSN 6920-00-795-1806 (or suitable substitute).

1.13.1.3. Target TF is the 25-meter scaled silhouette, timed fire target (NSN 6920-01-167-1397) or full distance silhouette NSN 6920-00-795-1806 (or suitable substitute).

1.13.2. Standards:

1.13.2.1. Phase I: Should fire one 4cm shot group.

1.13.2.2. Phase II: Seventy five-meter targets should have 7 hits. 175-meter targets should have 5 hits. 300-meter targets should have 3 hits.

1.13.2.3. Phase III: Group A Qualified: 32-42 hits. Group B Qualified: 25-42 hits. Group C Qualified: 19-42 hits.

1.13.2.4. Expert: All Groups: 43-50 hits.

NOTE: If gas mask training is temporarily waived by the MAJCOM Functional, practice and evaluation orders 2 with gas mask will not be fired. Qualification standards will be 25 of 40 hits for Group A personnel, 20 of 40 hits for Group B personnel, and 15 of 40 hits for Group C personnel. Expert for all Groups will be 35 of 40 hits. Ensure the AF Form 522 and AF Form 710 reflects an 80-round AFQC. Also, add the statement "Gas mask firing not conducted" in the remarks block of each form.

NOTE: The standards for Phase I and II are desired goals for all trainees. Instructors should use these standards to determine trainees' need for additional instruction or practice before firing Phase III. To correct shooting errors, instructors may provide additional rounds during Phases I and II. The standards for Phase III are required standards for qualification.

1.13.3. Course Notes AFQC.

1.13.3.1. If firing the standard M16 rifle, GAU-5A or GAU-5A/A, the trainee will use the long range "L" aperture on the rear sight for all 25-meter firing. Once the shot group is centered at 25-meters using the long range ("L" aperture), the rifle/carbine is battle sight zeroed for 250-meters when the unmarked, short-range sight position is used and will also be on at 375-meters when the long-range aperture is used. After firing the course, rotate the rear sight to the short-range position. If full distance firing is used (50 to 300-meters), fire with the rear sight set in the short-range position after 25-meter zeroing.

1.13.3.2. Trainees firing the M16A2 rifle or M4 series carbines will be taught battlesight zeroing IAW the AF lesson plan. When firing with the M68 Close Combat Optic (CCO) and the Back-up Iron Sight (BUIS), students will zero the BUIS first and than move the red dot of the M68 so it sits on top of the front sight. Change magazine loads from 5 to 4-round magazines. Fire the first three strings using the BUIS, after adjusting the M68, use the next two-strings to confirm zero. When firing the AFQC with the M68, trainees will fire using the M68 on practice and evaluation orders

1, 3 and 5. When using the M68, students should lower the intensity level of the dot to the lowest intensity visible to the shooter. This reduces the size of the dot so parts of the target are still visible.

1.13.3.3. The purpose of using the 25-meter zeroing (Z) target is two fold. First, the shooter has a realistic combat distance target (250-meters for M16 and 300-meters for M16A2) with a sight adjustment grid printed over the silhouette to aid in accurately making sight adjustments. Secondly, it is an excellent training aid for conducting 3-shot grouping exercises. The target also provides a good indication of the shooter's ability to hit a life-size target at expected engagement distances from a steady firing position. However, if ranges are available, full distance firing is highly encouraged.

1.13.3.4. Ideally, trainees should be able to put all shots of the shot group within the 4cm circle on the “Z” target using a prone supported position. However, a 4cm group anywhere on the target indicates good application of shooting fundamentals and only requires sight adjustments to center the shot group and zero the rifle/carbine.

1.13.3.5. Trainees may make sight corrections as needed anytime during training. Instructors will accompany trainees down range and analyze each of the trainee's shot groups fired during battle sight zero (BSZ). It may take one or more groups to evaluate how the trainee applies shooting fundamentals. Therefore, students should not make a sight correction after the first 4-round BSZ group unless determined by the firing line official. During the remaining 4-round BSZ groupings, observe and analyze the trainee's grouping performance and solicit input from them before automatically offering sight adjustments.

1.13.3.6. All orders of fire will start with the weapon on safe, bolt forward, magazine inserted and magazine pouch(s) fastened. This will require the trainee to charge the first round and move the selector to "SEMI" before firing. Trainees must do this on receiving the command "FIRE" and should use the non-shooting hand to operate the charging handle. However, they may use the shooting hand if they experience difficulty or are unable to safely control the direction of the muzzle during the charging operation. Trainees must unfasten the magazine pouch when reaching for the first magazine to reload on each order. Conduct charging and reloading exercises using dummy rounds in the classroom before live firing.

1.13.3.7. During Phase I and Phase II, trainees will perform immediate actions on their own stoppages, under instructor supervision. Trainees may then complete the order of fire. Prorate the time limit if required due to non-shooter caused malfuction or stoppages. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after clearing the stoppage.

1.13.3.8. Trainees will perform immediate actions on their own stoppages during each order of fire in Phase III. Prorate the time limit for the order of fire if the trainee has, or is in the process of, successfully applying immediate or remedial action to clear the stoppage. The ultimate goal is for the trainee to understand why the stoppage occurred and to have the ability to correct the problem and continue firing. ***WARNING:*** If a light recoil or difference in report is experienced, trainees must understand the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after clearing the stoppage.

1.13.3.9. Use sandbags filled with Styrofoam packing material, sand, gravel, wood chips, or crushed bark for the prone supported position.

1.13.3.10. The primary purpose of the various supported positions is to teach trainees the tactical advantage of using cover and concealment in a combat situation. Instructors will emphasize the use of cover throughout the course. Trainees will make maximum use of cover during firing and reloading.

1.13.3.11. Phase I and Phase II are instruction orders. Instructors will check and analyze targets after each order of Phase I and Phase 2. Instructors will assist trainees in assuming a correct position and will teach shooting fundamentals between orders of fire as needed.

1.13.3.12. Remind trainees to keep the tip of the front sight on the vital area (center of the 4cm circle) when engaging the 250 and 300-meter targets. The eye has a natural tendency to try to see more "black" or more of the target at those distances, and will cause the shooter to unconsciously hold the front sight low on those small targets.

1.13.3.13. During Phase II , trainees will engage each silhouette on the left side of the target for Orders 1, 3 and 5, beginning with the 75-meter target (bottom left, middle left, and top left). They will then engage each silhouette on the right side of the target for orders 2 and 4, beginning with the 75-meter target (top right, middle right, bottom right).

1.13.3.14. During Phase III, trainees will first engage the four silhouettes (50, 100, and 150 meters) on the lower half of the target with one round each. Trainees will then reload and engage the three silhouettes (200, 250, and 300 meters) in the target's upper left corner with one round each. Trainees will again reload and engage the three remaining silhouettes (200, 250, and 300 meters) in the target's upper right corner with one round each.

1.13.3.15. Instructors will not teach during the evaluation orders of fire. However, they may assist trainees and teach shooting fundamentals between the orders of fire. They will also correct safety infractions and supervise how trainees apply immediate action procedures when applicable.

1.13.3.16. During reloading, trainees will keep the shooting hand on the pistol grip and do all reloading functions with the non-shooting hand. Trainees must wear a web belt with a magazine pouch, SF personnel should use issued web gear combination (web belt, pouches, LBE/LBV). Position the magazine pouch for easy access by the non-shooting hand. A right-handed shooter will withdraw a loaded magazine from the ammo pouch with the left hand and, at the same time, remove the empty magazine by pressing the magazine release button with the trigger finger allowing the empty magazine to fall. Insert loaded magazine with the left hand and press the bolt release with fingers or heel of the left hand. A left-handed shooter will withdraw a loaded magazine from the pouch with the right hand, depress the magazine release with the thumb of the right hand, insert the loaded magazine and then reach under or over the weapon to press the bolt release with fingers of the right hand.

1.13.3.17. Before each order, place loaded magazines in the pouch with the top end of the magazine down and the projectile end or front edge of the magazine pointing away from the body. This way the shooter has only to reach back, unfasten the pouch latch and remove the magazine during the reload. This is a critical skill requiring practice to accomplish quickly and smoothly. It is imperative to practice reloading the rifle/carbine from the pouch and retaining empty magazines when moving out of position. Reload magazines between orders of fire as necessary.

1.13.3.18. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel; dual hearing protection is required for Combat Arms personnel (unless electronic headsets are being used).

1.13.3.19. ***WARNING:*** **Inspect all magazine pouches and magazines at the end of training to ensure they do not contain live rounds.**

Figure 1.2. Rifle/Carbine Firing Requirements, TRQC Day Fire

ORDER	POSITION	ROUNDS	TIME (SEC)	DISTANCE M/YDS	TARGET
Phase I: Battle Sight Zero and Grouping					
1. Back up iron sight	Prone Supported	3 (3-rd mag)	N/A	25	Z
2. Back up iron sight	Prone Supported	3 (3-rd mag)	N/A	25	Z
3. Back up iron sight	Prone Supported	3 (3-rd mag)	N/A	25	Z
4. **M68 (M4 only)**	**Prone Supported**	**3 (3-rd mag)**	**N/A**	**25**	**Z**
5. **M68 (M4 only)**	**Prone Supported**	**3 (3-rd mag)**	**N/A**	**25**	**Z**
6. **M68 (M4 only)**	**Prone Supported**	**3 (3-rd mag)**	**N/A**	**25**	**Z**
		18 Total Rounds for Phase I			
Phase II: Day Burst (Standards: Qualify, 2 hits on each target)					
1. Teaching/practice	Prone Supported	12 (2, 6-rd mag)	N/A	25	SF
2. Evaluation	Prone Supported	12 (2, 6-rd mag)	40	25	SF
		24 Total Rounds for Phase II			
Phase III: CWDE (Standards: Qualify, 4 of 6 targets hit)					
1. Teaching/practice	Prone Supported	6 (1, 6-rd mag)	N/A	25	SF
2. Evaluation	Prone Supported	6 (1, 6-rd mag)	45	25	SF
		12 Total Rounds for Phase III			
Phase IV: Weak Hand Firing (Standard: Qualify, 3 of 6 targets hit)					
1. Teaching/practice	Prone Supported	6 (1, 6-rd mag)	N/A	25	SF
2. Evaluation	Prone Supported	6 (1, 6-rd mag)	45	25	SF
		12 Total Rounds for Phase IV			
Phase V: Day Rapid Fire Evaluation (Standards: Qualify 18 hits, Expert 25 hits) Iron Sights Only, except DM					
1. Evaluation	Prone Unsupported	10 (4, 3, 3-rd mags)	70	25	TF
2. Evaluation	Kneeling Barricade	10 (4, 3, 3-rd mags)	70	25	TF
3. Evaluation	Over-Barricade	10 (4, 3, 3-rd mags)	80	25	TF
		30 Total Rounds for Phase V			
Phase VI: Quick Reaction Drills (Qualify, 7 hits within 10 inch circle)					
1. Teaching/practice	Standing	10 (1, 10-rd mag)	N/A	25	E
2. Evaluation	Standing	10 (1, 10-rd mag)	3, 3, 4 secs	25	E
		20 Total Rounds for Phase VI			
Phase VII: Night Semiautomatic Fire (Standards: Qualify, 5 hits on target)					
1. Teaching/practice	Standing	6 (1, 6-rd mag)	N/A	25	E
2. Evaluation	Standing	6 (1, 6-rd mag)	20	25	E
		12 Total Rounds for Phase VII			
Phase VIII: Night Burst Fire (Standards: Qualify, 4 hits on target)					
1. Teaching/practice	Over Barricade	6 (1, 6-rd mag)	N/A	25	E
2. Evaluation	Over Barricade	6 (1, 6-rd mag)	30	25	E
		12 Total Rounds Phase VIII			
Phase IX: Night Vision Devices (See 1.14.11.) (Standards: Qualify, 7 hits on target)					
1. Teaching	Kneeling Barricade	10 (1, 10-rd mag)	N/A	25	E
2. Evaluation	Kneeling Barricade	10 (1, 10-rd mag)	20	25	E
		20 Total Rounds for Phase IX			
		160 Total Rounds for Course			

1.14. Course Information, TRQC.

1.14.1. Targets for the Course:

1.14.1.1. Target Z is the 25-meter zero target National Stock Number (NSN) 6920-01-167-1392 for the M16, GAU-5A, GAU-5A/A and NSN 6920-01-253-4005 for the M16A2, GUU-5P and M4.

1.14.1.2. Target SF is the 25-meter scaled silhouette, slow fire target (NSN 6920-01-167-1391).

1.14.1.3. Target E is the kneeling "E" silhouette target (NSN 6920-00-600-6874).

1.14.1.4. Target TF is the 25-meter scaled silhouette, timed fire target (NSN 6920-01-167-1397).

1.14.1.5. Target configurations for course

1.14.1.5.1. Phase I, II, III and IV – Zero and SF

1.14.1.5.2. Phase V – TF

1.14.1.5.3. Phase VI, VII, VIII and IX - E

1.14.2. Qualification Standards:

1.14.2.1. PHASE I – Battle Sight Zero Grouping Phase (BSZGP): One 4cm shot group (desired). Orders 4, 5 and 6 are only used when firing with the M68 Close Combat Optic.

1.14.2.2. PHASE II--Day Burst: Both 75-meter targets engaged with 2 hits each.

1.14.2.3. PHASE III - CWDE: Four of six targets engaged and hit.

1.14.2.4. PHASE IV – Weak Hand Firing: Three of six targets engaged and hit.

1.14.2.5. PHASE V – Day Rapid Fire Evaluation: 18 of 30 hits required. 25 of 30 for expert, iron sights only, except DM. Designated Marksman qualification requirements are as follows: 50-meter target 3 of 3 hits, 100-meter target 3 of 3 hits, 150-meter target 6 of 6 hits, 200-meter targets must have 5 of 6 hits, 250-meter targets must have 5 of 6 hits and 300-meter targets must have 5 of 6 hits. Show score as number of hits and “Q, Qual or Qualified” for qualified, “UQ, Unqual or Unqualified” for unqualified and “E, Exp or Expert” for expert.

1.14.2.6. PHASE VI—Quick Reaction Drills: 7 hits on target within 10-inch circle.

1.14.2.7. PHASE VII--Night Semiautomatic Fire: 5 hits on target.

1.14.2.8. PHASE VIII--Night Burst Fire: 4 hits on target.

1.14.2.9. PHASE IX—Night Vision Devices: 7 hits on target.

1.14.3. Course notes TRQC:

1.14.3.1. Trainees will stow protective mask in carrier, unless required for wear. Issued web gear combination (web belt, magazine pouches, LBE/LBV, etc) must be worn throughout course. Helmet and flak vest will be worn during Phase IX and is optional (Commander’s option) in other phases.

1.14.3.2. To correct shooting errors, instructors may provide additional rounds during Phase I and all teaching/practice orders. Identify additional rounds on the AF Form 710.

1.14.3.3. The purpose of using the 25-meter zeroing (Z) target is two fold. First, the shooter has a realistic combat distance target (250-meters for M16 and 300-meters for M16A2/M4) with a sight adjustment grid printed over the silhouette to aid in accurately making sight adjustments. Secondly, it is an excellent training aid for conducting 3-shot grouping exercises. Finally, the target provides a good indication of the shooter's ability to hit a life-size target at expected distances from a steady firing position.

1.14.3.4. Ideally, trainees should be able to put all shots of the shot group within the 4cm circle on the 'Z' target using a prone supported position. However, a 4cm group anywhere on the target indicates good application of shooting fundamentals and only requires sight adjustments to center the shot group and zero the rifle/carbine.

1.14.3.5. Tracer mix for training is used (if range is capable of firing tracers) in teaching 3-shot burst techniques and as an aid to trainees in building skill to control automatic fire. For operational use, commanders, squad leaders, fire team leaders, etc., may elect to use tracers in various combinations for several different mission needs. Tracer ammunition can be used to adjust fire on your target, for incendiary purposes and for signaling other members of a fire team where to direct their fire.

1.14.3.6. Use sandbags filled with styrofoam packing material, sand, gravel, wood chips or crushed bark for the prone supported position.

1.14.3.7. The primary purpose of the various supported positions is to teach trainees the tactical advantage of the use of cover in a combat situation. Instructors will emphasize the use of cover throughout the course. Trainees will make maximum use of cover during firing and reloading.

1.14.3.8. Phase I and all teaching/practice orders are instruction orders. Instructors will check and analyze targets after each order of Phase I and must check and analyze targets after each teaching/practice order. Instructors will assist trainees in assuming a correct position and will teach shooting fundamentals between orders of fire as needed.

1.14.3.9. Remind trainees to keep the tip of the front sight on the vital area (center of the 4cm circle) when engaging the 250- and 300-meter targets. The eye has a natural tendency to try to see more "black" or more of the target at those distances and will cause the shooter to unconsciously hold the front sight low on those small targets.

1.14.3.10. Instructors will not teach during the evaluation orders of fire. However, they may assist trainees and teach shooting fundamentals between the actual orders of fire. They will also correct safety infractions and supervise how trainees apply immediate action procedures when applicable.

1.14.3.11. During reloading, trainees will keep the shooting hand on the pistol grip and do all reloading functions with the non-shooting hand. Trainees must wear a web belt with a magazine pouch and SF personnel should use issued web gear combination (web belt, pouches, LBE/LBV). Position the magazine pouch for easy access by the non-shooting hand. A right-handed shooter will withdraw a loaded magazine from the ammo pouch with the left hand and, at the same time, remove the empty magazine by pressing the magazine release button with the trigger finger allowing the empty magazine to fall. Insert loaded magazine with the left hand and press the bolt release with fingers or heel of the left hand. A left-handed shooter will withdraw a loaded magazine from the pouch with the right hand, depress the magazine release with the thumb of the right hand, insert the loaded magazine and then reach under or over the weapon to press the bolt release with fingers of the right hand.

1.14.3.12. Before each order, place loaded magazines in the pouch with the top end of the magazine down and the projectile end or front edge of the magazine pointing away from the body. This way the shooter has only to reach back, unfasten the pouch latch and remove the magazine during the reload. This is a critical skill requiring practice to accomplish quickly and smoothly. It is imperative to practice reloading the rifle/carbine from the pouch and retaining empty magazines when moving out of position. Reload magazines between orders of fire as necessary.

1.14.3.13. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel; dual hearing protection is required for Combat Arms personnel (unless electronic headsets are being used).

1.14.3.14. ***WARNING:*** **Combat Arms personnel must inspect all weapons, magazines and magazine pouch(s) at the end of training to ensure they do not contain live rounds. See AFI 36-2226 for additional range operation procedures.**

1.14.3.15. The silhouettes on the SF and TF targets are engaged as targets within the shooters' field of fire. For example, if six enemy targets presented themselves at the actual distances represented on the SF target (75, 175, and 300 meters), the closest (greatest threat) targets would be engaged first, progressing to the farthest (least threat) targets. In a real world situation, shooters should engage those targets posing the greatest threat to themselves or their gun position.

1.14.4. PHASE II--Day Burst Notes:

1.14.4.1. In the teaching order, trainees will fire a 3-round burst at each 75-meter silhouette (six rounds total), reload and repeat the same sequence.

1.14.4.2. Although there is no time limit in the teaching order, encourage trainees to deliver accurate fire on target as fast as their ability will permit. The goal is to ensure first round hits when firing 3-round bursts.

1.14.4.3. Before firing the evaluation order, hits on the practice target must be marked or the target replaced.

1.14.4.4. In the evaluation order, trainees will fire a 3-round burst at each 75-meter silhouette (six rounds total), reload and repeat the same sequence.

1.14.4.5. Those locations not capable of conducting automatic/burst fire will fire all orders rapid fire (MAJCOM/SF must be informed prior to implementation of this provision).

1.14.5. PHASE III--CWDE Notes:

1.14.5.1. The trainees will fire the complete phase while wearing the protective mask and CWDE gloves.

1.14.5.2. In the teaching order, the trainees will engage the silhouettes on the SF target in the following order: one shot at each 75-meter target, one shot at each 175-meter target and one shot at each 300-meter target.

1.14.5.3. In the evaluation order, the trainees will engage the silhouettes on the SF target as follows: one shot at each 75-meter target, one shot at each 175-meter target and one shot at each 300-meter target.

1.14.6. Phase IV--Weak Hand Firing Notes:

1.14.6.1. The trainees will fire the complete phase while gripping the weapon with the weak hand and using the strong hand for support.

1.14.6.2. In the teaching order, the trainees will engage the silhouettes on the SF target in the following order: one shot at each 75-meter target, one shot at each 175-meter target and one shot at each 300-meter target.

1.14.6.3. In the evaluation order, the trainees will engage the silhouettes on the SF target as follows: one shot at each 75-meter target, one shot at each 175-meter target and one shot at each 300-meter target.

1.14.7. Phase V, Day Rapid Fire Notes (**Iron Sights Only**): Trainees will first engage the four silhouettes (50, 100, and 150 meters) on the lower half of the target with one round each. Trainees will then reload and engage the three silhouettes (200, 250, and 300 meters) in the target's upper left corner with one round each. Trainees will again reload and engage the three remaining silhouettes (200, 250, and 300 meters) in the target's upper right corner with one round each.

1.14.8. PHASE VI – Quick Reaction Drills with or without the M68 Optic:

1.14.8.1. All orders in this phase will begin with the weapon shouldered, round chambered, weapon on semi and the muzzle pointing down at a “ready” position. The intent is to have the weapon’s sighting systems out of the shooter’s immediate view (simulating the weapon’s position while clearing an area).

1.14.8.2. Shooters will be given a 3 second time limit for the first and second string, and 4 seconds for the final string. Shooters may fire as many rounds as they wish in each string (semi only) to ensure all 10 rounds are fired within time limits.

1.14.8.3. Prior to firing Phase V, draw a 10-inch (vital area) circle on the target using chalk or white grease pencil. The circle must be visible to the shooter during the teaching phase. Once the teaching phase has been completed, replace these targets with a target where the 10-inch circle is drawn with pen or pencil to ensure the circle is not visible at 25-meters. Locate the 10 inch circle on the "E" target as shown in **Figure 2.7.** Center the circle on the target with the top edge of the circle 13 1/4 inches from the top of the head of the target. Make the template using plywood, acrylic plastic or other material. Holes in the target may be pasted or marked with a pen rather than replacing targets after every shooter.

1.14.9. PHASE VII—Night Semiautomatic Fire

1.14.9.1. The goal is for each trainee to have 4 of 6 hits during the teaching phase.

1.14.9.2. During all phases, trainees will fire one 6-round magazine.

1.14.10. PHASE VIII--Night Burst Fire Notes:

1.14.10.1. Shooters must be able to identify their sights and downrange targets. Instructors must be able to observe the actions of the shooters on the firing line. Consideration must be given to allow dimmable lights on the range to produce the desired results.

1.14.10.2. When possible, firing will be accomplished using 2 to 1 ball/tracer mix. Load magazines: 2 ball--1 tracer, 2 ball--1 tracer, etc. If loaded properly top round on the magazine should be a tracer.

1.14.10.3. During all phases, trainees will fire one 6-round magazine at the target using 3- round bursts.

1.14.10.4. Block officers will proceed down range and inspect/mark targets to preserve trainee's night vision.

1.14.11. PHASE IX--Night Vision Devices:

1.14.11.1. Trainees will wear the helmet and flak vest during the entire phase.

1.14.11.2. The M68 and AN/PVS-14 combination or the AN/PAQ-4 and AN/PVS-7D combination are the preferred equipment for this phase. However, units may use any combination of night vision devices for this course of fire if authorized for use.

1.14.11.3. Although this is a qualification phase, it is used to give each shooter the experience of firing with available Night Vision Devices.

1.14.11.4. Load magazines: 2 ball-1 tracer, 2 ball-1 tracer, etc. (if available). If loaded properly, the top round on the magazine should be a tracer. Trainees will fire one 10-round magazine.

Figure 1.3. Grip, Rifle Butt, Firing Hand, Stock Weld and Elbow Location:

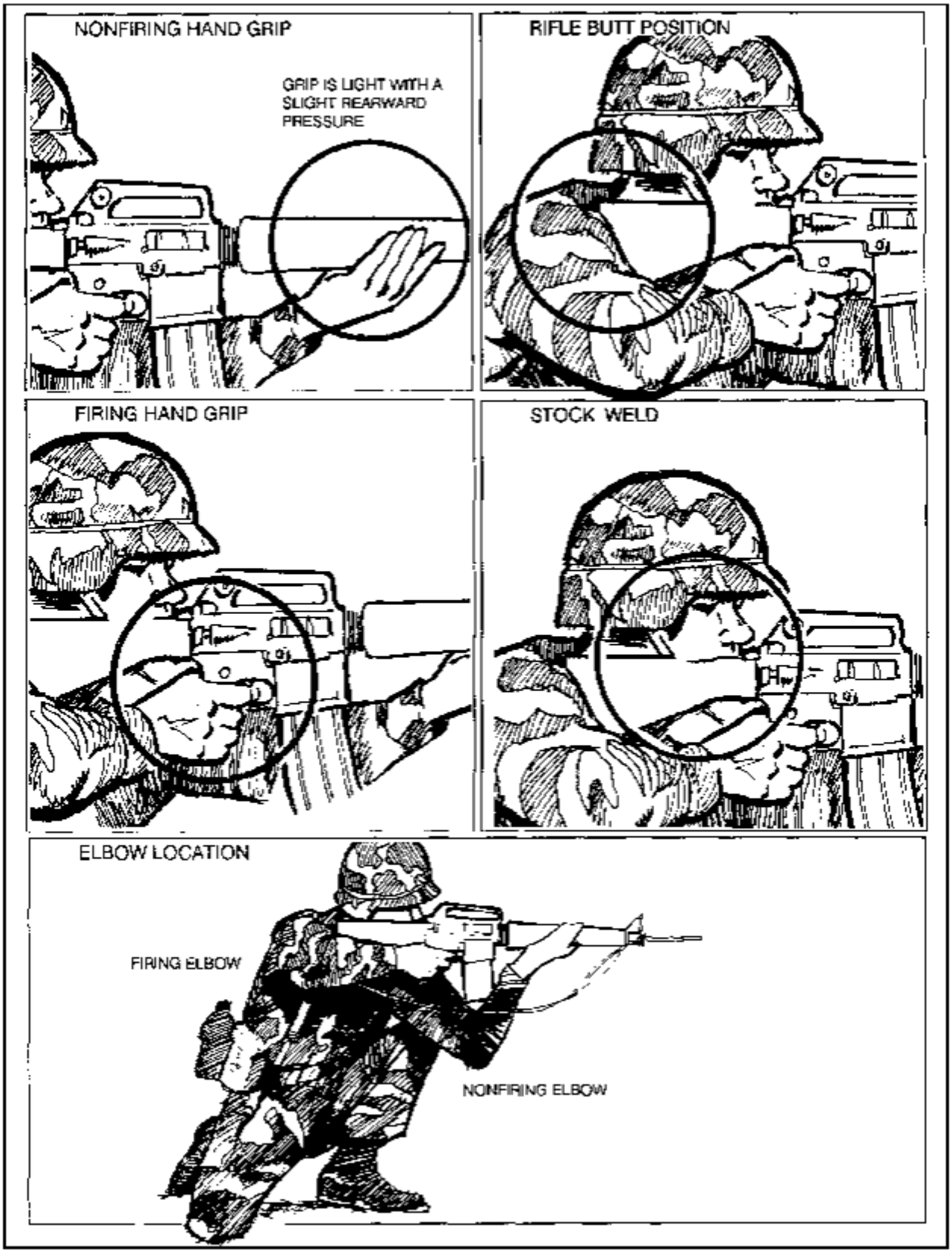
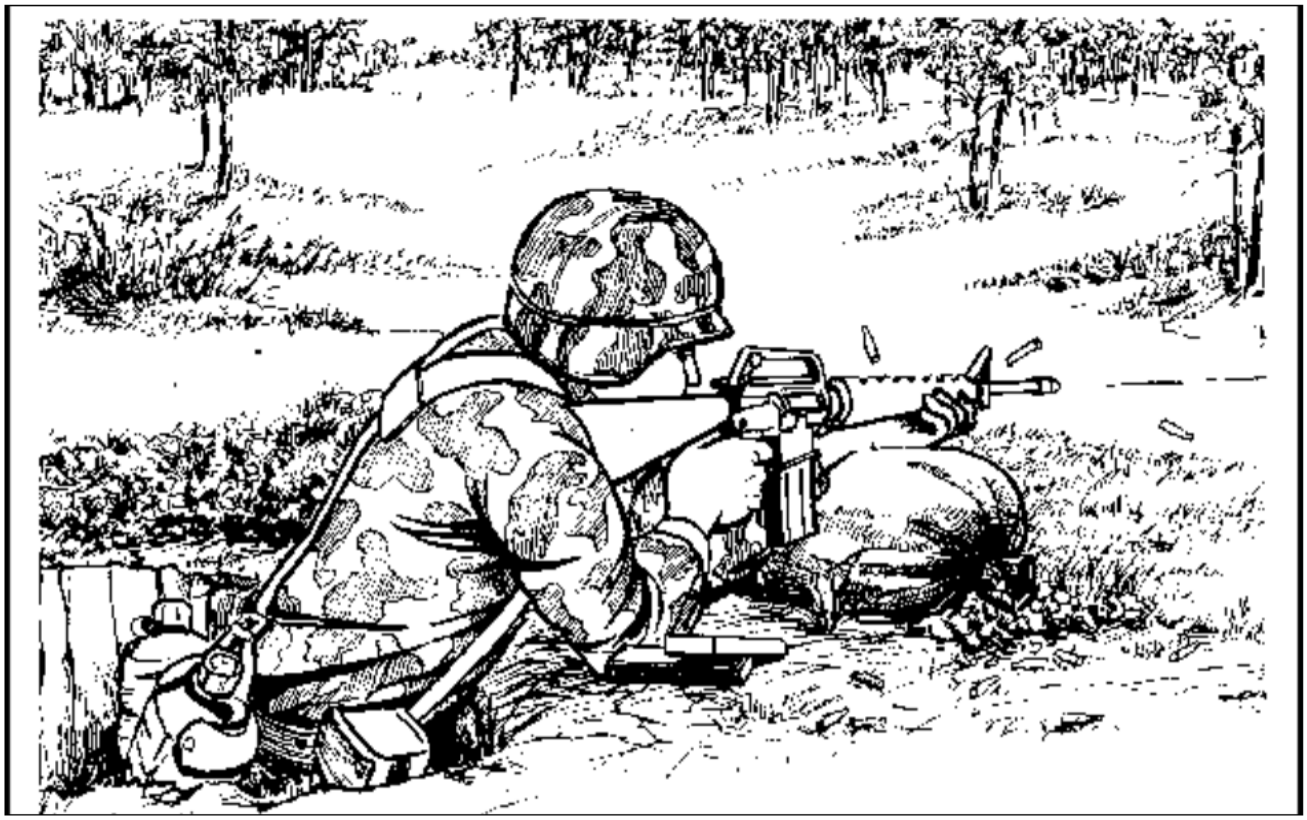


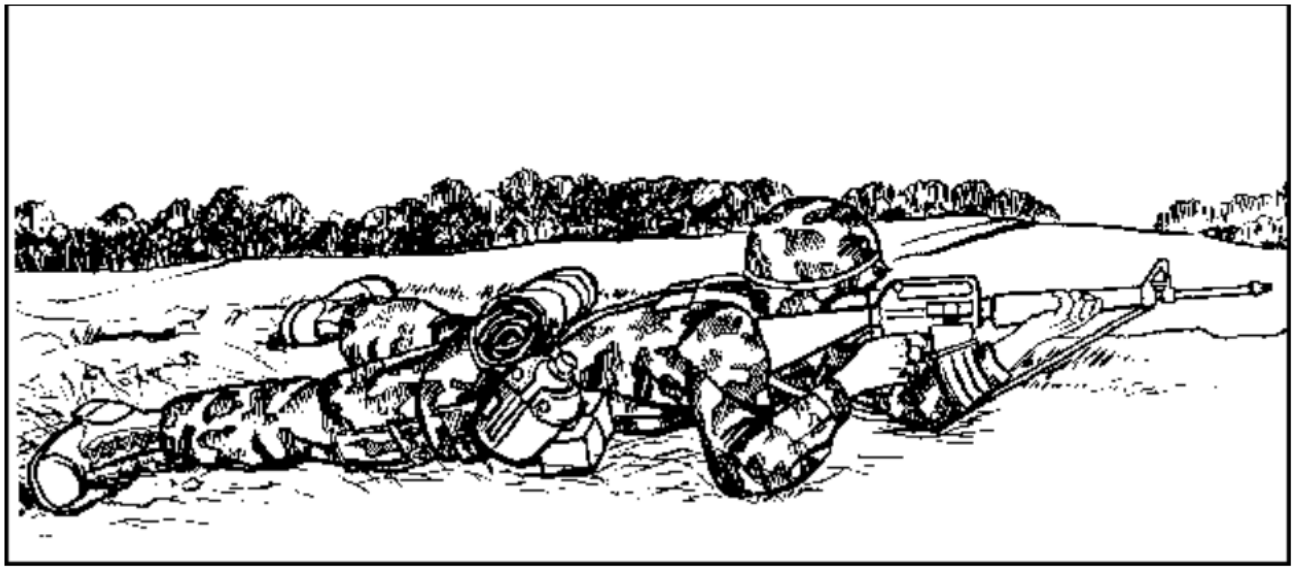
Figure 1.4. Supported Fighting Position.



Supported fighting position. This position provides the most stable platform for engaging targets. Upon entering the position, the shooter adds or removes dirt, sandbags or other supports to adjust for his/her height. The shooter then faces the target, executes a half-face to the firing side and leans forward until the chest is against the firing-hand corner of the position. The shooter places the rifle/carbine handguard in the V formed by the thumb and fingers of the nonfiring hand and rests the nonfiring hand on the material (sandbags or berm) to the front of the position. The shooter places the stock butt in the pocket of the firing shoulder and rests the firing elbow on the ground outside the position. (When prepared positions are not available, the prone supported position can be substituted). Once the supported fighting position has been mastered, the shooter should practice various unsupported positions to obtain the smallest possible wobble area during final aiming and hammer fall. The coach/trainer can check the steadiness of the position by observing movement at the forward part of the rifle, by looking through the M16 sighting device or by checking to see support is being used.

NOTE: The objective is to establish a steady position under various conditions. The ultimate performance of this task is in a combat environment. Although the shooter must be positioned high enough to observe all targets, the shooter must remain as low as possible to provide added protection from enemy fire.

Figure 1.5. Prone Unsupported Position.



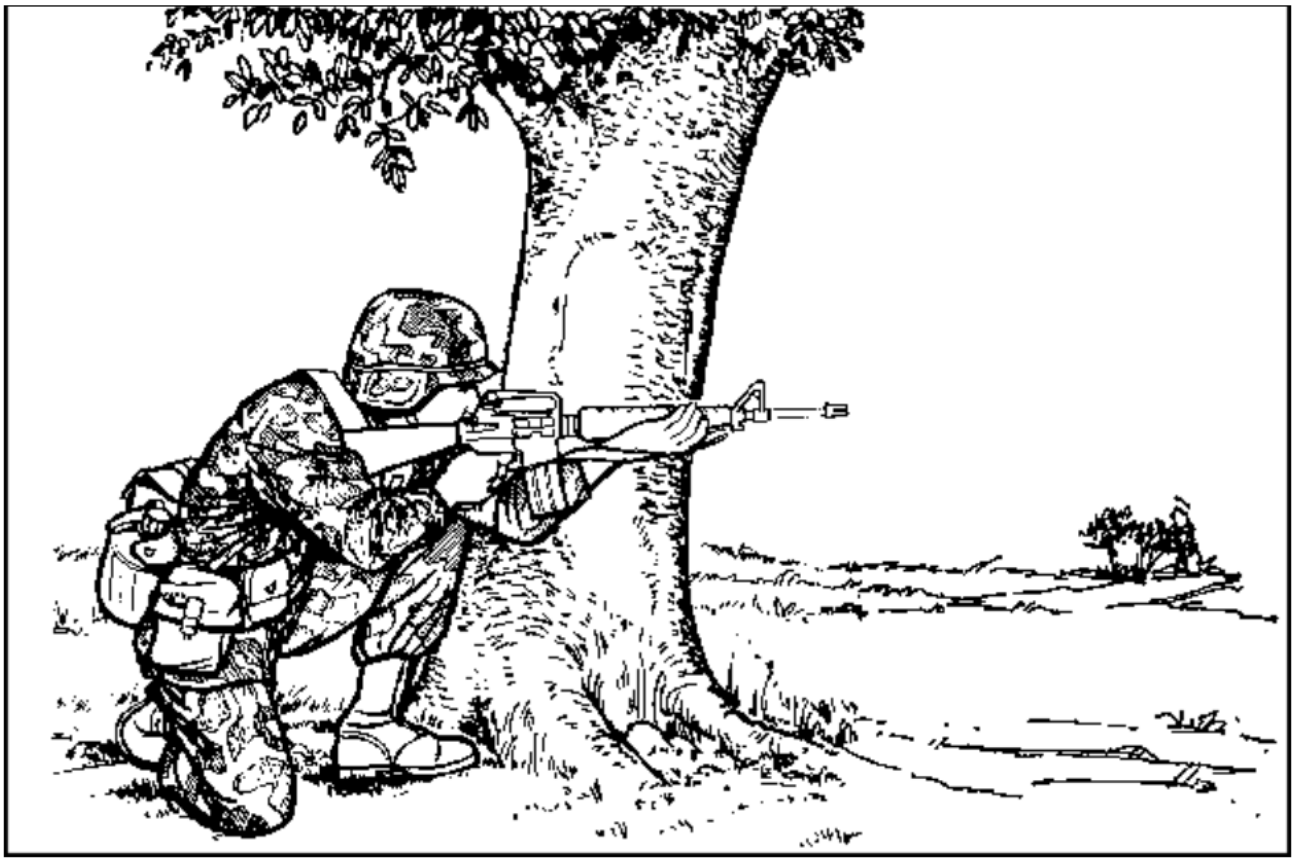
Prone unsupported position. This firing position offers another stable firing platform for engaging targets. To assume this position, the shooter faces the target, spreads the feet a comfortable distance apart and drops to the knees. Using the butt of the rifle/carbine as a pivot, the shooter rolls onto the nonfiring side placing the nonfiring elbow close to the side of the magazine. The shooter places the rifle/carbine butt in the pocket formed by the firing shoulder, grasps the pistol grip with the firing hand and lowers the firing elbow to the ground. The rifle/carbine rests in the V formed by the thumb and fingers of the nonfiring hand. The shooter adjusts the position of the firing elbow until the shoulders are about level and pulls back firmly on the rifle/carbine with both hands. To complete the position, the shooter obtains a stock weld and relaxes, keeping the heels close to the ground.

Advanced Positions. After mastering the four marksmanship fundamentals in the two basic firing positions, the shooter is taught the advanced positions. The shooter is trained to assume different positions to adapt to the combat situation.

Figure 1.6. Alternate Prone Position.

Alternate prone position. This position is an alternative to both prone supported and unsupported fighting positions, allowing the shooter to cock their firing leg. The shooter can assume a comfortable position while maintaining the same relationship between the body and the axis of the rifle/carbine. This position relaxes the stomach muscles and allows the shooter to breathe naturally.

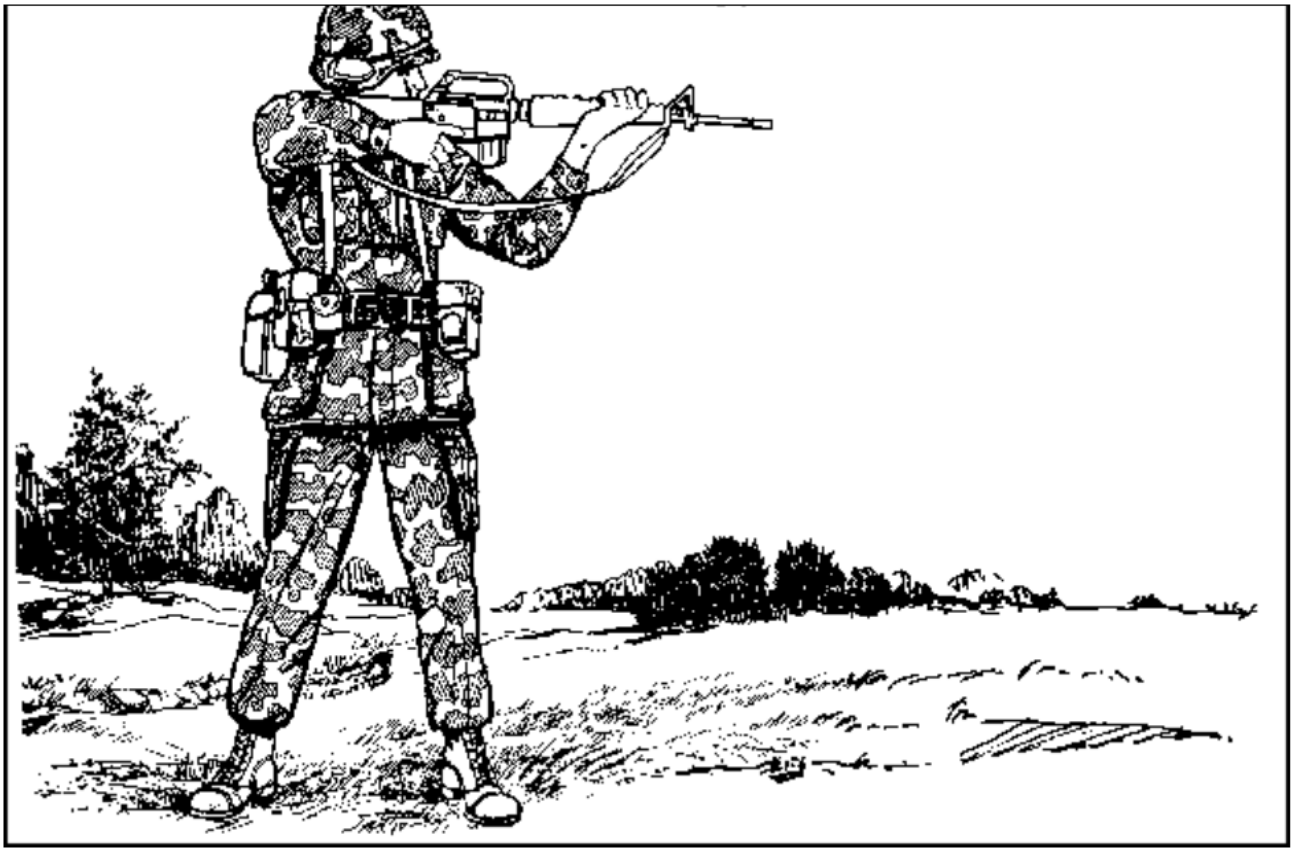
Figure 1.7. Kneeling Supported Position.



Kneeling supported position. This position allows the shooter to obtain the height necessary to better observe many target areas, taking advantage of available cover. Solid cover can support any part of the body or rifle/carbine assists in firing accuracy. The shooter may adjust this position (for example, both knees down on the ground, upright kneeling, etc) based on terrain, support used, body armor, personal preference, physical abilities etc.

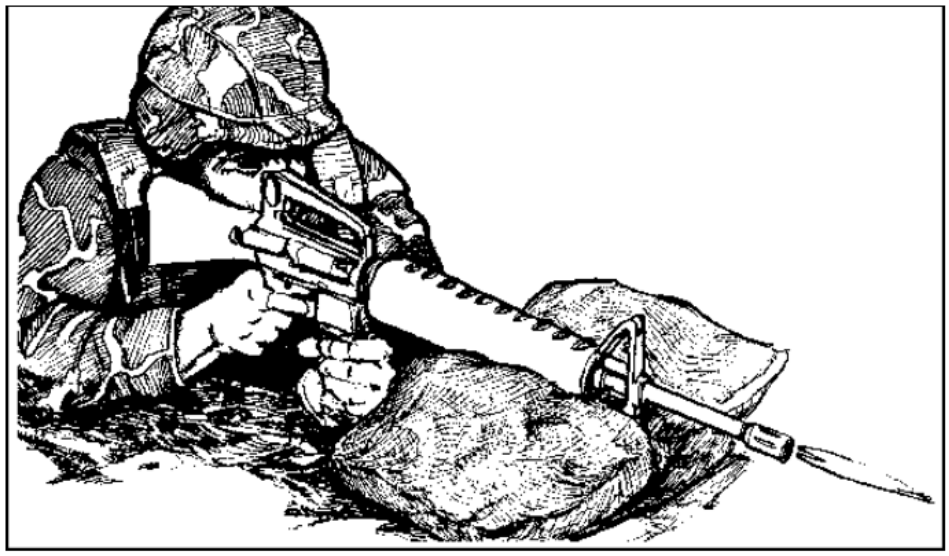
Kneeling unsupported position. This position is assumed quickly, places the shooter high enough to see over small brush and provides for a stable firing position. The nonfiring elbow should be pushed forward of the knee so the upper arm is resting on a flat portion of the knee to provide stability. The trailing foot can be placed in a comfortable position. The shooter may adjust this position (for example, both knees down on the ground, upright kneeling, etc) based on terrain, support used, body armor, personal preference, physical abilities etc.

Figure 1.8. Standing Position.



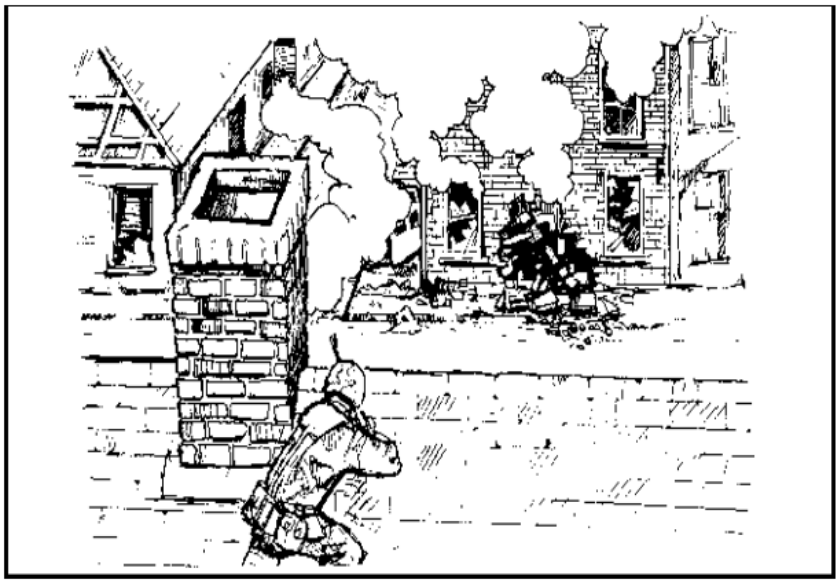
Standing position. To assume the standing position, the shooter faces their target, executes a facing movement to the firing side and spreads the feet a comfortable distance apart. With the firing hand on the pistol grip and the nonfiring hand on either the upper handguard or the bottom of the magazine, the shooter places the butt of the rifle/carbine in the pocket formed by the firing shoulder so the sights are level with his eyes. The weight of the rifle/carbine is supported by the firing shoulder pocket and nonfiring hand. The shooter shifts their feet until aiming naturally at the target and the weight is evenly distributed on both feet. The standing position provides the least stability but could be needed for observing the target area since it can be assumed quickly while moving. Support for any portion of the body or rifle/carbine improves stability. More stability can be obtained by adjusting the ammunition pouch to support the nonfiring elbow, allowing the rifle/carbine magazine to rest in the nonfiring hand.

Figure 1.9. Modified Firing Positions.



Modified Firing Positions. Once the basic firing skills have been mastered during initial training, the shooter should be encouraged to modify positions, to take advantage of available cover, to use anything to steady the rifle/carbine or to make any change allowing more combat targets. The position shown above uses sandbags to support the handguard and frees the nonfiring hand (hand should be wrapped around magazine, not underneath it as this could be a safety issue should the bottom of the magazine be blown out during a malfunction) to be used on any part of the rifle/carbine to hold it steady. **NOTE: Modified positions can result in small zero changes due to shifting pressure and grip on the rifle/carbine.**

Figure 1.10. Military Operations in Urban Terrain (MOUT) Firing Positions.



Military Operations in Urban Terrain (MOUT) Firing Positions. Although the same principles of rifle/carbine marksmanship apply, the selection and use of firing positions during MOUT requires some special considerations. Firing from around corners could require the shooter to fire from the opposite shoulder to avoid exposing themselves to enemy fire.

Figure 1.11. MOUT Continued.

The requirement for long-range observation can dictate what positions can be used high above ground. **Figure 1.10.** shows a shooter firing over rooftops, exposing only the parts of the body necessary to engage a target. **Figure 1.11.** shows a shooter firing around obstacles. **Figure 1.11.** also highlights the need to stay in the shadows while firing from windows and the requirements for cover and rifle/carbine support.

Chapter 2

HANDGUN TRAINING PROGRAM

2.1. Handgun AFQC. These courses provide Air Force members with the minimum training, Tactics, Techniques and Procedures and evaluation required for qualification with a handgun. Qualification is separate for each weapon model, type or system. Qualification on one type of handgun does not qualify an individual with other types of handguns.

2.2. Training Overview.

2.2.1. Initial Training. This is the trainee's first participation in the handgun training program. Initial training consists of classroom instruction, qualifying on the required evaluation phase of the AFQC and passing mechanical evaluations. Initial training on AFQC is a prerequisite before proceeding to more advanced specialized training courses.

2.2.2. Recurring Training. This is qualification training after initial qualification. This training consists of classroom instruction, qualification on the required AFQC or Specialized Pistol Course (SPC), evaluation phases and passing mechanical evaluations. Frequency of this training is outlined in AFI 36-2226. Weapons safety procedures and the training objectives in **Table 2.1.** are the minimum mandatory items required for Group A recurring training.

2.2.3. Remedial Training. This is the minimum training needed to correct deficiencies causing an individual to fail an evaluation. This training is given to all personnel who fail an evaluation.

2.2.4. Unit Training. Refresher training on operator skills and knowledge provided by weapons qualified members of a unit to help maintain the individual's weapon handling proficiency. Units should conduct this training before exercises and deployments.

2.3. Instructor Guidelines.

2.3.1. Classroom. Instructors will help trainees during portions of training requiring physical handling of the weapons. They will supervise, evaluate and assist trainees during the operator maintenance evaluation (care, cleaning and function check). See AFI 36-2226 for student to instructor ratios.

2.3.2. Range. Instructors will supervise, help, coach and teach trainees, as needed, during practice and evaluation orders of fire. See AFI 36-2226 for student to instructor ratios.

2.3.3. Tower Operator. The tower operator has responsibility and authority for safe and effective range operations during range training sessions. See AFI 36-2226 for exceptions.

2.4. Handgun Qualification Plan of Instruction. The plan in the following paragraphs is intended to provide instruction standardization. This program is mandatory for initial and recurring training. Remedial training is in-depth instruction, concentrating on known problems. Trainees must meet and be evaluated to the performance standards of these training objectives. Approximate training times for this program are:

2.4.1. For AFQC -- 5 to 6 hours.

2.4.2. For specialized courses – 6 to 8 hours

2.4.3. For remedial and unit training -- as required.

2.5. Training Goal. The training goal is to instill confidence in the trainee to develop and maintain the capability to use the handgun for personal defense.

2.6. Training Objectives (AFQC). Training objectives for successful completion of this course are found in **Table 2.1.**

2.6.1. Intermediate Training Objectives. Trainees must be familiar with:

2.6.1.1. Safety procedures.

2.6.1.2. Characteristics, nomenclature and general data.

2.6.1.3. Methods of destruction.

2.6.1.4. Types, caring for and handling ammunition.

2.6.1.5. Range firing procedures.

Table 2.1. Handgun Training Objectives/Intermediate Training Objectives (ITO).

	Objective	**Condition**	**Standard**
		Given:	
1.	Operate handgun.	Handgun, dummy ammunition and required equipment.	Operate handgun.
ITO			
1.1	Load Handgun.	Handgun, dummy ammunition and required equipment.	Load one magazine (5-rounds) and load handgun with magazine.
1.2	Unload/clear handgun.	Handgun loaded with dummy ammunition.	Unload/clear handgun.
1.3	Reload handgun.	Handgun with slide locked to rear, on fire and empty magazine inserted.	Reload handgun from a fastened pouch.
1.4	Perform function check.	Cleared handgun.	Perform function check.
1.5	Apply immediate and remedial actions.	Handgun, dummy ammunition and required equipment.	Apply actions.
2.	Apply shooting fundamentals.	Handgun, required ammunition and equipment.	Apply fundamentals to demonstrate ability to consistently place shots on target.
ITO			
2.1	Draw handgun from holster.	Handgun and required equipment.	Starting from the Field Interview stance, draw handgun and point it at target in 2 seconds.

	Objective	Condition	Standard
		Given:	
2.2	Demonstrate positions and techniques of holding handgun.	Handgun.	Demonstrate correct firing positions and techniques to properly hold handgun.
2.3	Apply aiming techniques.	Handgun and sighting & aiming bar if applicable.	Obtain correct sight alignment/ picture.
2.4	Apply breath control.	Handgun.	Apply breath control without disturbing sight alignment/picture.
2.5	Apply double/single action trigger control.	Handgun.	Apply trigger control without disturbing sight alignment/picture.
2.6	Apply effective follow-through/recovery techniques.	Handgun.	Apply/understand techniques to place more than one shot in vital target area.
3.	Meet/exceed minimum score.	Handgun and required equipment.	Qualify on AFQC.
ITO			
3.1	Fire teaching phase.	Handgun and required ammunition/equipment.	Demonstrate effective shooting from all positions.
3.2	Qualify on AFQC evaluation phase.	Handgun and required ammunition/equipment.	Qualify on appropriate course of fire.
4.	Perform operator maintenance.	Handgun and required equipment.	Clean, inspect, lubricate and function check.
ITO			
4.1	Disassemble handgun.	Handgun.	Disassemble handgun to authorized level.
4.2	Clean/inspect handgun.	Handgun and proper cleaning equipment.	Properly clean/inspect handgun.
4.3	Lubricate handgun.	Handgun and required lubricating supplies.	Lubricate handgun.
4.4	Assemble handgun.	Handgun.	Assemble handgun.
4.5	Perform function check.	Handgun.	Function check handgun.

2.7. Recommended Sequence of Events.

2.7.1. First Period -- Orientation and Mechanical Training. Approximately 2 hours are needed for this training.

2.7.1.1. Prepare all required forms and documentation.

2.7.1.2. Teach the basic rules of weapon safety.

2.7.1.3. Issue each trainee a handgun, dummy ammunition and other required equipment.

2.7.1.4. Introduce subject, motivate trainees and express importance for US Air Force personnel to handle weapons safely and efficiently.

2.7.1.5. Describe characteristics of the handgun.

2.7.1.6. Describe exterior nomenclature of the handgun.

2.7.1.7. Discuss functions of the handgun.

2.7.1.8. Types of ammunition used and methods of packaging.

2.7.1.9. How to care for, handle and preserve ammunition.

2.7.1.10. Explain, demonstrate and conduct practical exercises on:

2.7.1.10.1. Clearing the handgun.

2.7.1.10.2. Disassembling, assembling and function checking the handgun.

2.7.1.10.3. Caring for, cleaning and lubricating the handgun and magazine for all climatic conditions (the preferred method to teach this during cleaning as a demonstration and performance lesson).

2.7.1.10.4. Loading and unloading the handgun magazine.

2.7.1.10.5. Loading, unloading and reloading the handgun.

2.7.1.10.6. Stoppages, immediate actions and remedial action procedures.

2.7.1.10.7. Conduct immediate action practical exercises.

2.7.2. Second Period -- Preparatory Marksmanship Training. Approximately 1.5 hours are needed for this training.

2.7.2.1. Explain and demonstrate:

2.7.2.1.1. Grip and drawing techniques.

2.7.2.1.1.1. Students will practice drawing from the closed flap holster.

2.7.2.1.1.2. Students will also practice with the thumb-break holster if this configuration is carried in day-to-day operations. Unless waived by MAJCOM, the student may not use the thumb-break configuration for live-fire qualification.

2.7.2.1.2. Firing positions (**Figure 2.2.** - **Figure 2.6.**).

2.7.2.1.2.1. Weaver ready stance.

2.7.2.1.2.2. Weaver stance.

2.7.2.1.2.3. Field interview (neutral) stance.

2.7.2.1.2.4. Right, left and over barricade.

2.7.2.1.3. How marksmanship fundamentals help ensure hits on target.

2.7.2.1.4. Aiming, to include sight alignment, sight picture, focus of the eye and the importance of sight alignment.

2.7.2.2. Correct and conduct sight alignment and sight picture by using sighting and aiming training aids.

2.7.2.3. Conduct practical exercises on the four-stage draw and establishing a proper grip with a handgun.

2.7.3. Third Period -- Live Fire Practice. The objective is to prepare the trainees to confidently fire the handgun before evaluation. Approximately 1 hour is needed for this training.

2.7.3.1. Explain the safety requirements for live firing.

2.7.3.2. Range procedures.

2.7.3.3. Review marksmanship fundamentals.

2.7.3.4. Review all factors of aiming to include the importance of good sight alignment.

2.7.3.5. Review procedures for clearing stoppages during live fire training.

2.7.3.6. Conduct exercises in assuming firing positions and dry firing from these positions. Explain the tactical advantage of maintaining good cover and concealment.

2.7.3.7. Conduct practice fire training.

2.7.3.8. Conduct ball and dummy exercises.

2.7.4. Fourth Period -- Live Fire and Operator Maintenance Evaluation: Approximately 1.5 hours are needed for this training.

2.7.4.1. Brief trainees on evaluation criteria.

2.7.4.2. Conduct qualification evaluation.

2.7.4.3. Instructor will score evaluation phase.

2.7.4.4. Evaluate the trainee's proficiency in operator maintenance and function check procedures (the preferred method to teach operator maintenance is to teach this during cleaning as a demonstration and performance lesson).

2.7.4.5. Trainees must correctly perform the function check.

2.7.4.6. Instructors will provide remedial training for those who fail to qualify (live fire or performance evaluation). Instructors may provide immediate refires or notify unit training sections of failures.

2.7.4.7. Complete applicable blocks on AF Forms 522 and 710.

2.8. Administrative Requirements.

2.8.1. Reference Material:

2.8.1.1. AFI 36-2226, *Combat Arms Program.*

2.8.1.2. FM 23-35, *Pistols and Revolvers (Army).*

2.8.1.3. T.O. 11W3-3-4-11, *Pistol, 9mm, M11 Sig Sauer, P228 Operator's Manual.*

2.8.1.4. T.O. 11W3-3-5-1, *Operator's Manual Pistol, Semiautomatic, 9mm M9.*

2.8.1.5. T.O. 11W3-4-2-51, *Operation and Service Instruction with Illustrated Parts Breakdown for Smith and Wesson Combat Masterpiece, Caliber .38 Revolver, Model Number 15.*

2.8.1.6. *Combat Arms U.S. Air Force Handgun Guide.*

2.8.1.7. T M 750-244-7, *Procedures for Destruction of Equipment (Army).*

2.8.2. Facilities Needed:

2.8.2.1. Classroom equipped with chalk or dry erase board, tables, and one chair per trainee.

2.8.2.2. Range with 5, 15 and 25-meter target distances.

2.8.2.3. Care and cleaning area.

2.8.3. Training Aids and Equipment:

2.8.3.1. Handgun (one per trainee).

2.8.3.2. Magazines (as required).

2.8.3.3. Holsters, belts, magazines and ammunition pouches (one set per trainee).

2.8.3.4. Dummy ammunition (9mm or .38 caliber) and empty ammunition can/box.

2.8.3.5. Sighting and aiming bars, devices and charts as needed.

2.8.3.6. Training charts (optional).

2.8.3.7. Overhead projector/computer system with visual slide capability (optional) .

2.8.3.8. Slide projector (optional).

2.8.3.9. Video cassette recorder and monitor (optional).

2.8.3.10. Slides and transparencies (optional).

2.8.3.11. Silhouette targets.

2.8.3.12. Public address system.

2.8.3.13. Head sets and/or ear plugs (one set per trainee and one set per instructor).

2.8.3.14. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel; dual hearing protection is required for Combat Arms personnel (unless electronic headsets are being used).

2.8.3.15. Care and cleaning equipment.

2.8.3.16. Student handout material (optional).

2.8.3.17. First Aid kit.

2.8.3.18. Combat Arms Training Simulator (optional) meeting the requirements identified in AFI 36-2226.

2.8.4. Course Ammunition. Cartridge, 9mm ball, 9mm frangible or .38 caliber ball.

2.8.5. Documents Needed: AF Forms 522 and 710. Butt numbers and/or serial numbers are sufficient to document training on the AF Form 710.

2.9. Handgun Orientation Course. AFI 36-2226 paragraph 2.3. identifies those organizations allowed handgun orientation training. 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 of the Handgun Air Force Qualification Course (AFQC). Trainees earn the Small Arms Expert Marksmanship Ribbon (SAEMR) if they achieve an expert score. This program does not qualify an individual for armed duty. If qualification is required, personnel must meet the full objectives and requirements in **Chapter 2** of this AFI for the Handgun AFQC training program.

2.10. Specialized Handgun Training Program. This program is at the option of the major commands (MAJCOM). It is specialized training for Group A personnel with a definite mission need. It gives maximum flexibility to MAJCOMs in designing courses of fire compatible with available ranges and training facilities. When an Air Force Specialized course is developed, it will be used instead of the MAJCOM courses. Courses will require at least 50 rounds and no more than 100 rounds of ammunition, minimum qualification score, and classroom training covering weapons/range safety, immediate action drills and exercises in specialized weapons employment. MAJCOMs must coordinate specialized courses with HQ AFSFC/SFWC as detailed in AFI 36-2226.

Figure 2.1. Handgun Firing Requirements, Handgun Air Force Qualification Course (AFQC).

ORDER	POSITION	ROUNDS	TIME (SEC)	DISTANCE (METERS)	TARGET
Phase I: Practice					
1.	Weaver Stance	6 (3, 1 shot strings, and 1, 3-shot string)	N/A	5-7	E
2.	Weaver Stance	6 (2, 3-shot strings)	10 per string	5-7	E
3.	Right Barricade	6 (2, 3-shot strings)	10 per string	15	E
4.	Left Barricade	6 (2, 3-shot strings)	10 per string	15	E
5.	Weaver Stance	15 (5, 3-shot strings)	10 per string	15	E
6.	Over Barricade and Kneeling Barricade	6 (1, 6-round magazine)	25	25	E
		45 Total Rounds for Phase I			
Phase II: Evaluation					
1.	Weaver Stance	6 (2, 3-shot strings)	8 per string	5-7	E
2.	Right Barricade	6 (2, 3-shot strings)	10 per string	15	
3.	Weaver Stance and kneeling reload/fire	6 (3 and 3 rapid reload)	25	15	

ORDER	POSITION	ROUNDS	TIME (SEC)	DISTANCE (METERS)	TARGET
4.	Strong Side Barricade	9 (3, 3 shot strings)	10 per string	15	E
5.	Strong Side Barricade	6 (3 and 3 rapid reload behind cover)	25	15	E
6.	Left Side Barricade	6 (2, 3-shot strings)	10 per string	15	E
7.	Over Barricade and Kneeling Barricade	6 (1, 6-round magazine)	25	25	E
		45 Total Rounds for Phase II			
		90 Total Rounds for Course			

2.11. Course Information, Handgun AFQC.

2.11.1. Targets for the course: Use the Military "E" target facer (NSN 6920-00-600-6874) and Military "E" target backer (NSN 6920-00-795-1806) or suitable substitute. Targets may need to be hung lower to avoid shooting overhead baffles and/or target holders.

2.11.2. Standards:

2.11.2.1. Qualified: 35 hits on target (77.7%)

2.11.2.2. Expert: 41 hits (91.1%) on target with at least 25 hits within the 10-inch (vital area) circle (81.3%) and 6 hits within the 6-inch (head) circle (46%). ***NOTE:*** A triple-number score is annotated when any score 41 or higher has been achieved (examples: “41/25/8”,“44/30/10”, etc.) The first number is the amount of hits on the entire target, the second number is the total number of hits inside the 10-inch vital area and the third number is the total number of hits within the 6-inch head area of the target. A score of “41/20/3” would indicate a qualified score.

2.11.3. Course Notes:

2.11.3.1. Common Notes:

2.11.3.1.1. **WARNING:** Before starting live fire training, ensure students establish a proper grip with the handgun and do not have their thumb blocking the rear of the slide. Serious injury can occur if a portion of the shooters hand makes contact with the slide during recoil.

2.11.3.1.2. There is no zeroing order; however, instructors will check bullet impact and discuss the adjusted aiming point method if the point of impact is substantially off the vital area of the target and is not caused by shooter error, i.e., jerking the trigger, flinching, etc.

2.11.3.1.3. For the M9 or M11, start each order and string of fire with a round in the chamber, hammer down and the decocking lever (except M11) in the fire position (first round double action). Trainees are to fire the first round in each order and string of fire double action. To ensure consistency, the “Field Interview Stance” (placing hands on belt buckle area) is only used as a starting point (to ensure consistency) for each student prior to drawing the weapon from the holster.

2.11.3.1.4. Trainees firing with an approved concealed carry **MUST** wear a jacket concealing the holstered weapon. Drawing from a concealed carry is mandatory if the intent is to carry the weapon concealed.

2.11.3.1.5. Individuals authorized to use an approved “cross-draw” shoulder holster are not allowed to fire with students using “normal” hip type holsters. When firing with shoulder holsters, individuals will be positioned on every other firing point.

2.11.3.1.6. The over-barricade position is a supported position. Do not allow the weapon to touch the support. Trainees can use the barricade for support.

2.11.3.1.7. Pistol and revolver shooters may fire during the same relay; however, position pistol shooters to the right of the revolver shooters on the firing line.

2.11.3.1.8. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel; dual hearing protection is required for all Combat Arms personnel (unless electronic headsets are being used).

2.11.3.1.9. **WARNING: Combat Arms personnel must visually inspect all weapons, magazines and magazine pouches at the end of live-fire training to ensure they do not contain live rounds. Combat Arms personnel will rack clear all weapons prior to removal from the firing line (students may transport weapons in their holsters once made rack safe).**

2.11.3.1.10. **For all strings except right/left barricade:** Unless the weapon is empty, once a student has completed a string of fire, the student must remain on target and continue to scan until the command “cease fire” has been given or when the target is turned on edge. Once the command “cease fire” has been given, or the target turns on edge, students will remain on target for two seconds and the tower operator will give the command “finger off trigger and move to the weaver ready position.” Once at the weaver ready position, students will automatically decock the weapon and remain in this position looking at the target for four seconds until the command “recover to holster” has been given. This technique ensures students do not automatically take their weapons off target and holster without first ensuring the threat is eliminated. If the weapon is empty, students will take cover as appropriate, clear their weapons and follow the instructions from the tower operator. When reloading or performing immediate actions, shooters must bring weapon near eye level (weapon may be brought closer to the body as needed to accomplish these tasks). This technique ensures the shooter is not taking their eyes away from the simulated threat until the simulated threat is eliminated by the cease-fire command or the target being turned on edge.

2.11.3.1.11. **For right/left barricade:** Unless the weapon is empty, once a student has completed a string of fire, the students will immediately return to the weaver ready position behind the barricade. Once behind the barricade, shooters will remove their fingers from the trigger and decock the weapon. This technique ensures students are not placing their weapons on safe while engaging a simulated threat. Instructors must stress the importance of not firing the weapon behind the barricade. If the weapon is empty, students will take cover as appropriate, clear their weapons and follow the instructions from the tower operator. When reloading or performing immediate actions, shooters must bring weapon near eye level (weapon may be brought closer to the body to as needed to accomplish these tasks). This technique ensures the shooter is not taking their eyes away from the simulated threat until the simulated threat is eliminated by the cease-fire command or the target being turned on edge.

2.11.3.1.12. Trainees must have the authorized belt, holster, pouch and a minimum of three magazines. During the Evaluation, insert the 3rd magazine into the magazine pouch after completion of Evaluation Order number 3.

2.11.3.1.13. Practice Orders 2-5 and Evaluation Orders 1-6 will be fired with 2 shots to the body and 1 shot to the head. When firing Practice Order 6 and Evaluation Order 7 (all shots will be fired into the body), students will fire 3 rounds Over Barricade, move to the Kneeling Barricade position and fire the remaining 3 rounds from the Kneeling Barricade position.

2.11.3.1.14. The 3-shot strings (2 shots to the body and 1 shot to the head) are in actuality designed as a failure drill. This technique is used when the two shots to the body are stopped by body armor and the third shot (failure drill) is fired into the unprotected head of the target. During training, students will momentarily pause after firing the body shots and then fire the third round into the head of the target. This technique is used to so students can determine if the threat has been eliminated. Students are responsible for pausing between the second and third shot, Combat Arms personnel will not interfere to dictate/imply pause durations during actual strings of fire. In a real life scenario, the time it takes for a student to move from the chest/torso area to the head should be sufficient to determine if a head shot (failure drill) is needed. In reality, but not during this course of fire, shots may also be placed into the pelvic girdle to stop an enemy target.

2.11.3.1.15. Once the range has been cleared and/or the line has been made safe, the following range commands will be used for this new course of fire (commands may have to be repeated/ modified to ensure everyone understands). “Shooters with a ____ round magazine load. Your next order of fire will be ____ rounds fired from the _____ position within a _____ time limit. Once loaded, holster your weapon or move to the weaver ready position” (holstering the weapon or moving to weaver ready will depend on the firing position used). Once loaded, holstered, or weaver ready, and ready to fire, (the block officers will point downrange to ensure the tower operator knows the line is ready to fire) the following range commands will be used: “Shooters, this order of fire will be ____ rounds fired from the ____ position. You’re on duty, standby” and after a non-standard pause, give the command “fire” or whistle (students must not know when the command fire or whistle will be given). Once firing has been completed (either each string or the course of fire) normal range commands IAW AFI 36-2226, paragraph 5.6.6. will be used to ensure range safety. To eliminate the need for fire and cease fire commands, the use of turning targets is recommended.

2.11.3.2. Practice Order Notes:

2.11.3.2.1. Before firing Phase I, draw a 10-inch (vital area) circle and a 6-inch (head) circle on the target using chalk or white grease pencil. The circle must be visible to the shooter at all target distances. The shooter will use the circle as a reference point during practice fire to aid in placing rounds in the vital area of the target. Locate the 10 inch circle on the "E" target as shown in **Figure 2.7.** Center the circle on the target with the top edge of the circle 13-1/4 inches from the top of the head of the target. Place the top of the 6-inch head circle 3 inches below the top of the target. Make the template using plywood, acrylic plastic or other material.

2.11.3.2.2. Practice Orders 1 and 2 will begin from the weaver ready position. Practice Orders 3 and 4 will begin from the weaver ready position behind the barricade. Practice Orders 5 and 6 will begin from the field interview position with the holster and ammunition pouches secured. Practice Order 5 is a repetitious training phase to emphasize the failure drill process. On Practice Order 6, trainees will fire 3 rounds from the over barricade position (3 shots to the body), move to the kneeling barricade position and fire the remaining 3 rounds in the weapon (3 shots to the body). This reinforces the tactic of not reappearing in the same spot after a

reload. **For example:** the overbarricade position simulates firing over the hood of a car and the firing from the kneeling barricade simulates firing from in front of the headlights.

2.11.3.2.3. Instructors are to teach trainees, as needed, during practice orders. Instructors will correct safety infractions and supervise immediate action procedures if stoppages occur.

2.11.3.2.4. Before live firing, Group B and C trainees will practice drawing the handgun a minimum of 10 times and dry firing from a combination of the weaver stance and the left, right, or overbarricade positions. Allow sufficient time for instructors to observe, coach, and evaluate each trainee. Instructors will observe, coach and evaluate each trainee prior to live fire to ensure the weapon can be drawn from the holster safely.

2.11.3.2.5. Repair or replace all targets after Phase I.

2.11.3.2.6. To correct shooting errors, instructors may provide additional rounds during Phase I.

2.11.3.2.7. During Phase I, trainees will clear their own stoppages under instructor supervision when the order of fire is completed. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

2.11.3.3. Evaluation Order Notes:

2.11.3.3.1. Before firing Phase II, draw a 10-inch (vital area) circle and a 6-inch (head area) circle using a pencil or pen so the circle isn't visible to the shooter, at any distance, during the evaluation. Use the circles for scoring purposes starting at this point (all rounds in the circle or touching the lines of the circle will be scored as hits). Give trainees the opportunity to view their targets at the end of the course so they can see if their shots are in and around the vital area of the target. Evaluation targets having aiming points (accidental or intentional) within the circle must be replaced.

2.11.3.3.2. Trainees will begin each order of fire on Evaluation Orders 1, 3 and 7 with the handgun holstered and the flap fastened. Magazine/ammo pouch will be fastened on all orders of fire. Trainees will place loaded spare magazine in ammo pouch with top of magazine down into the pouch first and rounds pointed forward. As a reminder, insert the 3rd magazine into the magazine pouch after completion of Evaluation Order number 3.

2.11.3.3.3. Trainees will start and finish each string of fire in Evaluation Orders 2, 4, 5, and 6 from the weaver ready position behind the barricade. Once behind the barricade, shooters will remove their fingers from the trigger and decock the weapon. This technique ensures students are not placing their weapons on safe while engaging a simulated threat. **Instructors must stress the importance of not firing the weapon behind the barricade.** See **Figure 2.4.** and **Figure 2.5.** for additional guidance.

2.11.3.3.4. Trainees will clear their own stoppages during each order of fire in Phase II. Ensure students keep weapons near eye level (to ensure target stays in view) while clearing all malfunctions, stoppages, or corrective actions (weapons may be brought closer to the body as needed to accomplish these tasks). Give pro-rated time to complete the order of fire if the trainee has, or is in the process of, successfully applying immediate or remedial action to clear

the stoppage. The ultimate goal is for the trainee to understand why the stoppage occurred and to have the ability to correct the problem and continue firing. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

2.11.3.3.5. Instructors will not teach during the evaluation orders of fire. However, they may assist trainees and teach shooting fundamentals between the actual orders of fire. They will also correct safety infractions and supervise how trainees apply immediate action procedures when applicable.

2.11.3.3.6. When students are ready to fire the first string of the evaluation phase, they will be given the command to load. This will be the only time the students will be told to load for the remainder of the evaluation phase. From this point, students will automatically reload when their weapons are empty and the slide locks to the rear. Students must be clearly informed of the number of rounds fired during each string, as they will most likely have more rounds in the magazine than they will be firing. This technique allows the student to automatically reload without being told; the exact scenario they will encounter in a "real world" situation.

2.11.3.3.7. On evaluation order 7, trainees will fire 3 rounds from the over barricade position (3 shots to the body), move to the kneeling barricade position and fire the remaining 3 rounds in the weapon (3 shots to the body). This simulates a reload as in Practice Order number 6. This reinforces the tactic of not reappearing in the same spot after a reload. For example: the overbarricade position simulates firing over the hood of a car and the reload and firing from the kneeling barricade simulates firing from in front of the headlights. **Students will not fire any shots to the head at 25-meter targets.**

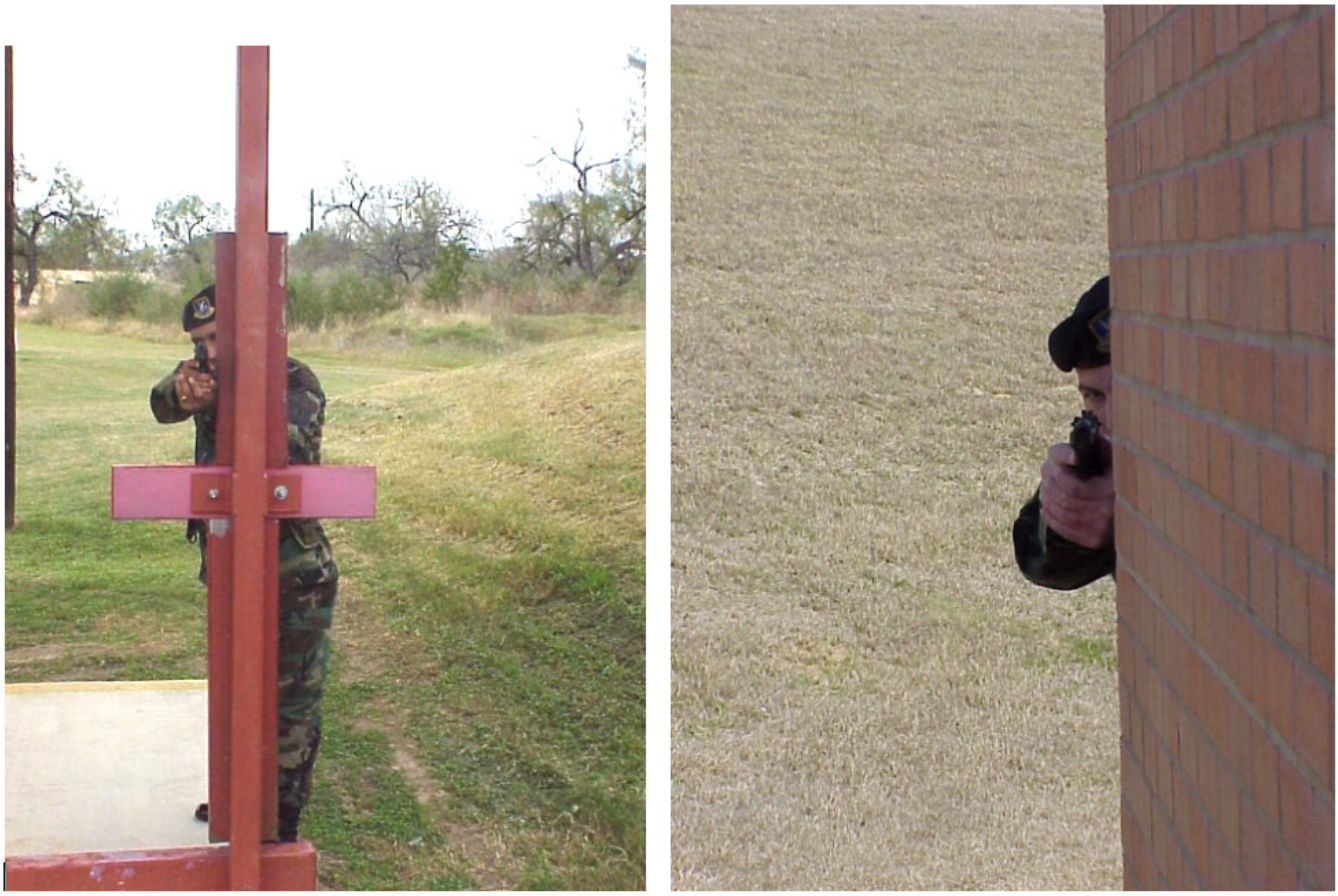
Figure 2.2. Weaver Stance.

Weaver Stance. Use the weaver stance when firing from cover isn't possible. The weaver stance affords the shooter a more stable firing position using less body movement than previous positions. It allows quicker target acquisition and increases speed and accuracy. To assume the weaver stance, take a standing position facing the target with the feet shoulder width apart, step back with the strong side foot about 5 to 8 inches, and pivot on the balls of your feet 45 degrees to the weak side (very similar to a boxer's stance). Bring weapon to eye level; do not lower head to weapon. This position may be modified to make maximum use of body armor. Extend the shooting arm toward the target, do not lock elbow. Wrap fingers of the support hand around (overlapping) fingers of the shooting hand (forefinger of support hand may be placed on concave forward surface of the trigger guard). Keep support arm bent, elbow pointing toward the ground. Apply forward pressure with the shooting arm and at the same time, apply equal pressure to the rear with the support arm. This will help steady the handgun. Lift head slightly for better sighting. Keep both eyes open if possible.

Figure 2.3. Weaver Ready Position.

Weaver Ready Position. With the shooter in the weaver stance, the shooter lowers the weapon so the entire target is visible. This lowered position may be nothing more than a 3 to 4 inch drop as demonstrated in the pictures above. Lower the weapon by pivoting at the shoulder, do not bend at the elbows or tuck the weapon into the chest to lower the handgun. Shooters must not raise and lower their heads to meet the intent of this requirement. Keep the weapon pointed down range and maintain eye contact with the target.

Figure 2.4. Handgun Right Barricade Position.



Right Barricade Position. The primary purpose of using a barricade is to provide cover for the shooter. Start from the weaver ready position from behind the barricade. With the weapon at the weaver position behind the barricade, roll out (lean) to the right and engage the target (ensure the weapon is clear of the barricade to prevent rounds from being fired into the barricade). Roll back behind the barricade after firing, take finger off trigger, decock and again assume the weaver ready position. Reloading is also conducted behind the barricade. If using the barricade for support, do not allow any portion of the weapon to touch the barricade. The picture on the left shows the position on the firing range; the picture on the right shows the position using an actual building. Notice the limited target potential this position shows. **During classroom and dry-fire training, students should be taught the "cut the pie" method of target engagement.**

Figure 2.5. Handgun Left Barricade Position.

Left Barricade Position. The primary purpose of using a barricade is to provide cover for the shooter. Start from the weaver ready position from behind the barricade. With the weapon at the weaver position behind the barricade, roll out (lean) to the left, and engage the target (ensure the weapon is clear of the barricade to prevent rounds from being fired into the barricade). Roll back behind the barricade after firing, take finger off trigger, decock and again assume the weaver ready position. Reloading is also conducted behind the barricade. If using the barricade for support, do not allow any portion of the weapon to touch the barricade. The picture on the left shows the position on the firing range; the picture on the right shows the position using an actual building. Notice the limited target potential this position shows. **During classroom and dry-fire training, students should be taught the "cut the pie" method of target engagement.**

Figure 2.6. Handgun Over Barricade Position.

Over Barricade Position. This is a variation of the standing position with the addition of a barricade for stability and protection. The barricade simulates a tall fence, wall, or solid object, giving protection to the shooter. To assume this position, place the weak foot forward towards the barricade, bend the forward knee, and move the strong foot back until only the head and weapon are visible above the barricade. Rest the forearms (behind wrists, or heels of the hands) on the barricade. The height of the over barricade position is no higher than necessary to see and shoot over your barricade. Don't allow any part of the handgun or magazine to touch the support. Reloading must be accomplished while kneeling concealed behind the barricade. **WARNING**: Resting wrists or heels of hands on barricade could result in painful pinching to the shooter's hands during recoil.

Figure 2.7. Circle Template for Handgun Targets.

Circle Template: This template is used to mark each target for the practice and qualification courses of fire. Instructors must ensure the circles are visible at all distance during practice by using white chalk or white grease pencil to make the circles. During the evaluation portion, the circles must not be visible at any distance. Use a lead pencil to ensure the circles are not visible. To speed up this process, instructors may choose to draw the circles on all targets using pencil and allow students to trace the circle in white grease pencil or chalk. The picture on the right shows the relationship between the template and an actual body. Notice how the 6-inch circle encompasses the eyes, nose and mouth and the 10-inch circle covers the thoracic cavity (the part of the human body between the neck and the diaphragm partially encased by the ribs).

Chapter 3

SHOTGUN TRAINING PROGRAM

3.1. Shotgun AFQC. This course provides Air Force members with the minimum training, Tactics, Techniques, and Procedures, and evaluation required for qualification with a shotgun. Qualification is separate for each weapon model, type or system. Qualification on one type of shotgun does not qualify an individual with other types of shotguns.

3.2. Training Overview.

3.2.1. Initial Training. This is the trainee's first participation in the shotgun-training program. Initial training consists of classroom instruction, qualification on the required evaluation phases of the AFQC and passing mechanical evaluations.

3.2.2. Recurring Training. This is qualification training after initial qualification. This training consists of classroom instruction, qualification on the shotgun AFQC and passing mechanical evaluations. Qualification length of this program is 12 months for all arming Groups. Weapons safety procedures and the training objectives in **Table 3.1.** are the minimum mandatory items required for Group A recurring training.

3.2.3. Remedial Training. This is the minimum training needed to correct deficiencies causing an individual to fail an evaluation. This training is given to all personnel who fail an evaluation.

3.2.4. Unit Training. Refresher training on operator skills and knowledge provided by unit to help maintain the individual's proficiency. Units should conduct this training before exercises and deployments.

3.3. Instructor Guidelines:

3.3.1. Classroom. Instructors will help trainees during portions of training requiring physical handling of the weapons. They will supervise, evaluate and assist trainees during the operator maintenance evaluation (care, cleaning and function check). See AFI 36-2226 for student to instructor ratios.

3.3.2. Range. Instructors will supervise, assist, coach and teach trainees, as needed, during practice and evaluation orders of fire. See AFI 36-2226 for student to instructor ratios.

3.3.3. Tower Operator. The tower operator has responsibility and authority for safe and effective range operations during range training sessions. See AFI 36-2226 for exceptions.

3.4. Shotgun Qualification Plan of Instruction. The plan in the following paragraphs is intended to provide instruction standardization. This program is mandatory for initial and recurring training. Remedial training is in-depth instruction, concentrating on known problems. Trainees must meet and pass evaluations to the performance standards of these training objectives. Approximate training times for this program are:

3.4.1. For AFQC -- 4 to 5 hours.

3.4.2. For remedial and unit training -- as required.

3.5. Training Goal. Training goal is to instill confidence in the trainee to develop and maintain the capability to use the shotgun against enemy targets and lightweight materials.

3.6. Training Objectives (AFQC). The training objectives needed for successful completion of this course are found in **Table 3.1.**.

3.6.1. Intermediate Training Objectives. Trainees must be familiar with:

3.6.1.1. Safety procedures.

3.6.1.2. Characteristics, nomenclature and general data.

3.6.1.3. Types, packaging, caring for, handling and preserving 12 gauge ammunition.

3.6.1.4. Range firing procedures.

Table 3.1. Shotgun Training Objectives/Intermediate Training Objectives (ITO).

	Objective	**Condition**	**Standard**
		Given:	
1.	Operate shotgun.	Shotgun, dummy ammunition and required equipment.	Operate shotgun.
ITO			
1.1	Load shotgun.	Shotgun, dummy ammunition and required equipment.	Load two rounds: one in chamber, one in magazine.
1.2	Unload/clear shotgun.	Shotgun loaded with dummy ammunition.	Unload/clear shotgun.
1.3	Reload shotgun.	Empty Shotgun	Reload shotgun.
1.4	Perform function check.	Cleared shotgun.	Perform function check.
1.5	Apply immediate and remedial actions.	Shotgun, dummy ammunition and required equipment.	Apply actions.
2.	Apply shooting fundamentals.	Shotgun, required ammunition and equipment.	Apply fundamentals to demonstrate ability to consistently place shots on target.
ITO			
2.1	Demonstrate positions and techniques of holding shotgun.	Shotgun.	Demonstrate correct firing position techniques to properly hold shotgun.
2.2	Apply aiming techniques.	Shotgun sighting and aiming bar if applicable.	Obtain correct sight alignment/ picture.
2.3	Apply effective trigger control.	Shotgun.	Apply trigger control without disturbing sight alignment/picture.

	Objective	Condition	Standard
		Given:	
2.4	Apply effective follow-through/ recovery techniques.	Shotgun.	Apply/understand techniques to place more than one shot in vital target area.
3.	Meet/exceed minimum score.	Shotgun and required equipment.	Qualify on AFQC.
ITO			
3.1	Fire teaching phase.	Shotgun, required ammunition and equipment.	Demonstrate effective shooting ability from all positions.
3.2	Qualify on AFQC evaluation phase.	Shotgun, required ammunition and equipment.	Qualify on appropriate course of fire.
4.	Perform operator maintenance.	Shotgun and required equipment.	Clean, inspect, lubricate and function check shotgun.
ITO			
4.1	Disassemble shotgun.	Shotgun.	Disassemble to authorized level.
4.2	Clean/inspect shotgun.	Shotgun and proper cleaning equipment.	Clean and inspect shotgun.
4.3	Lubricate shotgun.	Shotgun and required lubricating supplies.	Lubricate shotgun.
4.4	Assemble shotgun.	Disassembled shotgun.	Assemble shotgun.
4.5	Perform function check.	Shotgun.	Function check shotgun.

3.7. Recommended Sequence of Events.

3.7.1. First Period -- Orientation and Mechanical Training. Approximately 2 hours are needed for this training.

3.7.1.1. Prepare all required forms and documents.

3.7.1.2. Teach the basic rules of weapon safety.

3.7.1.3. Issue each trainee a shotgun, dummy ammunition and other required equipment.

3.7.1.4. Introduce subject, motivate trainees and express importance for US Air Force personnel to handle weapons safely and efficiently.

3.7.1.5. Describe characteristics of the shotgun.

3.7.1.6. Describe exterior nomenclature.

3.7.1.7. Discuss functions of the shotgun.

3.7.1.8. Discuss the various types of ammunition used and methods of packaging.

3.7.1.9. Discuss how to care for, handle and preserve ammunition.

3.7.1.10. Explain, demonstrate and conduct practical exercises on:

3.7.1.10.1. Clearing the shotgun.

3.7.1.10.2. Disassembling, assembling and function checking the shotgun.

3.7.1.10.3. Care, cleaning and lubricating the shotgun for all climatic conditions (the preferred method is to teach this in the cleaning area as a demonstration/performance lesson).

3.7.1.10.4. Loading, unloading and reloading the shotgun.

3.7.1.11. Explain, demonstrate and conduct practical exercises on malfunctions, stoppages, immediate actions and remedial action procedures.

3.7.1.12. Conduct immediate action practical exercises.

3.7.1.13. Discuss types and methods of destruction.

3.7.2. Second Period -- Preparatory Marksmanship Training. Approximately 1 hour is needed for this training.

3.7.2.1. Explain and demonstrate:

3.7.2.1.1. Firing positions (**Figure 3.2.** - **Figure 3.5.**).

3.7.2.1.2. How marksmanship fundamentals help ensure hits on target.

3.7.2.1.3. Aiming to include sight alignment, sight picture, focus of the eye and the importance of sight alignment.

3.7.2.2. Conduct exercises on sight alignment and sight picture by using sighting and aiming training aids.

3.7.2.3. Conduct practical exercises on shouldering the shotgun and proper placement of the hands.

3.7.3. Third Period -- Live Fire Practice. The objective is to prepare the trainees to confidently fire the shotgun before evaluation. Approximately 1 hour is needed for this training.

3.7.3.1. Explain safety requirements for live firing.

3.7.3.2. Explain range procedures.

3.7.3.3. Review marksmanship fundamentals.

3.7.3.4. Review all factors of aiming to include the importance of good sight alignment.

3.7.3.5. Review procedures for clearing stoppages during live fire training.

3.7.3.6. Conduct exercises in assuming firing positions and dry firing from these positions.

3.7.3.7. Conduct practice fire training.

3.7.3.8. Use ball and dummy exercises if needed to achieve required shooting skills.

3.7.4. Fourth Period -- Live Fire and Operator Maintenance Evaluation. Approximately 1 hour is needed for this training.

3.7.4.1. Brief trainees on evaluation criteria.

3.7.4.2. Conduct qualification evaluation.

3.7.4.3. Instructor will score evaluation phase.

3.7.4.4. Evaluate the trainee's proficiency in operator maintenance and function check procedures.

3.7.4.5. Trainees must correctly perform the function check.

3.7.4.6. Instructors will provide remedial training for those who fail to qualify (live fire or performance evaluation). Instructors may provide immediate refires or notify unit training sections of failures.

3.7.4.7. Complete applicable blocks on AF Forms 522 and 710.

3.8. Administrative Requirements.

3.8.1. Reference material:

3.8.1.1. AFI 36-2226, *Combat Arms Program.*

3.8.1.2. T.O. 11W3-6-1-154, *Field and Depot Maintenance Instruction, Winchester Riot-Type Shotgun M12, Stevens Riot-Type Shotguns, M520-30, M620A.*

3.8.1.3. T.O. 11W3-6-1-171, *Operator's, Unit, and Direct Support Maintenance Manual*, *Shotgun, 12 Gauge, M1200/870/500/590 (Army TM 9-1005-303-13&P).*

3.8.1.4. T.O. 11W3-6-2-1, *Intermediate Maintenance Instructions with Illustrated Parts Breakdown Military Shotgun, 12 Gauge, Pump Action Model 870, with Adapter Part Number 32911.*

3.8.1.5. TM 750-244-7, *Procedures for Destruction of Equipment (Army).*

3.8.2. Facilities Needed:

3.8.2.1. Classroom equipped with chalk or dry erase board, tables and one chair per trainee.

3.8.2.2. Range with 25-meter target distances.

3.8.2.3. Care and cleaning area.

3.8.3. Training Aids and Equipment:

3.8.3.1. Shotgun (one per trainee).

3.8.3.2. 12 gauge dummy ammunition and empty ammunition can/box.

3.8.3.3. Sighting and aiming bars, devices and charts.

3.8.3.4. Training charts (optional).

3.8.3.5. Overhead projector/computer system with visual slide capability(optional) .

3.8.3.6. Slide projector (optional).

3.8.3.7. Video cassette recorder and monitor (optional).

3.8.3.8. Slides and transparencies (optional).

3.8.3.9. "E" silhouette targets.

3.8.3.10. Public address system.

3.8.3.11. Sound suppressors and/or ear plugs (one set per trainee and one set per instructor).

3.8.3.12. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel; dual hearing protection is required for all Combat Arms personnel (unless electronic headsets are being used).

3.8.3.13. Care and cleaning equipment.

3.8.3.14. Student handout material.

3.8.3.15. First Aid kit.

3.8.3.16. Combat Arms Training Simulator (optional) meeting the requirements identified in AFI 36-2226.

3.8.4. Course Ammunition: 12 gauge, "00" Buckshot or Frangible (9 pellets).

3.8.5. Documents Needed: AF Forms 522 and 710.

Figure 3.1. Shotgun Firing Requirements, Shotgun Air Force Qualification Course (AFQC).

ORDER	POSITION	ROUNDS	TIME (SEC)	DISTANCE M/YDS	TARGET
Phase I: Practice					
1.	Standing	1	10	25	E
2.	Strong Side Barricade	2	10	25	E
3	Over Barricade	2	10	25	E
		5 Total Rounds for Phase I			
Phase II: Evaluation					
1.	Standing	1	10	25	E
2.	Strong Side Barricade	2	10	25	E
3.	Over Barricade	2	10	25	E
		5 Total Rounds for Phase II			
		10 Total Rounds for Course			

3.9. Course Information, Shotgun AFQC.

3.9.1. Targets for the course: Use the Military "E" target facer (NSN 6920-00-600-6874) and Military "E" target backer (NSN 6920-00-795-1806) or suitable substitute.

3.9.2. Standard: Qualified: 25 hits out of a possible score of 45.

3.9.3. Course notes:

3.9.3.1. During training, shotguns may be equipped with removable (slide on) recoil pads.

3.9.3.2. Before live firing, trainees will be given an opportunity to practice assuming each position and establishing proper grip/technique. Afford sufficient time for instructors to observe, coach and evaluate each trainee. This may be accomplished on the firing line prior to firing Phase I or in the classroom during the second period.

3.9.3.3. Conduct all firing with "00" buckshot or Frangible (9 pellets).

3.9.3.4. Instructors will teach trainees, as needed, during practice orders. Instructors will correct safety infractions and supervise immediate action procedures if stoppages occur.

3.9.3.5. Start standing orders of fire with the shotgun at a low ready position and the safety on.

3.9.3.6. The shotgun must not touch or rest on the barricade.

3.9.3.7. During Phase I, trainees will clear their own stoppages under instructors supervision when the order of fire is completed. Trainees must bring the weapon to eye level (or approximate) to ensure the target remains in their field of vision. ***WARNING***: If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

3.9.3.8. To correct shooting errors, instructors may provide additional rounds during Phase I.

3.9.3.9. Repair or replace all targets after the practice order.

3.9.3.10. Instructors will evaluate the trainee's ability to effectively apply marksmanship fundamentals during the evaluation phase of fire. Instructors will not teach during the evaluation orders of fire. They may assist trainees and teach shooting fundamentals between the actual orders of fire. They will also correct safety infractions and supervise how trainees apply immediate action procedures when applicable.

3.9.3.11. Trainees will clear their own stoppages during each order of fire in Phase II. Give additional time to complete the order of fire if the trainee has, or is in the process of, successfully applying immediate or remedial action to clear the stoppage. The ultimate goal is for the trainee to understand why the stoppage occurred and to have the ability to correct the problem and continue firing. ***NOTE:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

3.9.3.12. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel; dual hearing protection is required for all Combat Arms personnel (unless electronic headsets are being used).

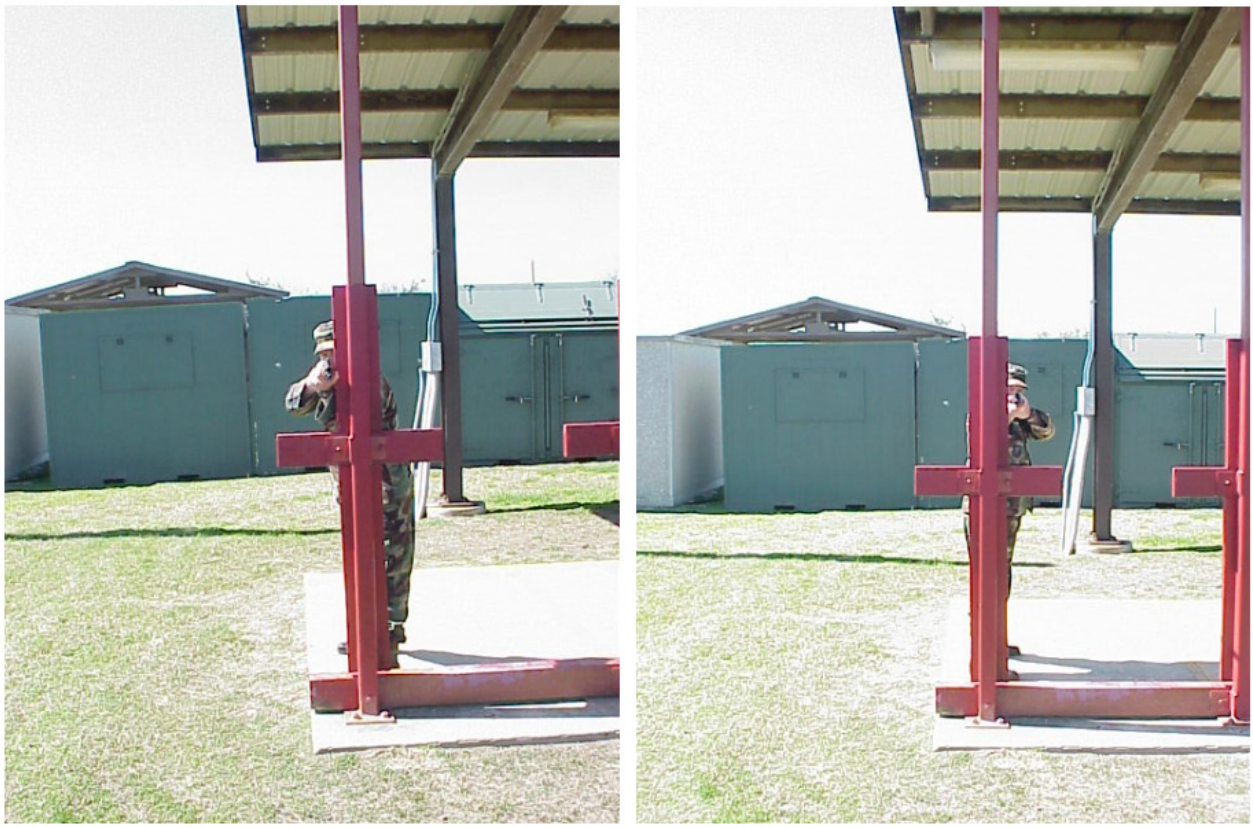
Figure 3.2. Shotgun Ready Position.

Ready Position. The shooter is standing up straight and relaxed. Feet should be Approximately shoulder width apart, the stock of the shotgun is in the shoulder and the weapon is pointed down at a 45-degree angle. The shotgun should be loaded, safety on and the shooter's eyes on the target.

Figure 3.3. Shotgun Standing Position.

Standing Position. To assume the standing position (right-handed), face the target and spread feet a comfortable distance apart. Step back with the right foot 6 to 8 inches and with the toes of the right foot pointed about 45 degrees to the right. The left foot stays in place with the toes pointed towards the target. Place the butt of the weapon tightly into the right shoulder, keeping the right elbow parallel to the ground to form a good pocket for the butt of the weapon. Place the left hand on the fore-end assembly with the left forearm parallel to the weapon. Lean forward bending the left leg, leaving the right leg and back straight.

Figure 3.4. Shotgun Strong Side Barricade Position.



Strong Side Barricade Position. Assume a standing position behind the barricade. The back of the support arm or hand rests against the barricade for support. The elbow of the shooting arm is in close to the body to lessen the shooter's exposure to the enemy. During classroom and dry-fire training, students should be taught the “cut the pie” method of target engagement.

Figure 3.5. Shotgun Over Barricade Position.

Over Barricade Position. Assume a position behind the barricade and lower your position to the height of the over barricade support. The back of the support arm or hand rests on the barricade for support.

Chapter 4

40MM GRENADE LAUNCHER TRAINING PROGRAM

4.1. Grenade Launcher AFQC. This course provides Air Force members with the minimum training, Tactics, Techniques, and Procedures, and evaluation required for qualification with a grenade launcher. Qualification is separate for each weapon model, type or system. Qualification on one type of grenade launcher does not qualify an individual with other types of grenade launchers. SF personnel will zero and qualify with the actual weapon they will be armed with.

4.2. Training Overview.

4.2.1. Initial Training. This is the trainee's first participation in the grenade launcher-training program. Initial training consists of classroom instruction, qualification on the required evaluation phases of the AFQC and passing the mechanical evaluations.

4.2.2. Recurring Training. This is qualification training after initial qualification. It consists of classroom instruction, qualification on the AFQC and passing the mechanical evaluations. Qualification length of this program is 12 months for all arming Groups.

4.2.3. Remedial Training. This is the minimum training needed to correct deficiencies causing an individual to fail an evaluation. This training is given to all personnel who fail an evaluation.

4.2.4. Unit Training. Refresher training on operator skills and knowledge provided by units to help maintain the grenadier's proficiency. Units should conduct this training before exercises and deployments.

4.3. Instructor Guidelines.

4.3.1. Classroom. Instructors will help trainees during portions of training requiring physical handling of the weapons. They will supervise, evaluate and assist trainees during the operator maintenance evaluation (care, cleaning and function check). See AFI 36-2226 for student to instructor ratios.

4.3.2. Range. Instructors will supervise, assist, coach and teach trainees, as needed, during practice and evaluation phases of fire. Each firing point instructor conducts the course of fire, to include monitoring time limits, at the firing point. To ensure safe range operations, close communication is essential between the range safety instructor, tower operator and all firing point instructors. See AFI 36-2226 for student to instructor ratios.

4.3.3. Range Safety Instructor/Tower Operator. This instructor monitors all firing points and has responsibility and authority for safe and effective range operations during range training sessions. He/she may work directly on the firing line if a fixed control tower is not on the grenade range. ***NOTE:*** This position is in addition to each firing point instructor. The Range Safety Instructor is not to serve as a firing point instructor in addition to this duty. See AFI 36-2226 for exceptions.

4.4. Grenade Launcher Qualification Plan of Instruction. The plan in the following paragraphs is intended to provide instruction standardization. This program is mandatory for initial and recurring training. Remedial training is in-depth instruction, concentrating on known problems. Trainees must meet and be evaluated to the performance standards of these training objectives. Approximate training times for this program are:

4.4.1. For AFQC -- 5 to 6 hours.

4.4.2. For remedial and unit training -- as required.

4.5. Training Goal. The training goal is to instill confidence in the trainee to develop and maintain the capability to use the grenade launcher against enemy targets.

4.6. Training Objectives (AFQC). The training objectives needed for successful completion of this course are found in **Table 4.1.**

4.6.1. Intermediate Training Objectives. Trainees must be familiar with:

4.6.1.1. Safety procedures.

4.6.1.2. Characteristics, nomenclature and general data.

4.6.1.3. Types, packaging, care, handling and preserving 40mm ammunition.

4.6.1.4. Range determination techniques.

4.6.1.5. Lateral distance measurement techniques.

4.6.1.6. Adjusted aiming point method of fire.

4.6.1.7. Range firing procedures.

Table 4.1. Grenade Launcher Training Objectives/Intermediate Training Objectives (ITO).

	Objective	**Condition**	**Standard**
		Given:	
1.	Operate grenade launcher (GL).	GL, dummy ammunition and required equipment.	Operate GL.
ITO			
1.1	Load GL.	GL, dummy ammunition and required equipment.	Load GL with one round.
1.2	Unload/clear GL.	GL loaded with dummy ammunition.	Unload/clear GL.
1.3	Reload GL.	Empty GL on fire.	Reload GL.
1.4	Perform function check.	Cleared GL.	Perform function check.
1.5	Apply immediate and remedial actions.	GL, dummy ammunition and required equipment.	Apply immediate action procedures.
2.	Apply shooting fundamentals.	GL, required ammunition and equipment.	Apply fundamentals to demonstrate ability to consistently place shots on target.
ITO			
2.1	Demonstrate positions and techniques of holding GL.	GL.	Demonstrate correct firing positions and techniques to properly hold GL.

	Objective	Condition	Standard
		Given:	
2.2	Apply aiming techniques.	GL sighting/aiming bar if applicable.	Obtain correct sight alignment/ picture.
2.3	Apply effective trigger control.	GL.	Apply trigger control without disturbing sight alignment/picture.
2.4	Apply effective follow-through/ recovery techniques.	GL.	Apply/understand techniques to place more than one shot in vital target area.
3.	Meet/exceed minimum score.	GL and required equipment.	Qualify on AFQC.
ITO			
3.1	Fire teaching phase.	GL, required ammunition and equipment.	Demonstrate effective shooting ability from all positions.
3.2	Qualify on AFQC evaluation phase.	GL, ammunition, flak vest, Kevlar helmet and grenade vest.	Qualify on appropriate course of fire.
4.	Perform operator maintenance.	GL and required equipment.	Clean, inspect, lubricate and function check GL.
ITO			
4.1	Disassemble GL.	GL.	Disassemble to authorized level.
4.2	Clean/inspect GL.	GL and proper cleaning equipment.	Properly clean/inspect GL.
4.3	Lubricate GL.	GL and required lubricating supplies.	Lubricate GL.
4.4	Assemble GL.	GL.	Assemble GL.
4.5	Perform function check.	GL.	Function check GL.

4.7. Recommended Sequence of Events.

4.7.1. First Period -- Orientation and Mechanical Training. Approximately 2 hours are needed for this training.

4.7.1.1. Prepare all required forms and documents.

4.7.1.2. Teach the basic rules of weapon safety.

4.7.1.3. Issue each trainee a grenade launcher, dummy ammunition and other required equipment.

4.7.1.4. Describe characteristics of the grenade launcher.

4.7.1.5. Describe exterior nomenclature of the grenade launcher.

4.7.1.6. Explain functioning of the grenade launcher.

4.7.1.7. Discuss various types of ammunition used and methods of packaging.

4.7.1.8. Discuss how to care for, handle and preserve ammunition.

4.7.1.9. Explain, demonstrate and conduct practical exercises on:

4.7.1.9.1. Clearing the grenade launcher.

4.7.1.9.2. Disassembling, assembling and function checking the grenade launcher.

4.7.1.9.3. Care, cleaning and lubricating the grenade launcher for all climatic conditions (the preferred method is to teach this in the cleaning area as a demonstration/performance lesson).

4.7.1.9.4. Loading, unloading and reloading the grenade launcher.

4.7.1.9.5. Stoppage, malfunction and immediate and remedial action procedures.

4.7.2. Second Period -- Preparatory Marksmanship Training. Approximately 1 hour is needed for this training.

4.7.2.1. Explain and demonstrate:

4.7.2.1.1. Tactical employment of firing positions (**Figure 4.2.** and **Figure 4.3.**).

4.7.2.1.2. How marksmanship fundamentals help ensure hits on target.

4.7.2.1.3. Aiming to include sight alignment, sight picture and focus of the eye.

4.7.2.1.4. Correct sight alignment/sight picture by using sighting and aiming training aids.

4.7.2.2. Conduct practical exercises on shouldering the grenade launcher and placement of the hands.

4.7.2.3. Conduct practical exercises on range determination, lateral distance measurements and adjusted aiming point techniques.

4.7.2.4. Correct procedures for sensing and adjustment of fire.

4.7.3. Third Period -- Live Fire Practice. The objective is to prepare the trainees to confidently fire the grenade launcher before evaluation. Instructors will assist, teach and supervise trainees during practice. Approximately 1 hour is needed for this training.

4.7.3.1. Teach safety requirements for live firing.

4.7.3.2. Explain range procedures.

4.7.3.3. Review points of marksmanship fundamentals.

4.7.3.4. Review all factors of aiming to include the importance of good sight alignment.

4.7.3.5. Review procedures for clearing stoppages during live fire training.

4.7.3.6. Conduct exercises in assuming firing positions and dry firing from these positions.

4.7.3.7. Conduct practice fire training to achieve initial firing skill.

4.7.3.8. Use ball and dummy exercises as needed.

4.7.4. Fourth Period -- Live Fire and Operator Maintenance Evaluation: Approximately 1.5 hours are needed for this training.

4.7.4.1. Brief trainees on evaluation criteria.

4.7.4.2. Conduct live-fire evaluation phases. Trainees must qualify without instructor assistance.

4.7.4.3. Point instructors will score evaluation phases.

4.7.4.4. Evaluate the trainee's proficiency in operator maintenance and function check procedures.

4.7.4.5. Trainees must correctly perform the function check.

4.7.4.6. Instructors will provide remedial training for those who fail to qualify (live fire or performance evaluation). Instructors may provide immediate refires or notify unit training sections of failures.

4.7.4.7. Complete applicable blocks on AF Forms 522 and 710.

4.8. Administrative Requirements.

4.8.1. Reference Material:

4.8.1.1. AFI 36-2226, *Combat Arms Program.*

4.8.1.2. FM 23-31, *40mm Grenade Launcher, M203 (Army).*

4.8.1.3. T.O. 11W3-9-4-1, *40mm Grenade Launcher, M203, Operations Manual.*

4.8.1.4. T.O. 11W3-9-2-2, *Grenade Launcher, 40mm, M79 (Army TM 9-1010-205-10).*

4.8.1.5. TM 750-244-7, *Procedures for Destruction of Equipment (Army).*

4.8.1.6. T.O. 11W3-5-5-1, *Operator, Maintenance, Repair and Replacement Parts, Rifle 5.56mm M16, Rifle 5.56mm M16A1, Bipod Assembly M3, and Launcher Grenade 40mm XM148.*

4.8.2. Facilities Needed:

4.8.2.1. Classroom equipped with chalk or dry erase board, tables and one chair per trainee.

4.8.2.2. Range with 90 to 300-meter target distances (**Figure 4.4.**).

4.8.2.3. Weapon cleaning area.

4.8.3. Training Aids and Equipment:

4.8.3.1. Grenade launcher (one per two trainees recommended).

4.8.3.2. 40mm dummy ammunition and empty ammunition crate.

4.8.3.3. Sighting and aiming bars, devices and charts.

4.8.3.4. Training charts (optional).

4.8.3.5. Overhead projector/computer system with visual slide capability (optional).

4.8.3.6. Slide projector (optional) .

4.8.3.7. Video cassette recorder and monitor (optional).

4.8.3.8. Slides and transparencies (optional).

4.8.3.9. Public address system.

4.8.3.10. Ear plugs (one set per trainee and one set per instructor).

4.8.3.11. Eye protection is mandatory for all personnel. Hearing protection is mandatory for all personnel; dual hearing protection is required for all Combat Arms personnel (unless electronic headsets are being used).

4.8.3.12. Flak vests and helmets during live-fire training.

4.8.3.13. Grenade vest.

4.8.3.14. Care and cleaning equipment.

4.8.3.15. Student handout material (optional).

4.8.3.16. First Aid kit.

4.8.3.17. Combat Arms Training Simulator (optional) meeting the requirements identified in AFI 36-2226.

4.8.4. Documents Needed:

4.8.4.1. AF Forms 522 and 710. Butt numbers and/or serial numbers are sufficient to document training on the AF Form 710.

4.8.5. Ammunition Needed:

4.8.5.1. Cartridge, 40mm Training Practice (TP). MAJCOMs may approved the use of other rounds for use at regional training centers.

Figure 4.1. Grenade Launcher Firing Requirements, Grenade Launcher Air Force Qualification Course (AFQC).

ORDER	POSITION	ROUNDS	TIME (MIN)	DISTANCE M/YDS	TARGET
Phase I: Practice					
1.	Prone Supported	3	N/A	200	#1
2.	Kneeling Supported	1	1	90-115	#2
3.	Kneeling Supported	1	1	135-150	#3
4.	Prone Supported	1	1	250-300	#4
		6 Total Rounds for Phase I			
Phase II: Evaluation					
1.	Kneeling Supported	3	2	90-115	#2
2.	Kneeling Supported	3	2	135-150	#3
3.	Prone Supported	3	2	250-300	#4
		9 Total Rounds for Phase II			

15 Total Rounds for Course

4.9. Course Information, Grenade Launcher AFQC.

4.9.1. Targets for the course (**Figure 4.4.**):

4.9.1.1. Zero panel should be 2-meters by 2-meters (6 feet x 6 feet). Place this target at a distance of 200 meters. If the range is already constructed with 150-meter zero targets, these may be used instead of reconfiguring the range.

4.9.1.2. Point target, 1-meter by 1.5-meters (vertical), one meter off the ground, at 90-115 meters from the firing line.

4.9.1.3. Point target, 1.5-meters by 1.5-meters, .5-meter off the ground, at 135-150 meters from the firing line.

4.9.1.4. Area target, vehicle, 55 gallon drums, "E" targets, etc., 250-300 meters from the firing line.

4.9.2. Standard: Qualified: 3 hits. Trainees must hit all three targets with one shot each to qualify. The maximum score for the evaluation is three TARGETS. In the evaluation phase, if a target has been hit prior to the three rounds per position, the student will move to the next qualification target and the extra rounds returned to the range ammo custodian. A HIT is any round directly striking a point target or a round striking within 5-meters of the center aiming point of the area target.

4.9.3. Course notes:

4.9.3.1. Trainees must not touch or rest the grenade launcher on the support. ***WARNING:*** **Ensure the rifle/carbine sling does not hang in front of launcher barrel and the muzzle is not behind (blocked) by the sandbags or log wall.**

4.9.3.2. Trainees will wear flak vests, grenade vests and helmets during all live-fire training.

4.9.3.3. When possible, trainees should fire using the peer/coach method. They should work together on range determination; sight adjustments, lateral distance measurements and adjusted aiming point method of firing.

4.9.3.4. Instructors are to teach trainees, as needed during Phase I. Instructors will correct safety infractions and supervise immediate action procedures if stoppages occur. Trainees must ensure the weapon is at eye level (or approximate) during these procedures to ensure their target remains within view.

4.9.3.5. Before live firing from a new position, give trainees an opportunity to practice assuming the position and dry fire from each position. Afford sufficient time for instructors to observe, coach and evaluate each trainee. Instructors will evaluate the trainee's ability to effectively apply marksmanship fundamentals during Phase II.

4.9.3.6. To correct shooting errors, instructors may provide additional rounds during Phase I.

4.9.3.7. During Phase I, trainees will clear their own stoppages under instructor supervision. Instructors will stop the time and supervise trainee actions. Resume the time limit once immediate action has been properly performed. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

4.9.3.8. Trainees will clear their own stoppages under instructor supervision during each order of fire in Phase II. Instructors will stop the time, and supervise trainee actions. Resume the time limit

once immediate action has been properly performed. Give additional time to complete the order of fire if the trainee has, or is in the process of, successfully applying immediate or remedial action to clear the stoppage. The ultimate goal is for the trainee to understand why the stoppage occurred and to have the ability to correct the problem and continue firing. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

4.9.3.9. Instructors will not teach during the evaluation orders of fire. However, they may assist trainees and teach shooting fundamentals between the actual orders of fire. They will also correct safety infractions and supervise how trainees apply immediate action procedures when applicable.

4.9.3.10. Eye protection is mandatory for all personnel. Hearing protection is mandatory for all personnel, dual hearing protection is required for all Combat Arms personnel (unless electronic headsets are being used).

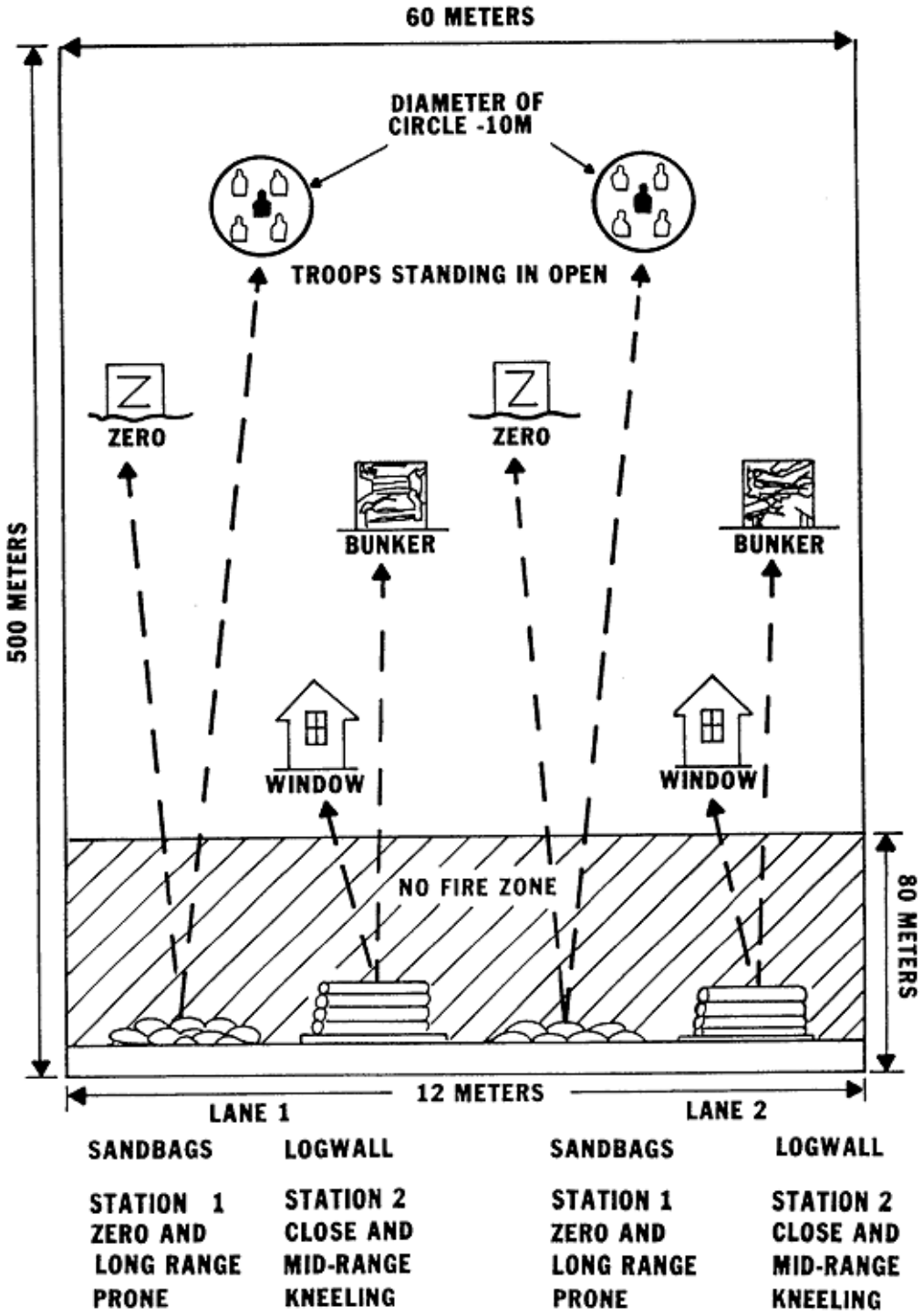
Figure 4.2. Grenade Launcher Prone Supported Position.

Prone Supported Position. To assume the prone supported position, the shooter first assumes the rifle/carbine prone position, adjusts the position to the available support, and places the left hand or forearm against the support. Whether the left elbow is directly under the weapon is of less importance in this position because the support, rather than the arm, sustains the weight of the weapon. No part of the grenade launcher or rifle/carbine should be touching the support as this reduces the shooter's control of the weapon. The placement of the rifle/carbine stock in the shooter's shoulder depends greatly on the distance of the target being engaged. Generally, targets engaged at distances greater than 150-meters require the rifle/carbine stock being placed low against the shooter's shoulder or on the ground.

Figure 4.3. Grenade Launcher Kneeling Supported Position.

Kneeling Supported Position. The kneeling supported position is particularly effective from level ground or ground sloping upward toward the target. A right handed shooter assumes the kneeling barricade position by kneeling on the right knee, right buttock resting on right heel, left foot forward, and pointed toward the target. The shooter leans forward over the left leg, resting the upper part of the left arm on the left knee, adjusts the position to the available support, and places the left hand or forearm against the support. Whether the shooter's left elbow is directly under the weapon is of less importance in this position because the support, rather than the arm, sustains the weight of the weapon. No part of the grenade launcher or rifle/carbine should be touching the support as this reduces the shooter's control of the weapon. The placement of the rifle/carbine stock in the shooter's shoulder depends greatly on the distance of the target being engaged. Generally, targets engaged at distances greater than 150-meters require the rifle/carbine stock being placed low against the shooter's shoulder. This permits the shooter to obtain correct sight alignment and sight picture.

Figure 4.4. Example of Grenade Launcher Target Arrays.



Chapter 5

LIGHT ANTI-ARMOR WEAPONS TRAINING PROGRAM

5.1. Light Anti-armor Weapons AFQC. This course provides the minimum training, Tactics, Techniques and Procedures and evaluation required to qualify Air Force members with the M72 LAW or M136 AT4. Qualification is separate for each weapon model, type or system. Qualification on one weapon does not qualify an individual with the other.

5.2. Training Overview.

5.2.1. Initial Training. This is the trainee's first participation in the training program. Initial training consists of classroom instruction, qualification on the required evaluation phase of the AFQC and passing the performance evaluations.

5.2.2. Recurring Training. This is qualification training after initial qualification. It consists of classroom instruction, qualification on the required evaluation phase of the AFQC and passing the performance evaluations. Qualification length of this program is 12 months for all arming groups.

5.2.3. Remedial Training. This is the minimum training needed to correct deficiencies causing an individual to fail an evaluation. This training is given to all personnel who fail an evaluation.

5.2.4. Performance Evaluations. Performance evaluations consist of weapon operator skills certification. Evaluation is mandatory during initial and recurring training.

5.2.5. Unit Training. Refresher training on operator skills and knowledge provided by units to help maintain individual's proficiency. Units should conduct this training before exercises and deployments.

5.3. Instructor Guidelines:

5.3.1. Classroom. Instructors will help trainees during portions of training requiring physical handling of weapons. They will supervise and evaluate trainees during performance evaluations. See AFI 36-2226 for student to instructor ratios.

5.3.2. Range. Instructors will supervise, help, coach and teach trainees as needed during practice and evaluation phases of fire. See AFI 36-2226 for student to instructor ratios.

5.3.3. Range Safety Instructor/Tower Operator. This instructor monitors all firing points and has responsibility and authority for safe and effective range operations during range training sessions. He/she may work directly on the firing line if a fixed control tower is not on the grenade range. ***NOTE:*** This position is in addition to each firing point instructor. The Range Safety Instructor is not to serve as a firing point instructor in addition to this duty. See AFI 36-2226 for exceptions.

5.4. Light Anti-armor Weapons Qualification Plan of Instruction. The plan in the following paragraphs is intended to provide instruction standardization. This program is mandatory for initial and recurring training. Remedial training is in-depth instruction, concentrating on known problems. Trainees must meet and be evaluated to the performance standards of these training objectives. Approximate training times for this program are:

5.4.1. For AFQC training -- 5 to 7 hours.

5.4.2. For remedial and unit training -- as needed.

5.5. Training Goal. The training goal is to instill confidence in the trainee to develop and maintain the capability to successfully use the weapon against enemy targets.

5.6. Training Objectives (AFQC). The training objectives needed for successful completion of this course are found in **Table 5.1.**

5.6.1. Intermediate Training Objectives. Trainees must be familiar with:

5.6.2. Safety rules.

5.6.3. Characteristics, nomenclature, packaging and general data.

5.6.4. Functioning and methods of destruction.

5.6.5. Range firing procedures.

Table 5.1. Light Anti-armor Weapon Training Objectives/Intermediate Training Objectives (ITO).

	Objective	Condition	Standard
		Given:	
1.	Operate weapon.	Weapon, sight template and series armored target silhouettes.	Operate weapon.
ITO			
1.1	Perform serviceability check.	Expended weapon.	Perform serviceability check.
1.2	Place weapon into operation.	Expended weapon.	Ready weapon, inspect back blast area, place on shoulder or arm and aim at target.
1.3	Take weapon out of action.	Expended and readied weapon.	Completely collapse and return to carry configuration.
1.4	Apply immediate action procedures.	Expended and readied weapon.	Apply immediate action procedures.
1.5	Assume proper firing positions.	Expended and readied weapon.	Assume prone, regular kneeling and modified kneeling positions.
1.6	Apply proper lead on moving targets.	Sight template and series armored target silhouettes.	Apply lead on at least six of eight opportunities.
2.	Performance evaluations.	Expended weapon and blank performance evaluation.	Successfully complete all phases within time limits.

	Objective	Condition	Standard
		Given:	
3.	Qualify with weapon.	M190 subcaliber launcher or M287 tracer trainer, required ammunition, steel/Kevlar helmet and flak vest.	Qualify on AFQC.

5.7. Recommended Sequence of Events.

5.7.1. First Period -- Orientation and Mechanical Training. Approximately 2 hours are needed for this training.

5.7.1.1. Prepare all required forms and documentation.

5.7.1.2. Discuss weapon safety.

5.7.1.3. Discuss description, characteristics, nomenclature, packaging and functioning.

5.7.1.4. Explain, demonstrate and conduct practical exercise on:

5.7.1.4.1. Conducting a serviceability check on the weapon.

5.7.1.4.2. Placing the weapon in and out of operation.

5.7.1.4.3. Performing immediate action procedures.

5.7.1.4.4. The four methods of target engagement with the weapon.

5.7.2. Second Period -- Preparatory Marksmanship. Approximately 2 hours are needed for this training.

5.7.2.1. Know how to properly assume all firing positions. (**Figure 5.2.**- **Figure 5.6.**)

5.7.2.2. Explain how to:

5.7.2.2.1. Estimate range.

5.7.2.2.2. Apply lead in engaging moving targets.

5.7.2.3. Prepare an anti-armor range card.

5.7.2.4. Explain, demonstrate and conduct practical exercises on how to apply the fundamentals of shooting the weapon.

5.7.2.5. Explain the probability of hits on target and killing the target.

5.7.3. Third Period -- Performance Evaluations. Approximately 1 hour is needed for this training.

5.7.3.1. Perform a serviceability check on a weapon.

5.7.3.2. Demonstrate how to place weapon into operation.

5.7.3.3. Perform immediate action for a failure to fire in a simulated combat situation.

5.7.3.4. Demonstrate how to take a weapon out of action.

5.7.3.5. Be able to apply proper lead on a moving target.

5.7.4. Fourth Period -- Live Fire. Approximately 1 hour is needed for this training.

5.7.4.1. Discuss range safety procedures.

5.7.4.2. Conduct exercises in assuming firing positions.

5.7.4.3. Review immediate action procedures.

5.7.4.4. Fire qualification course.

5.7.4.5. Reschedule trainees who fail to meet qualification standards.

5.7.4.6. Instructors will provide remedial training for those who fail to qualify (live fire or performance evaluation). Instructors may provide immediate refires or notify unit training sections of failures.

5.7.4.7. Complete applicable blocks on AF Forms 522 and 710.

5.8. Administrative Requirements.

5.8.1. Reference Material:

5.8.1.1. AFI 36-2226, *Combat Arms Program.*

5.8.1.2. T.O. 11A8-2-1, *Hand and Rifle Grenades, 66mm Rocket Launcher, 81mm Mortars, 90mm Recoiless Rifle, 40mm Cartridges, Flares and Signals, Smoke Pots, and Land Mines.*

5.8.1.3. FM 23-25, *Light Anti-armor Weapons, M72 LAW and M136 AT4 (Army).*

5.8.1.4. TM 9-1315-886-12, *Operator's and Unit Maintenance Manual, Launcher and Cartridge, 84mm, M136 (AT4) (Army).*

5.8.1.5. TM 9-1340-214-10, *Operator's Manual for 66-mm Light Antitank Weapon (LAW) System M72A1, M72A2 with Coupler, M72A3 and Practice Rocket Launcher M190 with M73 Practice Rocket (Army).*

5.8.1.6. TM 11-5855-213-10, *Operator's Manual for Night Vision Sight, Individual-Served Weapon AN/PVS-4 (Army).*

5.8.1.7. TM 750-244-7, *Procedures for Destruction of Equipment (Army).*

5.8.2. Facilities Needed:

5.8.2.1. Classroom equipped with chalk or dry erase board, tables and chairs for training.

5.8.2.2. Firing range capable of conducting weapon training.

5.8.3. Training Aids and Equipment:

5.8.3.1. Expended M72 series LAW tube or M136 AT4 (as required).

5.8.3.2. M190 subcaliber launcher or M287 tracer trainer (as required).

5.8.3.3. 35mm dummy ammunition or 9mm dummy cartridge (as required).

5.8.3.4. Graphic Training Aid (GTA) 7-1-28 LAW, GTA 7-2-5 AT4 and GTA 17-2-13.

5.8.3.5. Blank armor range card.

5.8.3.6. Flak vests for trainees.

5.8.3.7. Hearing protection for instructors and trainees.

5.8.3.8. Kevlar helmets for trainees.

5.8.3.9. Public address system.

5.8.3.10. Training charts (optional) .

5.8.3.11. Overhead projector/computer system with visual slide capability (optional).

5.8.3.12. Slide projector (optional).

5.8.3.13. Video cassette recorder and monitor (optional).

5.8.3.14. Slides and transparencies (optional).

5.8.3.15. Student handout material (optional).

5.8.3.16. Eye and ear protection are mandatory for all personnel.

5.8.3.17. First Aid kit.

5.8.3.18. Combat Arms Training Simulator (optional) meeting the requirements identified in AFI 36-2226.

5.8.4. Documents Needed: AF Forms 522 and 710.

5.8.5. Ammunition Required. M73, 35mm sub-caliber rockets or M939 tracer cartridges (as required).

Figure 5.1. Light Anti-armor Weapon Firing Requirements, Air Force Qualification Course.

ORDER	POSITION	ROUNDS	DISTANCE (M)	TARGET
Phase I: Practice				
1.	Prone	1	100	Salvaged Vehicle
2.	Kneeling	1	150	Salvaged Vehicle
3.	Sitting	1	200	Salvaged Vehicle
		3 Total Rounds for Phase I		
Phase II: Evaluation				
1.	Prone	1	100	Salvaged Vehicle
2.	Prone	1	150	Salvaged Vehicle
3.	Kneeling	1	150	Salvaged Vehicle
4.	Kneeling	1	175	Salvaged Vehicle
5.	Sitting	1	175	Salvaged Vehicle
6.	Sitting	2	200	Salvaged Vehicle
		7 Total Rounds for Phase II		

ORDER	POSITION	ROUNDS	DISTANCE (M)	TARGET
Phase III: Evaluation Moving Target (Optional)				
1.	Kneeling	1	100	Moving Armored Vehicle or Tank
2.	Kneeling	1	125	Moving Armored Vehicle or Tank
3.	Kneeling	1	150	Moving Armored Vehicle or Tank
		3 Total Rounds for Phase III		

13 Total Rounds for Course

5.9. Course Information, Light Anti-armor Weapons AFQC.

5.9.1. Course Targets:

5.9.1.1. Recommend targets be scaled as close to armored targets as possible. Using fifty-five gallon drums in place of salvaged vehicles is allowable.

5.9.1.2. The moving target is optional for units with moving target capabilities. Moving vehicle targets will move to provide flanking targets only.

5.9.2. Course Standards:

5.9.2.1. Phase II -- 5 hits.

5.9.2.2. Phase III -- 1 hit.

5.9.2.3. There is no time limit on this course.

5.9.3. Course Notes:

5.9.3.1. Instructors are to teach and coach trainees as needed during the practice phase. Instructors will correct safety infractions and supervise the application of immediate action procedures.

5.9.3.2. Before live firing from a new position, provide trainees an opportunity to practice assuming the position and dry fire from each position. Afford sufficient time for instructors to observe, coach and evaluate each trainee. Evaluation of the trainee's ability to effectively apply marksmanship fundamentals is accomplished during the evaluation phases.

5.9.3.3. To correct shooting errors, instructors may furnish additional rounds during the practice phase.

5.9.3.4. Instructors will not teach or coach during the evaluation orders of fire. However, they may help trainees and teach or coach shooting fundamentals between the actual orders of fire. They also will correct safety infractions and supervise the application of immediate action procedures.

5.9.3.5. Eye and ear protection is mandatory for all personnel.

5.9.3.6. Trainees will wear flak vests and helmets during live-fire training.

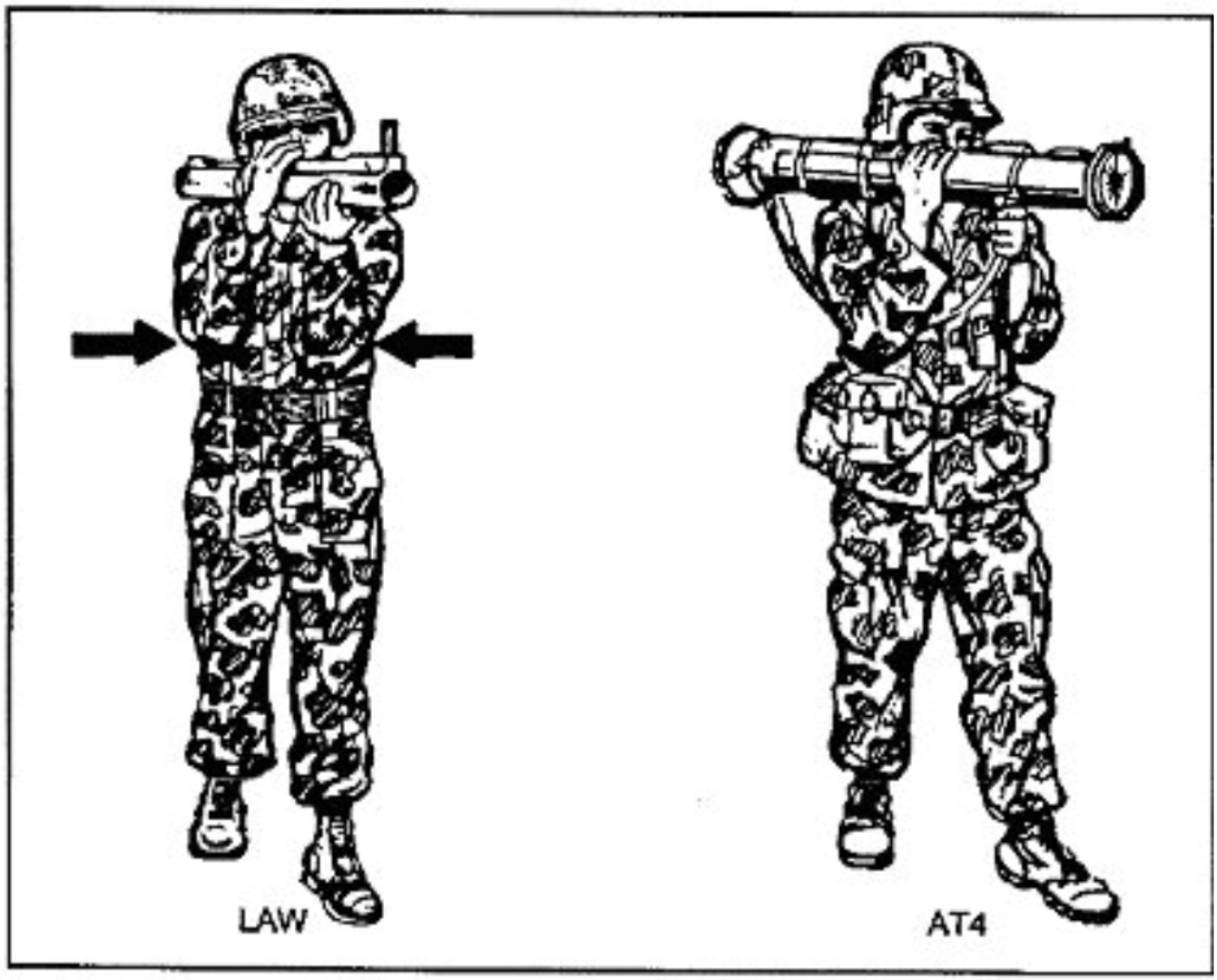
5.9.3.7. Do not announce target distances to students.

5.9.3.8. When firing in kneeling position, students may fire using kneeling supported or modified kneeling positions.

5.9.3.9. Range may be superimposed on existing grenade launcher range as long as surface danger zone requirements are met.

5.9.3.10. Students will train and qualify using the M73 subcaliber rocket or M939 tracer cartridge.

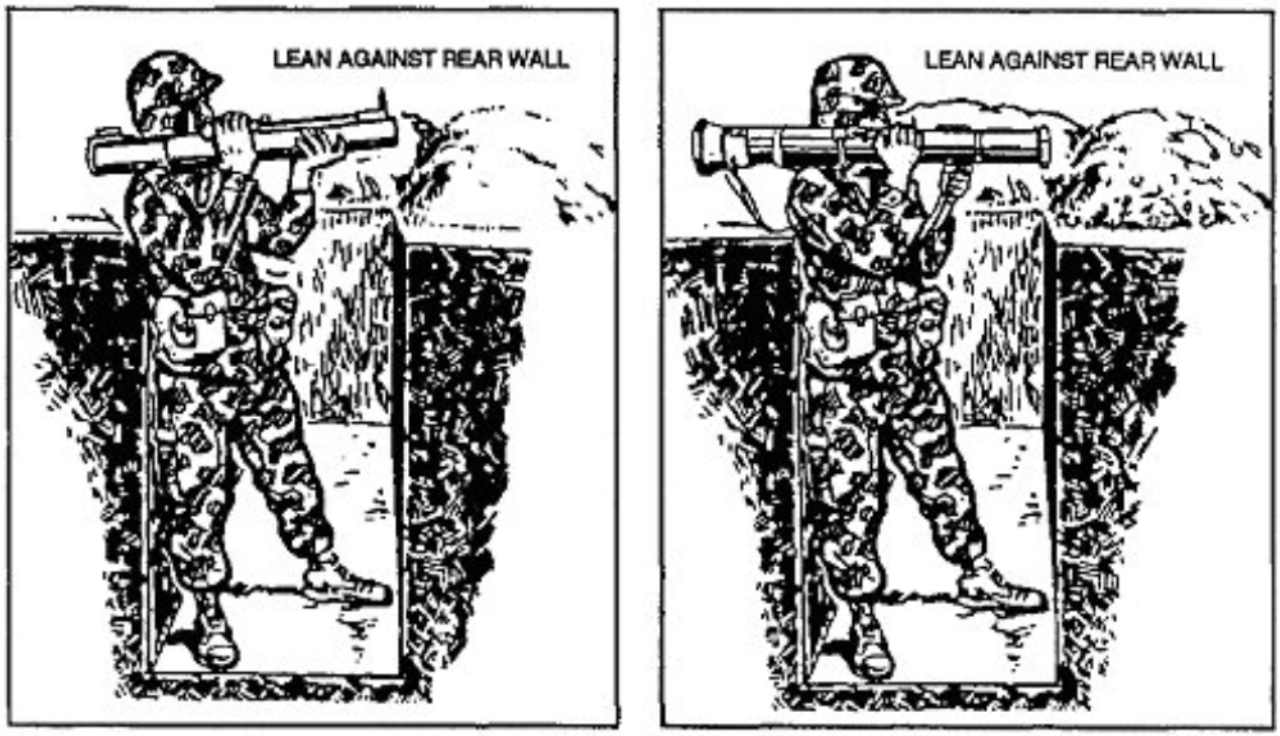
Figure 5.2. Light Anti-armor Basic Standing Positions.



Basic Standing Position. Raise the launcher slightly higher than shoulder level. Execute a left face, rotate your shoulder under the launcher and spread your feet a comfortable distance apart. Move your left foot 15 to 24 inches forward, keeping your hips level and your weight balanced on both feet. To obtain a firm, stable position; tuck both elbows tightly into your body. **LAW.** Place your non-firing hand about 4 inches from the front of the muzzle, with your firing hand on the rear cover. After placing the weapon on your shoulder, release the rear cover and place your firing hand on the trigger. Cup the launcher in the palm of your non-firing hand. Position your firing eye as close to the rear sight as comfortable. **AT4.** Grasp the sling near the launcher with your left hand

and the shoulder stop with your right hand. Raise the launcher above shoulder level. After placing the launcher on your shoulder, release the shoulder stop and place your right hand on the trigger. Place your firing eye 2 ½ to 3 inches from the rear sight.

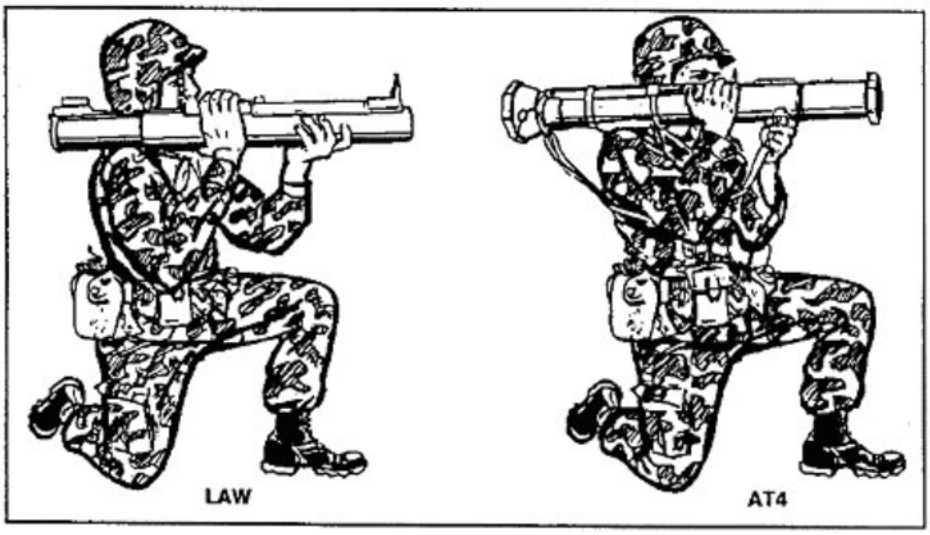
Figure 5.3. Light Anti-armor Modified Standing Positions.



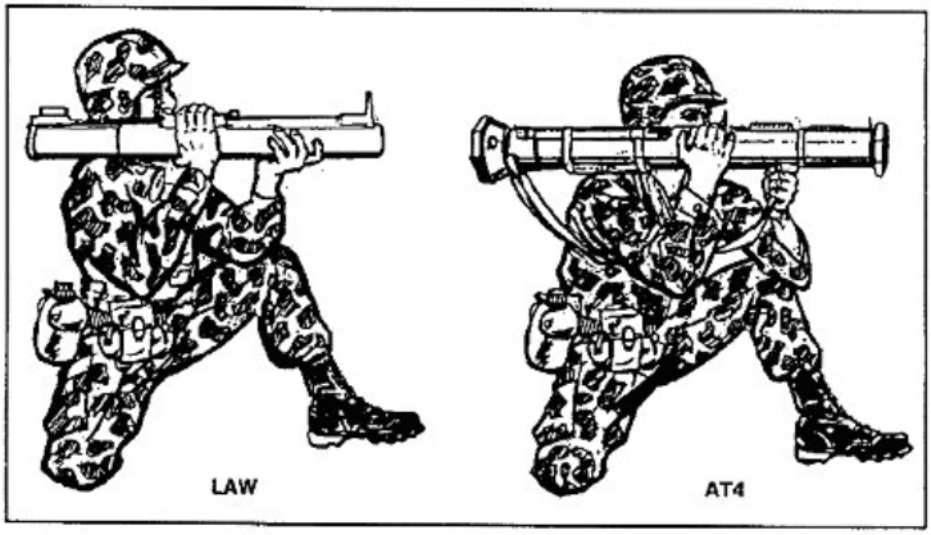
Modified Standing Position. Use this position when you occupy a fighting position. Assume the basic standing position, but instead of stepping forward, leans against the back wall of the fighting position. Ensure the venturi or rear of the weapons extends beyond the rear of the fighting position.

Figure 5.4. Light Anti-armor Weapon Kneeling Positions.

The basic kneeling position is the best position for tracking moving targets. The modified kneeling position is best for engaging stationary targets, since it is a supported position. However, either can be used for stationary or moving targets.



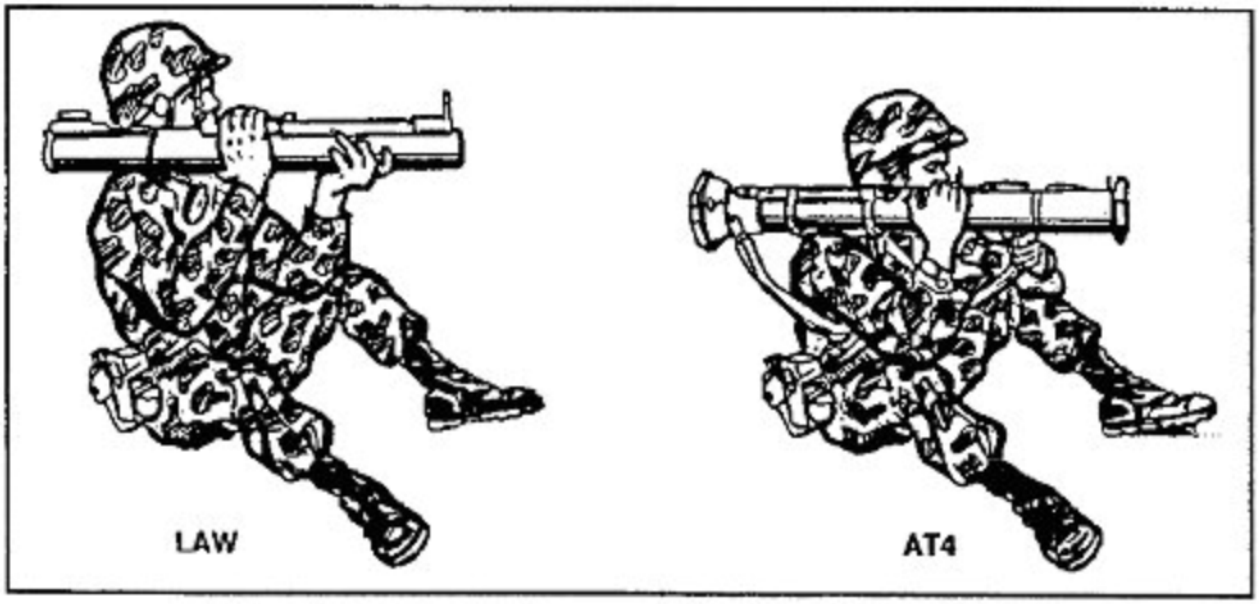
Basic Kneeling Position. Kneel from the basic standing position onto your right knee, keeping your left thigh parallel to the ground. Rotate your lower right leg 90° to the left. (This removes your right foot from exposure to the backblast.) Keep your right thigh and back straight and perpendicular to the ground. Point your left foot in the direction of fire and tuck your elbows into your sides. Though this is not a supported position, it should be a firm, stable one.



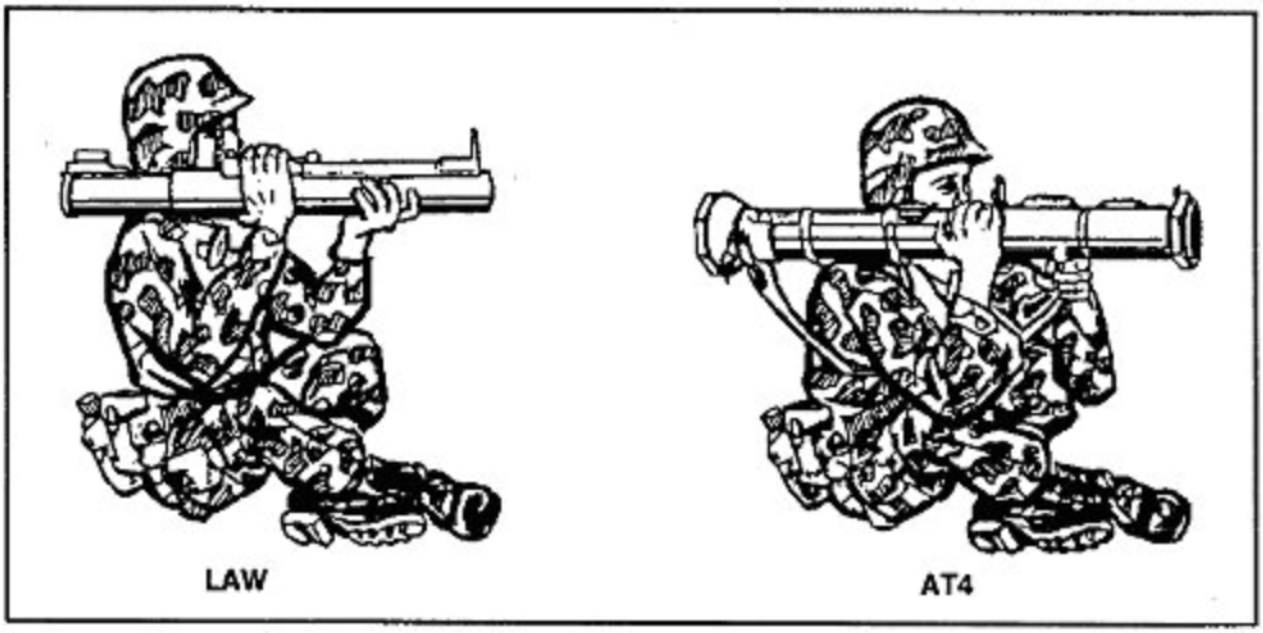
Modified Kneeling Position. From the basic kneeling position, sit back on your right heel. Place the back of your upper left arm on your left knee, making sure you do not have bone-to-bone contact between your left elbow and left knee. Keep your right elbow tucked in close to your side. Use any protective barriers available.

Figure 5.5. Light Anti-armor Weapon Sitting Positions.

The sitting position is the most stable firing position. In this position, the arms are placed on the legs for support. Depending on his/her physique, the firer can use either of two versions of the sitting position. Either is suitable for engaging stationary targets.

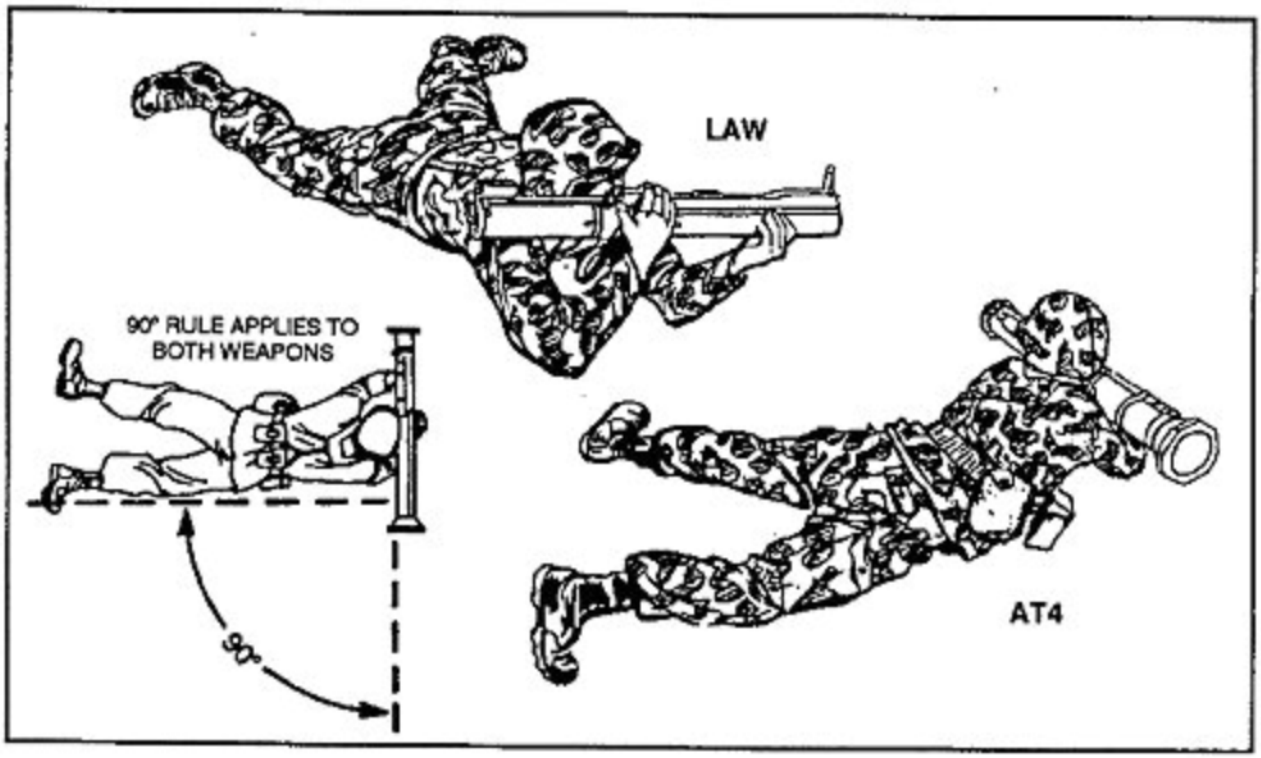


Basic Sitting Position. Sit facing the target and spread your feet a comfortable distance apart. Lean forward and place the backs of your upper arms on your knees, avoiding bone-to-bone contact.



Modified Sitting Position. From the basic sitting position, cross your ankles for added support. Raise or lower your knees to adjust for elevation on the target.

Figure 5.6. Light Anti-armor Weapon Prone Position.



Prone Position. The prone position is the most dangerous position due to its proximity to the ground. Ideally the ground should slope downward from the rear of the launcher. This reduces the effects of the backblast. Lie on the stomach with the body at a 90° angle to direction of fire, and with the body and legs to the left of the direction of fire. Unlike other firing positions, this one prevents placing the launcher on your right shoulder. Instead, hold the launcher in place against your upper right arm. For stability, apply extra pressure on the firing mechanism with your right hand. The prone position is the least stable of all firing positions. Instructors must ensure the body and legs are not in the backblast area. **WARNING: FAILURE TO MAINTAIN A 90° ANGLE FROM THE DIRECTION OF FIRE COULD CAUSE INJURY OR DEATH TO THE FIRER.**

Chapter 6

SUBMACHINE GUN TRAINING PROGRAM

6.1. Submachine Gun AFQC. This course provides the minimum training, Tactics, Techniques, and Procedures and evaluation required to qualify Air Force members with a submachine gun (not carbines). Qualification is separate for each weapon model, type or system. Qualification on one weapon does not qualify an individual with the other.

6.2. Training Overview.

6.2.1. Initial Training. This is the trainee's first participation in the Submachine Gun Training Program. Initial training consists of classroom instruction, qualification on the required evaluation phase of the AFQC and passing the mechanical evaluations.

6.2.2. Recurring Training. This is qualification training after initial qualification. It consists of classroom instruction, qualification on the required evaluation phases of the AFQC and passing the mechanical evaluations. Qualification length of this program is 12 months.

6.2.3. Remedial Training. This is the minimum training needed to correct deficiencies causing an individual to fail an evaluation. This training is given to all personnel who fail an evaluation.

6.2.4. Unit Training. Refresher training on operator skills and knowledge provided by units to help maintain the individual's proficiency. Units should conduct this training before exercises and deployments.

6.3. Instructor Guidelines and Ratios.

6.3.1. Classroom. Instructors will help trainees during portions of training requiring physical handling of the weapons. See AFI 36-2226, *Combat Arms Program,* for instructor to student rations. They will supervise, evaluate and help trainees during the operator maintenance (care, cleaning and function check).

6.3.2. Range. Instructors will supervise, help, coach and teach trainees as needed during practice and evaluation phases of fire. Ratio: One instructor per seven trainees for semiautomatic fire and one instructor per three trainees for automatic fire.

6.4. Submachine Gun Qualification Plan of Instruction. The plan in the following paragraphs is intended to provide instruction standardization. This program is mandatory for initial and recurring training. Remedial training is in-depth, concentrating on known problems. Trainees must meet and be evaluated to the performance standards of these training objectives. Approximate training times for this program are:

6.4.1. AFQC training -- 4 to 5 hours.

6.4.2. Remedial training -- as needed.

6.5. Training Goal. The training goal is to instill confidence in the trainee to develop and maintain the capability to successfully use the submachine gun against enemy targets.

6.6. Training Objectives (AFQC). The training objectives needed for successful completion of this course are found in **Table 6.1.**

6.6.1. Intermediate Training Objectives. Trainees must be familiar with:

6.6.1.1. Safety procedures.

6.6.1.2. Characteristics, nomenclature and general data.

6.6.1.3. Methods of destruction.

6.6.1.4. Types, packaging, care, handling and preservation of appropriate submachine gun caliber ammunition.

6.6.1.5. Range firing procedures.

Table 6.1. Submachine Gun Training Objectives/Intermediate Training Objectives (ITO).

	Objective	**Condition – Given:**	**Standard**
1.	Operate submachine gun.	Submachine gun, dummy ammunition and required equipment.	Operate submachine gun.
ITO			
1.1	Load submachine gun.	Submachine gun, dummy ammunition and required equipment.	Load submachine gun with one magazine (5 rds).
1.2	Unload/clear submachine gun.	Submachine gun loaded with dummy ammunition.	Unload/clear submachine gun.
1.3	Reload submachine gun.	Empty submachine gun.	Reload submachine gun.
1.4	Perform function check.	Cleared submachine gun.	Perform function check.
1.5	Apply immediate action to clear/correct stoppages.	Submachine gun, dummy ammunition and required equipment.	Apply immediate action procedures.
2.	Apply shooting fundamentals.	Submachine gun, required ammunition and equipment.	Apply fundamentals to demonstrate ability to consistently place shots on target.
ITO			
2.1	Demonstrate positions and techniques of holding gun.	Submachine gun.	Demonstrate correct firing positions and techniques to properly hold gun.
2.2	Apply aiming techniques.	Submachine gun and sighting/aiming bar if applicable.	Obtain correct sight alignment/picture.

	Objective	Condition – Given:	Standard
2.3	Apply trigger control.	Submachine gun.	Apply trigger control without disturbing sight alignment/ picture.
2.4	Apply effective follow-through/recovery techniques.	Submachine gun.	Apply/understand techniques to place more than one shot in vital target area.
3.	Meet/exceed minimum score.	Submachine gun and required equipment.	Qualify on AFQC.
ITO			
3.1	Fire teaching phase.	Submachine gun, required ammunition and equipment.	Demonstrate effective shooting ability from all positions.
3.2	Qualify on AFQC evaluation phase.	Submachine gun, required ammunition and equipment.	Qualify on appropriate course of fire.
4.	Perform operator maintenance.	Submachine gun and required equipment.	Clean, inspect, and lubricate. Pass function check.
ITO			
4.1	Disassemble submachine gun.	Submachine gun.	Disassemble to authorized level.
4.2	Clean/inspect submachine gun.	Submachine gun and cleaning equipment.	Properly clean/inspect submachine gun.
4.3	Lubricate submachine gun.	Submachine gun and lubricating supplies.	Lubricate submachine gun.
4.4	Assemble submachine gun.	Submachine gun.	Assemble submachine gun.
4.5	Perform function check.	Submachine gun.	Function check submachine gun.

6.7. Recommended Sequence of Events.

6.7.1. First Period--Orientation and Mechanical Training. Approximately 2 hours are needed for this training and as required for remedial training.

6.7.1.1. Prepare all required forms and documentation.

6.7.1.2. Teach the basic rules of weapon safety.

6.7.1.3. Issue each trainee appropriate equipment.

6.7.1.4. Describe characteristics of the submachine gun.

6.7.1.5. Describe exterior nomenclature.

6.7.1.6. Explain functioning.

6.7.1.7. Discuss types of ammunition used and methods of packaging.

6.7.1.8. Discuss care, handling and preservation of ammunition.

6.7.1.9. Explain, demonstrate and conduct practical exercises on:

6.7.1.9.1. Clearing the submachine gun.

6.7.1.9.2. Disassembly, assembly and function checking the submachine gun.

6.7.1.9.3. Proper care, cleaning and lubrication of the submachine gun and magazine for all climatic conditions (the preferred method is to teach this in the cleaning area as a demonstration/performance lesson).

6.7.1.9.4. Loading and unloading the submachine gun magazine.

6.7.1.9.5. Loading, unloading and reloading the submachine gun.

6.7.1.9.6. Stoppage, malfunctions and immediate action procedures.

6.7.2. Second Period -- Preparatory Marksmanship Training. Approximately 3/4 hours are needed for this training and as required for remedial training. Explain and demonstrate:

6.7.2.1. Firing positions.

6.7.2.2. How steady position, aiming, breath control and trigger control help ensure hits on target.

6.7.2.3. Aiming to include sight alignment, placement of aiming point and focus of the eye.

6.7.2.4. Correct sight alignment and sight picture through the use of sighting and aiming training aids.

6.7.3. Third Period -- Live Fire Practice. The objective is to prepare the trainees to confidently fire the submachine gun before evaluation. Instructors will assist, teach and supervise trainees during practice. Approximate training time is 1 hour and as needed for remedial training.

6.7.3.1. Teach safety requirements for live firing.

6.7.3.2. Explain range procedures.

6.7.3.3. Review points of marksmanship fundamentals.

6.7.3.4. Review all factors of aiming to include the importance of good sight alignment.

6.7.3.5. Review procedures for clearing stoppages during live fire training.

6.7.3.6. Conduct exercises in assuming firing positions and dry firing from these positions. Instructors must stress the need to make maximum use of cover and concealment.

6.7.3.7. Conduct practice fire training to achieve initial firing skill.

6.7.3.8. Use ball and dummy exercises if needed.

6.7.4. Fourth Period -- Live Fire and Operator Maintenance Evaluation. Approximately 1 hour is needed for this training and as required for remedial training.

6.7.4.1. Brief trainees on evaluation criteria.

6.7.4.2. Conduct live fire evaluation phases. Trainees must qualify without instructor assistance.

6.7.4.3. Instructors will score evaluation phases.

6.7.4.4. Evaluate trainee's proficiency in operator maintenance and function check procedures.

6.7.4.5. Trainees must correctly perform the function check.

6.7.4.6. Instructors will provide remedial training for those who fail to qualify (live fire or performance evaluation). Instructors may provide immediate refires or notify unit training sections of failures.

6.7.4.7. Complete applicable blocks on AF Forms 522 and 710. Butt numbers and/or serial numbers are sufficient to document training on the AF Form 710.

6.8. Administrative Requirements.

6.8.1. Reference Material:

6.8.1.1. AFI 36-2226, *Combat Arms Program.*

6.8.1.2. Applicable weapon operator's instructions.

6.8.1.3. UZI, 9mm, Submachine gun Operating Procedures and training video SAVPIN 607160DF (available through base audiovisual services).

6.8.2. Facilities Needed:

6.8.2.1. Classroom equipped with chalk or dry erase board, tables and one chair per trainee.

6.8.2.2. Range with 5, 15 and 25-meter target distances.

6.8.2.3. Care and cleaning area.

6.8.3. Training Aids and Equipment:

6.8.3.1. Submachine gun.

6.8.3.2. Magazines.

6.8.3.3. 9mm Dummy ammunition.

6.8.3.4. Sighting and aiming bars, devices and charts as needed.

6.8.3.5. Training charts (optional).

6.8.3.6. Overhead projector (optional).

6.8.3.7. Slide projector (optional).

6.8.3.8. Video cassette recorder and monitor (optional).

6.8.3.9. Slides and transparencies (optional).

6.8.3.10. Silhouette targets.

6.8.3.11. Public address system.

6.8.3.12. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel; dual hearing protection is required for all Combat Arms personnel (unless electronic headsets are being used).

6.8.3.13. Care and cleaning equipment.

6.8.3.14. Student handout material(optional) .

6.8.4. Documents Needed: AF Form 522 and AF Form 710.

6.8.5. Ammunition Needed: Cartridge, 9mm ball.

Figure 6.1. Submachine Gun Firing Requirements, Air Force Qualification Course.

Order	Position	Rounds	Time (Seconds)	Distance (M)
Phase I: Practice				
1.	Prone Supported	10 (2, 5-round strings)	N/A	25
2.	Standing	10 (1, 10-round magazine)	25	5/7
3.	Standing	15 (1, 15-round magazine)	25	5/7
4.	Strong Side Barricade Standing	10 (2, 5-round magazines)	35	15
5.	Over Barricade	10 (2, 5-round magazines)	35	25
		55 Total Rounds		
Phase II: Evaluation				
1.	Standing	10 (1, 10-round magazine)	25	5/7
2.	Standing	15 (1, 15-round magazine)	25	5/7
3.	Strong Side Barricade Standing	10 (2, 5-round magazines)	25	15
4.	Over Barricade	10 (2, 5-round magazines)	30	25
		45 Total Rounds		
		100 Total Rounds for Course		

6.9. Course Information, Submachine Gun AFQC.

6.9.1. Course Targets. Use the military "E" target facer (NSN 6920-00-600-6874) and military "E" target backer (NSN 6920-00-795-1806) or suitable substitute.

6.9.2. Course Standards. Qualified: 40 hits. 30 hits must be within the 10-inch (vital area) circle of the target.

6.9.3. Course Notes: **Briefcase, courier bag and shoulder harness are used by OSI only.**

6.9.3.1. Before firing the practice phase, draw a 10-inch (vital area) circle on the target using chalk. The circle must be visible to the shooter at all target distances. The shooter will use the circle as a reference point during the practice fire to aid in placing rounds in the vital area of the target. Locate the 10-inch circle on the "E" target as shown in **Figure 2.7.** Center the circle on the target with the top edge of the circle 13 1/4 inches from the top of the head of the target (even with side cut notches on "E" backers and facers). A template can be made of plywood, acrylic plastic, or other material.

6.9.3.2. Start all orders of fire with the submachine gun with an empty chamber, bolt forward, selector in the semiautomatic position and the trigger pulled.

6.9.3.3. Instructors are to teach or coach trainees as needed during the practice phase. Instructors will correct safety infractions and supervise immediate action procedures if stoppages occur.

6.9.3.4. Before live firing from a new position, provide trainees an opportunity to practice assuming the position and dry fire from each position. For each order of training requiring the weapon to be removed from concealment, provide each trainee at least five practice runs with an unloaded weapon. Afford sufficient time for instructors to observe, coach and evaluate each trainee. Evaluation of the trainee's ability to effectively apply marksmanship fundamentals is accomplished during the evaluation phases.

6.9.3.5. During the practice phase, trainees will clear their own stoppages under instructor supervision when the order of fire is completed. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

6.9.3.6. On Practice Order 1, instructors and trainees will check targets after each five-round string. Shooters may make additional sight adjustments at anytime during the practice orders, as required.

6.9.3.7. Practice Order 1, 2, 4, and 5 and Evaluation Order 1, 3, and 4 are fired in the semiautomatic (R) mode.

6.9.3.8. On Practice Order 2 through 5 and all evaluation orders, OSI personnel will use a courier bag, shoulder harness or briefcase if available. If the shooters are not using concealed carry equipment, deduct 5 seconds from Practice Order 2 through 5 and all evaluation orders.

6.9.3.9. On Practice Order 3 and Evaluation Order 2, the shooter will fire a 15-round magazine full automatic (A).

6.9.3.10. Shooters should fire in bursts of two to three rounds.

6.9.3.11. The over barricade position is a supported position. Trainees may use the barricade for support. Reload from behind cover. Do not allow the weapon to touch the support.

6.9.3.12. To correct shooting errors, instructors may provide additional rounds during the practice phase.

6.9.3.13. Repair or replace targets after the practice phase.

6.9.3.14. Before firing the evaluation phase, draw a 10-inch (vital area) circle on the target using a pencil or pen so the circle is not visible to the shooter during the evaluation. The circle is used for scoring purposes at this point in the course. Give trainees the opportunity to view their targets upon completion of the phase so they can see if their shots are in and around the vital area of the target.

6.9.3.15. Instructors will not teach or coach during the evaluation phase. However, they may assist trainees and teach or coach shooting fundamentals between the actual orders of fire. They will also correct safety infractions and supervise the application of immediate action procedures by trainees when applicable.

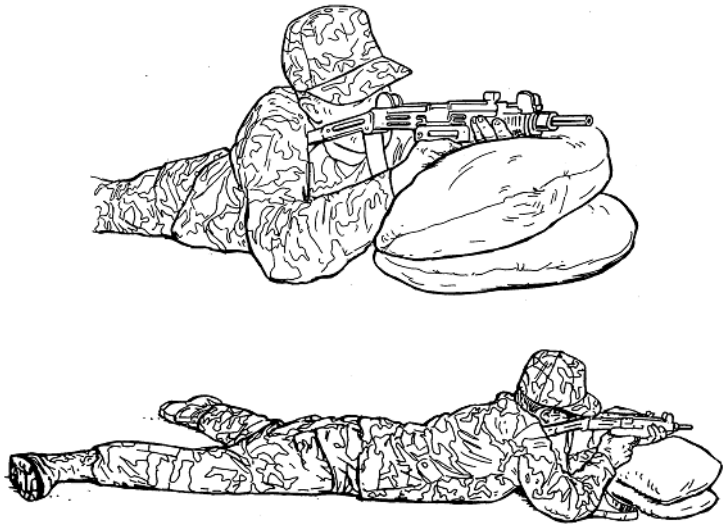
6.9.3.16. Reload magazines between orders of fire, as necessary.

6.9.3.17. Trainees will clear their own stoppages during each order of fire in the evaluation phase. Give additional time to complete the order of fire if the trainee has, or is in the process of, successfully applying immediate or remedial action to clear the stoppage. The ultimate goal is for the trainee to understand why the stoppage occurred and have the ability to correct the problem and continue firing. ***WARNING:*** Trainees must understand if a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

6.9.3.18. Eye protection for instructors is mandatory and is highly recommended for trainees. Hearing protection is mandatory for all personnel, dual hearing protection is required for all Combat Arms personnel (unless electronic headsets are being used).

6.9.3.19. Inspect all magazines at the completion of training to make sure they do not contain live rounds.

Figure 6.2. Prone Supported Position.



Prone Supported Position. To assume the prone supported position, the shooter first assumes the prone position. The shooter then adjusts the position to the available support, placing the support hand and forearm against the support. Whether the left elbow is directly under the submachine gun is of less importance in this position because the support, rather than the arm, sustains the weight of the submachine gun. No part of the submachine gun should be touching the support as this reduces the shooter's control of the submachine gun and hinders rapid recovery between shots.

Figure 6.3. Standing Shoulder Point and Ready Positions.

Standing Position. Assume a standing position. Pull the weapon tightly into the shoulder. Keep head erect, looking over the top of the sights, eyes on the target, pointing the weapon at the target. Lean body forward slightly.

Standing Ready Position. Assume a standing position. Pull the weapon tightly into the shoulder. From the standing position, the shooter lowers the weapon so the entire target is visible. Lower the weapon by pivoting at the shoulder, do not bend at the elbows or tuck the weapon into the chest to lower the weapon. Shooters must not raise and lower their heads to meet the intent of this requirement. Keep the weapon pointed down range and maintain eye contact with the target.

Figure 6.4. Strong Side Barricade Standing Position.

Strong Side Barricade Standing Position. These pictures demonstrate the position once the command fire has been given. The starting point for these positions would be a standing position behind the barricade, stock in the shoulder, and keeping the shooting elbow tucked in close to the body to maintain maximum cover and concealment. Keep the muzzle pointed downrange at an approximate 45-degree angle to the target. When given the command fire, bring the muzzle up, roll out around the barricade, look through the sights and engage the target. After engaging the target, roll back behind the barricade and lower the muzzle to an approximate 45-degree angle to the target. The barricade may be used for support. **During classroom and dry-fire training, students should be taught the "cut the pie" method of target engagement.**

Figure 6.5. Over Barricade Position.

Over Barricade Position. When the barricade is used for support, rest the supporting forearm or hand on the barricade. Lower the body by taking a stance with a visible bend in the front leg. To maintain maximum cover and concealment, the height of the over barricade position should be no higher than necessary to see and shoot over the barricade. Do not allow any part of the weapon or magazine to touch the support.

Chapter 7

M249 AUTOMATIC RIFLE TRAINING PROGRAM

7.1. M249 Automatic Rifle AFQC. This course provides the minimum training, Tactics, Techniques and Procedures and evaluation required to qualify Air Force members with the M249. SF personnel will zero and qualify with the actual weapon they will be armed with.

7.2. Training Overview.

7.2.1. Initial Training. This is the trainee's first participation in the M249 Qualification Training Program. Initial training consists of classroom instruction, qualification on the required evaluation phases of AFQC, and passing the performance tests. **Full distance (AFQC/FD) training is desired. When full distance range facilities are not available, MAJCOMs may grant individual bases permission to qualify personnel using Figure 7.2. as an initial 10-meter course (AFQC/10M). 37 TRW/CC may grant permission to qualify personnel using Figure 7.2. as an initial 10-meter course (AFQC/10M) for personnel attending technical training courses at Lackland AFB when full distance ranges are not available.** Personnel who have not qualified on the automatic rifle within 12 months must requalify using initial training standards. The AF Form 522 will reflect a 12-month qualification.

7.2.2. Live-fire Recurring Training -- 12 Month. This is qualification training after initial qualification. It consists of classroom instruction, qualification on the required evaluation phases of the AFQC (Full Distance or 10-Meter) and passing the performance evaluations. **Full distance training is desired. Personnel may qualify on either full distance course, Figure 7.1. or the 10-meter course, Figure 7.2. to meet training requirements.** This evaluation is mandatory on an annual basis.

7.2.3. Remedial Training. This is the minimum training needed to correct deficiencies causing an individual to fail an evaluation. Training is given to all personnel who fail an evaluation.

7.2.4. Performance Evaluations. Performance evaluations consist of weapon operator skills certification. Evaluation is mandatory for initial and 12-month recurring training.

7.2.5. Unit Training. Refresher training on operator skills and knowledge provided by units to help maintain the operator's proficiency. Units should conduct this training before exercises and deployments.

7.3. Instructor Guidelines and Ratios.

7.3.1. Classroom. Instructors will help trainees during portions of training requiring physical handling of weapons. They will supervise and evaluate trainees during performance evaluations. They will supervise, evaluate, conduct performance evaluations and assist trainees during operator maintenance (care and cleaning). See AFI 36-2226 for student to instructor ratios.

7.3.2. Range. Instructors will supervise, assist, coach and teach trainees as needed during practice and evaluation phases of fire. Each firing point instructor conducts the course of fire, to include monitoring time limits, at the firing point. To ensure safe range operations, close communication is essential between the range safety instructor, tower operator and all point instructors. See AFI 36-2226 for student to instructor ratios.

7.3.3. Range Safety Instructor/Tower Operator. This instructor monitors all firing points and has responsibility and authority for safe and effective range operations during range training sessions. He/she may work directly on the firing line if a fixed control tower is not on the range. ***NOTE:*** This position is in addition to each firing point instructor. The Range Safety Instructor is not to serve as a firing point instructor in addition to this duty. See AFI 36-2226 for exceptions.

7.4. M249 Qualification Plan of Instruction. The plan in the following paragraphs intends to provide instruction standardization. This program is mandatory for the initial qualification course and recurring training. Remedial training is in-depth instruction, concentrating on known problems. Trainees must meet and be evaluated to the performance standards of these training objectives. Approximate training times for this program are:

7.4.1. Initial training -- 12 to 14 hours.

7.4.2. Recurring training (12 month) -- 8 to 10 hours.

7.4.3. Remedial and unit training -- as needed.

7.5. Training Goal. The training goal is to instill confidence in the trainee to develop and maintain the capability to use the M249 against enemy targets. With the exception of operator maintenance, trainees must perform all evaluated tasks without assistance.

7.6. Training Objectives (AFQC). The training objectives needed for successful completion of this course are found in **Table 7.1.**

7.6.1. Intermediate Training Objectives. Trainees must be familiar with:

7.6.1.1. Safety rules and procedures.

7.6.1.2. Characteristics, nomenclature and types of ammunition.

7.6.1.3. Stoppages and malfunctions.

7.6.1.4. Roles of the automatic rifle.

7.6.1.5. Classes of fire and types of targets.

7.6.1.6. Range determination.

7.6.1.7. Sight adjustments.

7.6.1.8. Adjusted aiming point method.

7.6.1.9. Alternate methods of laying the gun.

Table 7.1. M249 Automatic Rifle Training Objectives/Intermediate Training Objectives (ITO).

	Objective	Condition	Standard
		Given:	
1.	Operate M249.	M249 dummy ammunition and required equipment.	Operate M249.
ITO			
1.1	Perform clearing procedures.	M249.	Clear M249.
1.2	Full load, half-load and clear M249.	M249 and dummy ammunition.	Full load, half-load and clear M249.
1.3	Perform immediate and remedial action procedures.	M249 and dummy ammunition.	Apply actions.
1.4	Conduct preventative maintenance inspection.	M249.	Conduct pre-fire inspection.
2.	Qualify with weapon.	M249, required ammunition and equipment.	Qualify on appropriate live fire orders.
3.	Performance evaluations.	M249, required equipment and blank performance evaluation form.	Successfully complete all phases of performance evaluation.
4.	Perform operator maintenance.	M249 and required equipment.	Clean, inspect and lubricate M249 (with instructor assistance) and pass function check.
ITO			
4.1	Disassemble M249.	M249.	Disassemble M249 to authorized level.
4.2	Clean, lubricate and inspect M249.	M249 and proper equipment.	Clean, lubricate and inspect M249 and associated equipment with instructor assistance.
4.3	Assemble M249.	M249.	Assemble M249.
4.4	Perform function check.	M249 and dummy ammunition.	Function check M249.

7.7. Recommended Sequence of Events.

7.7.1. First Period -- Orientation and Mechanical Training. Approximately 4 hours for initial and 3 hours for 12-month recurring.

7.7.1.1. Prepare all required forms and documentation.

7.7.1.2. Discuss:

7.7.1.2.1. M249 weapons safety.

7.7.1.2.2. M249 general description and characteristics.

7.7.1.3. Explain, demonstrate and conduct practical exercises on:

7.7.1.3.1. General nomenclature of the M249.

7.7.1.3.2. Clearing of the M249.

7.7.1.3.3. Disassembly of the M249.

7.7.1.3.4. Assembly of the M249.

7.7.1.3.5. Function check of the M249.

7.7.1.3.6. Proper care, cleaning and lubrication of the M249. The preferred method is to teach this in the cleaning area as a demonstration/performance lesson.

7.7.1.3.7. Immediate action procedures.

7.7.1.3.8. Loading, unloading, reloading and clearing the M249.

7.7.1.3.9. Types of ammunition, care, handling and preservation of ammunition for the M249.

7.7.1.3.10. Stoppages, immediate action and remedial action.

7.7.2. Second Period -- Effective Techniques of Fire. Approximately 4 hours for initial and 3 hours for 12-month recurring are needed for this training.

7.7.2.1. Discuss:

7.7.2.1.1. M249 roles.

7.7.2.1.2. M249 characteristics of fire.

7.7.2.1.3. M249 classes of fire.

7.7.2.1.4. Principles of fire and types of targets engaged by an M249.

7.7.2.1.5. Explain, demonstrate and conduct practical exercises on range determination and lateral distance measurement.

7.7.2.1.6. Discuss technique of engaging visible targets during periods of limited visibility to include types of targets, fire control and target engagement.

7.7.3. Third Period -- Preparatory Marksmanship. Approximately 1.5 hours for initial and 1.5 hours for 12-month recurring are needed for this training.

7.7.3.1. Explain, demonstrate and conduct practical exercises on:

7.7.3.1.1. Assuming proper firing positions and establishing a proper grip (**Figure 7.3.** and **Figure 7.4.**). Ensure students are taught the tactical advantage of maintaining cover and concealment while firing this weapon.

7.7.3.1.2. Proper techniques of firing while wearing the Chemical Warfare Defense Ensemble (CWDE) mask and gloves.

7.7.3.2. Discuss principles of:

7.7.3.2.1. Aiming.

7.7.3.2.2. Proper trigger manipulation.

7.7.3.2.3. Zeroing the rear sight and the adjusted aiming point method of fire adjustment.

7.7.3.2.4. Target analysis and common errors encountered in automatic rifle marksmanship.

7.7.4. Fourth Period -- Performance Evaluations. Approximately 1.5 hours for initial, 1.5 hours for 12-month recurring, and as needed for remedial training.

7.7.4.1. Prepare performance evaluation forms.

7.7.4.2. Brief students on evaluation criteria.

7.7.4.3. Set up weapons and equipment.

7.7.4.4. Conduct performance evaluation on:

7.7.4.4.1. Clearing.

7.7.4.4.2. Loading (Half load and full load).

7.7.4.4.3. Clearing from the loaded configuration.

7.7.4.4.4. Disassembly.

7.7.4.4.5. Assembly.

7.7.4.4.6. Function check.

7.7.4.4.7. Immediate action procedures.

7.7.5. Fifth Period -- Live-Fire and Operator Maintenance Evaluation. Approximately 3 hours for initial and 2 hours for 12-month recurring are needed for this training.

7.7.5.1. Discuss range procedures and safety requirements for live firing.

7.7.5.2. Review all factors of obtaining an accurate initial burst.

7.7.5.3. Review immediate action procedures.

7.7.5.4. Conduct exercises in assuming firing positions.

7.7.5.5. Fire qualification course.

7.7.5.6. Evaluate the trainee's proficiency in operator maintenance and function check.

7.7.5.7. Trainees must correctly perform the function check.

7.7.5.8. Instructors will provide remedial training for those who fail to qualify (live fire or performance evaluation). Instructors may provide immediate refires or notify unit training sections of failures.

7.7.5.9. Complete applicable blocks on AF Forms 522 and 710. Butt numbers and/or serial numbers are sufficient to document training on the AF Form 710.

7.8. Administrative Requirements.

7.8.1. Reference Material:

7.8.1.1. AFI 36-2226, *Combat Arms Program.*

7.8.1.2. T.O. 11W3-5-5-51, *M249, Machine gun, 5.56mm.*

7.8.1.3. T.O. 11W3-5-5-52, *M249, Machine gun, 5.56mm.*

7.8.1.4. FM 23-14, *M249 Light Machine Gun in the Automatic Rifle Role (Army).*

7.8.1.5. TM 750-244-7, *Procedures for Destruction of Equipment (Army).*

7.8.1.6. TM 11-5855-213-10, *Operator's Manual Night Vision Sight Individual Served Weapon AN/PVS-4.*

7.8.1.7. TM 11-5855-238-10, *Operator's Manual for Night Vision Goggles Ground Use: AN/PVS-5, AN/PVS-5A, AN/PVS-5B, AN/PVS-5C.*

7.8.1.8. TM 11-5855-262-10-1, *Operator's Manual Night Vision Goggle, AN/PVS-7A.*

7.8.1.9. T.0. 12S10-2PVS7-11, *Operator's Manual Night Vision Goggle AN/PVS-7D.*

7.8.1.10. TM 11-5855-301-12&P, *Operators and Unit Maintenance Manual, Light, Aiming, Infrared AN/PAQ-4B, AN/PAQ-4C.*

7.8.1.11. TM 750-244-2, *Procedures for Destruction of Electronics Material to Prevent Enemy Use.*

7.8.2. Facilities Needed:

7.8.2.1. Classroom equipped with chalk or dry erase board, tables and chairs.

7.8.2.2. Area to conduct practical exercises in assuming firing positions.

7.8.2.3. Full distance range or firing range with target line at 10-meters.

7.8.2.4. Weapon cleaning area.

7.8.3. Training Aids and Equipment:

7.8.3.1. M249, one for two trainees (recommended).

7.8.3.2. Ammunition case loaded with dummy 5.56mm linked ammunition, one per M249.

7.8.3.3. 100-round assault magazine (NSN 1005-01-334-1507) loaded with linked dummy ammunition (optional).

7.8.3.4. Empty ammunition can.

7.8.3.5. Care and cleaning equipment, as required by TO 11W3-5-5-51.

7.8.3.6. Scraper Assembly (NSN 1005-01-131-1914).

7.8.3.7. CWDE mask and gloves.

7.8.3.8. Targets.

7.8.3.9. Training charts (optional).

7.8.3.10. Overhead projector/computer system with visual slide capability (optional).

7.8.3.11. Public address system.

7.8.3.12. Ear plugs for instructors and trainees.

7.8.3.13. Eye and ear protection are mandatory for all personnel.

7.8.3.14. Flak vests and helmets during all live-fire training.

7.8.3.15. Binoculars.

7.8.3.16. First Aid kit.

7.8.3.17. Combat Arms Training Simulator (optional) meeting the requirements identified in AFI 36-2226.

7.8.4. Documents Needed:

7.8.4.1. AF Forms 522 and 710.

7.8.4.2. Performance evaluation forms.

7.8.5. Ammunition Needed. Cartridge, 5.56mm linked required to complete the applicable course of fire.

Figure 7.1. M249 Automatic Rifle Firing Requirements, Air Force Qualification Course (AFQC) (Full Distance).

Order Number and Target Description	Ammunition and Fire Control	Type Load	Time	No. of Targets Engaged	Required No. of Targets Hit (Qual)
Phase I: Practice					
1. Zeroing 500M	24 (3 to 5-rd burst) ball or 4:1	Full load	N/A	1	N/A
2. Point targets 300 to 500M	50 (3 to 5-rd burst) ball or 4:1	Half load	N/A	3	N/A
3. Deep targets and linear with depth (CWDE) 300 to 800M	176 (3 to 5-rd burst) ball or 4:1	Half load	N/A	13	N/A
	250 Total rounds for Phase I.				
Phase II: Evaluation					
1. Point and area targets (CWDE)	100 (3 to 5-rd burst) ball or 4:1	Half load	3:30	6	6
2. Linear with depth and deep targets 300 to 800M	200 (3 to 5-rd burst) ball or 4:1	Full load	4:00	13	13
	300 Total rounds for Phase II.				

550 Total Rounds for Course

7.9. Course Information, M249 AFQC (Full Distance).

7.9.1. Course Targets:

7.9.1.1. Double "E" silhouette targets (NSN 6920-00-795-1806) or empty 55-gallon drums may be used to represent personnel for 300 to 800-meter firing. Mounds of earth or salvaged vehicles may also be used to represent personnel and vehicle targets.

7.9.1.2. When using silhouettes or 55-gallon drums as area targets, position at least three targets within a 5-meter diameter. Leave at least 50-meters between each area target.

7.9.2. Course Standards: ***NOTE:*** If the beaten zone covers the target, score it as a hit.

7.9.2.1. Order 1 -- Must successfully engage all six targets.

7.9.2.2. Order 2 -- Must successfully engage all 13 targets.

7.9.3. Course Notes:

7.9.3.1. There are no time limits during the practice phase. Instructors will analyze targets, render help to trainees as needed, correct safety infractions and supervise the application of immediate action.

7.9.3.2. Do not use assistant rifleman. Peer coach method is permissible.

7.9.3.3. Trainees will wear flak vests and helmets during the entire course.

7.9.3.4. The operator must stow the protective mask in the carrier when not required for wear and have the CWDE gloves on their person during the entire course.

7.9.3.5. Trainees may make sight corrections at any time during the course.

7.9.3.6. Trainees will do all firing in the bipod mode.

7.9.3.7. On Practice Order 3, the trainee will engage a minimum of five targets in a deep target formation with the 76-round belt, don the protective mask and engage a minimum of eight targets in a linear with depth formation with the 100-round belt.

7.9.3.8. After engaging all point targets on Evaluation Order 1, the operator will immediately put the gun on safe, don the protective mask and gloves and engage all area targets.

7.9.3.9. When engaging deep targets and linear with depth targets, the operator will engage targets as a single gun covering the entire target. For example, initial lay on the linear target with depth is midpoint. The operator then traverses and searches to the near flank (left), back to the far flank (right) and then back to midpoint. Initial lay on the deep target is also midpoint. The operator then searches down to the near end, up to the far end and then back to the midpoint.

7.9.3.10. Eye and ear protection is mandatory for all personnel.

7.9.3.11. During Phase I, trainees will clear their own stoppages under instructor supervision. Resume firing once immediate action has been properly performed. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

7.9.3.12. Conduct a barrel change before starting Phase II.

7.9.3.13. Trainees will clear their own stoppages under instructor supervision during each order of fire in Phase II. Instructors will stop the time and supervise trainee actions. Resume the time limit once immediate action has been properly performed. Give additional time to complete the order of fire if the trainee has, or is in the process of, successfully applying immediate or remedial action to clear the stoppage. The ultimate goal is for the trainee to understand why the stoppage occurred and to have the ability to correct the problem and continue firing. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

7.9.3.14. Ammunition belts should be divided up to match the required rounds for each order of fire. After firing the required number of bursts, trainees may go back (time permitting) and reengage targets still posing a threat (i.e., no hits). Rounds may not be fired after the cease fire command is given during phase II.

7.9.3.15. AF Form 522 should only reflect qualified "Q" or unqualified "UQ" for the entire course. If trainees fail to qualify on Evaluation Order 1 or Evaluation Order 2, trainees are unqual-

ified. They need only to refire and meet qualification criteria for the order they failed to achieve qualified status.

Figure 7.2. M249 Automatic Rifle Firing Requirements, Air Force Qualification Course (10-Meter).

Order Number and Target Description	**Ammunition and Fire Control**	**Type Load**	**Time**	**No. of Targets Engaged**	**Required No. of Targets Hit (Qual)**
Phase I: Practice					
1. Zeroing 10 M pasters A1 and A2	10 (5 single rounds at A1 and A2)	Full load	N/A	2	N/A
2. Point Targets A3 and A4	20 (2, 5-rd bursts at A3 and A4	Half load	N/A	2	N/A
3. Point Targets B1, B2, B3, and B4	40 (3 to 5-rd bursts, 2 bursts per paster)	Half load	N/A	4	N/A
4. Linear with depth and deep targets Section A	130 (3 to 5-rd bursts, 2 bursts per paster)	Full load	N/A	13	N/A
5. Point targets B5 and B6 and linear targets with depth Section B (CWDE)	100 (3 to 5-rd bursts, 2 bursts per paster)	Full load	N/A	10	N/A
	300 Total Rounds for Phase I				
Phase II: Evaluation					
1. Linear with depth and deep targets Section C	130 (3 to 5-rd bursts, 2 bursts per paster)	Full load	4 min	13	2 hits per target
2. Point targets D5 and D6 and linear targets with depth Section D (CWDE)	100 (3 to 5-rd bursts, 2 bursts per paster)	Half load	3 min 30 sec	10	2 hits per target
	270 Total Rounds for Phase II				

570 Total Rounds for Course

7.10. Course Information, M249 AFQC (10-Meter).

7.10.1. Course Targets. Use the 10-meter machine gun target (NSN 6920-00-078-5123).

7.10.2. Course Standards for Phase II Evaluation:

7.10.2.1. Order 1--All 13 targets must have a minimum of 2 hits per target.

7.10.2.2. Order 2--All 10 targets must have a minimum of 2 hits per target.

7.10.3. Course Notes:

7.10.3.1. There are no time limits during the practice phase. Instructors will analyze targets, render help to trainees as needed, correct safety infractions and supervise the application of immediate action. The entire course of fire is based on the student's ability to fire a 3 to 5-round burst during training and is used to teach firing discipline and the tactical employment of the automatic rifle. In an actual real-world scenario, the shooter would continue to fire (sustained, rapid or cyclic) until the threat is eliminated

7.10.3.2. Do not use assistant rifleman. Peer/coach method is permissible.

7.10.3.3. Trainees will wear flak vests and helmets during the entire course.

7.10.3.4. The operator must stow the protective mask in the carrier when not required for wear and have the CWDE gloves on their person during the entire course.

7.10.3.5. Trainees may make sight corrections at any time during the course.

7.10.3.6. Trainees will do all firing in the bipod mode.

7.10.3.7. Ammunition belts should be divided up to match the required rounds for each order of fire. During qualification, once the student has fired at the required number of targets, any remaining ammunition will be returned to the instructor for placement back into the ammunition inventory. Ensure the AF Forms 522 and 710 reflect the correct number of rounds fired by the student.

7.10.3.8. During Phase I, Order 3, the trainee is to practice controlled burst firing while applying the basic fundamentals of M249 marksmanship. This exercise gives the instructor an opportunity to detect common errors by analyzing each of the four pasters.

7.10.3.9. Initial lay on all targets is midpoint. After the initial burst, the gunner will move to the closest part of the target to the gunner, then moves to the farthest point from the gunner and finally back to the midpoint. Instructors must ensure targets are large enough to allow adequate traversing and/or searching with the required number of bursts. Gunners will ensure beaten zones over lap while firing. This tactic/technique is used for training and simulates no known threat. In real-life situations, gunners will tactically engage the portion of the target posing the greatest threat to themselves or the gun position.

7.10.3.10. Phase I, Order 5. After engaging both point targets (B5 and B6), the operator will immediately put the gun on safe, don the protective mask and gloves and engage the linear target with depth (B7 thru B8).

7.10.3.11. Conduct a barrel change before starting Phase II.

7.10.3.12. After completing Phase I, Order 4 and Phase II, Order 1, the firing point instructor will give the command "Gas, Gas, Gas" and the gunner will immediately put the gun on safe and don the protective mask and gloves. Gunner will then engage targets D5 and D6.

7.10.3.13. During Phase I, trainees will clear their own stoppages under instructor supervision. Resume firing once immediate action has been properly performed. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

7.10.3.14. Trainees will clear their own stoppages under instructor supervision during each order of fire in Phase II. Instructors will stop the time and supervise trainee actions. Resume the time limit once immediate action has been properly performed. Give additional time to complete the order of fire if the trainee has, or is in the process of, successfully applying immediate or remedial action to clear the stoppage. The ultimate goal is for the trainee to understand why the stoppage occurred and to have the ability to correct the problem and continue firing. ***WARNING:*** If a light recoil or difference in report is experienced, the instructor must verify the weapon is safe to fire (projectile not stuck in barrel) after the stoppage is cleared.

7.10.3.15. Eye protection is mandatory for all personnel. Hearing protection is mandatory for all personnel. Dual hearing protection is required for Combat Arms personnel (unless electronic headsets are being used).

7.10.3.16. AF Form 522 should only reflect qualified "Q" or unqualified "UQ" for the entire course. If the trainees fail to qualify on Evaluation Order 1 or 2, trainees are unqualified. They need only to refire and meet qualification criteria for the order failed to achieve qualified status.

Figure 7.3. M249 Prone Position (Left Side, Right Side and Frontal View).

Prone Position. The shooter (right handed) assumes a prone position behind the gun keeping the body in line with the barrel. Legs are spread a comfortable distance apart with heels down and toes pointed outward. Place left hand on top of the stock and grasp the pistol grip with the right hand. Maintain a firm, steady pressure down and to the rear with both hands (pull the gun down and tightly into the shoulder). Rest cheek lightly against the stock and left hand, with shoulders level and elbows an equal distance apart below the receiver of the gun.

Prone Position (Front View). The shooter (right handed) assumes a prone position behind the gun keeping the body in line with the barrel. Legs are spread a comfortable distance apart with heels down and toes pointed outward. Place left hand on top of the stock and grasp the pistol grip with the right hand. Maintain a firm, steady pressure down and to the rear with both hands (pull the gun down and tightly into the shoulder). Rest cheek lightly against the stock and left hand, with shoulders level and elbows an equal distance apart below the receiver of the gun.

Figure 7.4. Sample Air Force Form 522

USAF GROUND WEAPONS TRAINING DATA

PRIVACY ACT STATEMENT

AUTHORITY: 10 U.S.C. 8013, and Executive Order 9397 (SSN)

PRINCIPAL PURPOSE(S): Used to record results of small arms qualification training. Serves as the official source document for proof of firearms qualification.

ROUTINE USE(S): None.

DISCLOSURE: Disclosure is voluntary. SSN may be used by arming authority officials to positively identify the individual for suitability to bear firearms.

LAST NAME	FIRST NAME	MIDDLE INITIAL	RANK	SSN
EDWARDS	GILBERT, JR	NMI	MSGT	123-45-6789

ORGANIZATION	OFFICE SYMBOL	BASE	DSN NUMBER	ARMING GROUP	PRIMARY DUTY WEAPON
HQ AFSFC	SFWC	Lackland	945-XXXX	A	M4

COMBAT ARMS SECTION	DSN NUMBER	COMBAT ARMS E-MAIL ADDRESS (Optional)
Lackland AFB	945-XXXX	combat.arms@lackland.af.mil

DATE TRAINED	WEAPON COURSE	ROUNDS FIRED	STATUS / SCORE	DATE EXPIRES	SHOOTER'S SIGNATURE / PRINTED NAME AND RANK OF INSTRUCTOR / INSTRUCTOR'S SIGNATURE
20040504	M4 TRQC	160	E / 25	20041231	JOEL T. LAYTON, SMSgt
20040505	M16A2 Mech	N/A	Q / N/A	20041231	JOEL T. LAYTON, SMSgt
20040602	M9 AFQC	90	E / 41/25/6	20050630	JOEL T. LAYTON, SMSgt
20041225	M4 DM TRQC	160	E / 30	20050630	DONALD R. BRIDGE, MSgt

REMARKS

AF IMT 522, 19990701, V1 PREVIOUS EDITIONS ARE OBSOLETE.

Line 1: Individual fired the M4 TRQC, scored expert on phase V, and passed all required phases.

Line 2: Individual fired the M4 and received M16A2 mechanical training.

Line 3: Individual fired the M9 and scored expert. ***NOTE:*** The first number is the amount of hits on the entire target, the second number is the total number of hits inside the 10-inch vital area and the third number is the total number of hits within the 6-inch head area of the target.

Line 4: Individual fired the M4 Designated Marksman TRQC, scored expert on phase V and passed all required phases.

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

A1.1. Management and Operational References

AFIND 2	*Numerical Index of Standard and Recurring Air Force Publications*
AFIND 9	*Numerical Index of Departmental Forms*
AFIND 17	*Index of Air Force Occupational Safety and Health (AFOSH) Standards, Department of Labor Occupational Safety and Health (OSHA) Standards, and National Institute for Occupational Safety and Health (NIOSH) Publications*
AFIND 18	*Index of Air Force Manpower Standards (AFMSs)*
AFI 10-403	*Deployment Planning and Execution*
AFPD 16-8	*Arming of Aircrew, Mobility, and Overseas Personnel*
AFI 21-201	*Management And Maintenance Of Non-Nuclear Munitions*
AFCAT 21-209	*Ground Munitions*
AFMAN 23-110	*USAF Supply Manual*
AFPD 24-2	*Preparation and Movement of Air Force Materiel*
AFPD 25-2	*Support Agreements*
AFI 25-201	*Support Agreements Procedures*
AFI 31-101	*AF Installation Security Program*
AFI 31-207	*Arming and Use of Force by Air Force Personnel*
AFMAN 31-229	*USAF Weapons Handling Manual*
AFI 32-9002	*Use of Real Property Facilities*
AFI 33-360, Volume 1	*Publications Management Program*
AFI 34-227	*Excellence-In-Competition* (EIC)
AFPD 36-22	*Military Training*
AFMAN 36-2108	*Enlisted Classification*
AFI 36-2201	*Developing, Managing, and Conducting Training*
AFI 36-2226	*Combat Arms Program*
AFI 37-123	*Management of Records*
AFMAN 37-139	*Records Disposition Schedule*
AFOSHSTD 48-8	*Controlling Exposures to Hazardous Materials*
AFOSHSTD 48-19	*Hazardous Noise Program*
AFI 48-101	*Aerospace Medical Operations*
AFOSHSTD 48-137	*Respiratory Protection Program*
AFI 48-145	*Occupational Health Program*
AFOSHSTD 91-31	*Personal Protective Equipment*

AFOSHSTD 91-32	*Emergency Shower and Eyewash Units*
AFOSHSTD 91-45	*Hazardous Energy Control and Mishap Prevention Signs and Tags*
AFOSHSTD 91-46	*Materials Handling and Storage Equipment*
AFOSHSTD 91-66	*General Industrial Operations*
AFOSHSTD 91-68	*Chemical Safety*
AFMAN 91-201	*Explosive Safety Standards*
AFI 91-202	*The US Air Force Mishap Prevention Program*
AFI 91-301	*Air Force Occupational and Environmental Safety, Fire Protection and Health (AFOSH) Program*
AFOSHSTD 161-2	*Industrial Ventilation*
AFOSHSTD 161-17	*Standardized Occupational Health Program*
AFOSHSTD 161-20	*Hearing Conservation Program*
AFOSHSTD 161-21	*Hazard Communication*
AFOSHSTD 161-32-1W	*Department of Defense, Federal Hazard Communication Training Program, Students Workbook*
CFETP 3P0X1/X1A/ X1B	*Security Forces Specialty*
DOD 4160.21-M-1	*Defense Demilitarization Manual*
DODD 5210.56	*Use of Deadly Force and the Carrying of Firearms by DoD Personnel Engaged in Law Enforcement and Security Duties*
DOD 5200.76-M	*Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives*

A1.2. General Weapons And Equipment References

T.O. INDEX 0-1-CD-1	*USAF Technical Order Index Data, CD Rom Version,* or obtain individual indexes, 0-1-02, 0-1-11, 0-1-12, 0-1-32, 0-1-33-1, 0-1-33-3, 0-1-33-6, 0-1-34, 0-1-43, 0-1-49
T.O. INDEX 0-4-6-2-CD-1	*CD-USAF Equipment/T.O. Number/Cross Reference File*
T.O. 00-5-1	*AF Technical Order System*
T.O. 00-5-2	*Technical Order Distribution System*
T.O. 00-35D-54	*USAF Material Deficiency Reporting and Investigating System*
T.O. 11W-1-10	*Recording of Historical Data for Ground Weapons*
T.O. 33K-1-100-1	*Technical Manual, TMDE Calibration Notes, Maintenance Data Collection Codes and Calibration Measurement Summaries*
T.O. 33K-1-100-2	*Technical Manual, TMDE Calibration Interval Technical Order and Work Unit Code Reference Guide*
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.*

TB 9-1000-247-34	*Standards for Overseas Shipment of Small Arms, Aircraft Armament, Towed Howitzers, Mortars, Recoilless Rifles, Rocket Launchers, and Associated Fire Control Equipment (Army)*

A1.3. M16 series rifles, Sub-machineguns, Carbines and Other Rifle References

T.O. 11W3-5-5-1	*Operator's, Maintenance, Repair and Replacement Parts Manual, Rifle, 5.56mm , M16 and M16A1, Bipod Assembly M3, and Launcher Grenade 40-MM XM148*
T.O. 11W3-5-5-1-1	*Maintenance and Repair, Sub-machinegun, 5,56mm GAU-5A, GAU-5A/A, and GUU-5P*
T.O. 11W3-5-5-24	*Unit and Direct Support Maintenance Manual, Rifle, 5.56mm, M16 and M16A1 and Bipod, Rifle, M3*
T.O. 11W3-5-5-31	*Operator's and Organizational Maintenance Manual, M2 Bolt*
T.O. 11W3-5-5-41	*Operator's Manual, Rifle, 5.56mm, M16A2*
T.O. 11W3-5-5-42	*Unit and Direct Support Maintenance Manual, Rifle, 5.56mm, M16A2*
T.O. 11W3-5-5-61	*Operator's Manual for Rifle, 5.56mm, M16, M16A1*
T.O. 11W3-5-5-81	*M16A1 and M16A2 Rifle Marksmanship (Army FM 23-9)*
TM 09724A-24&P/2	*Organizational and Intermediate Maintenance Manual Including Repair Parts List, Submachine Gun, 9mm, MP5N (USMC)*

A1.4. Pistol/Revolver References

T.O. 11W3-3-4-11	*Operator's Manual, Pistol, Semi-Automatic, Compact, Model M11*
T.O. 11W3-3-4-12	*Maintenance Manual, Pistol, Semi-Automatic, Compact, Model M11*
T.O. 11W3-3-5-1	*Operator's Maintenance Manual, Pistol, Semiautomatic, 9mm, M9*
T.O. 11W3-3-5-4	*Unit and Intermediate Direct Support Maintenance Instruction (Including Repair Parts and Special Tools List), Pistol, Semiautomatic, 9mm, M9*
T.O. 11W3-3-6-1	*Combat Training with Pistols and Revolvers*
T.O. 11W3-4-2-51	*Operator's and Service Instructions with Illustrated Parts Breakdown, Smith and Wesson Combat Masterpiece, Caliber .38 Revolver, Model M15*

A1.5. Grenade Launcher References

T.O. 11W3-5-5-1	*Operator's, Maintenance, Repair and Replacement Parts Manual, Rifle, 5.56mm , M16 and M16A1, Bipod Assembly M3, and Launcher Grenade 40-MM XM148*
T.O. 11W3-9-2-21	*Operator's Manual Grenade Launcher, 40mm, M79*
T.O. 11W3-9-2-32	*Organizational, Direct Support and General Support, Maintenance Instructions, Including Repair Parts and Special Tools List, Grenade Launcher 40mm, M79*
T.O. 11W3-9-4-1	*40mm Grenade Launcher, M203, Operator's Manual (Army TM 9-1010-221-10)*
T.O. 11W3-9-4-2	*Organizational, Direct, and General Support, 40mm Grenade Launcher, M203 W/E*
T.O. 11W3-9-6-1	*40-MM Grenade Launcher, M203 (Army FM 23-31)*

A1.6. Shotgun References

T.O. 11W3-6-1-114	*Operator's, Organizational, and Field Maintenance Instructions, Repair Parts and Equipment for Commercial Shotguns*
T.O. 11W3-6-1-154	*Field and Depot Maintenance Instructions, Winchester Riot-Type Shotgun M12, Stevens Riot-Type Shotguns M520-30, M620A*
T.O. 11W3-6-1-171	*Operator's, Unit, and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Riot Type M1200 Winchester 12 GA Shotgun, M870 Remington 12 GA Shotgun, M500 Mossberg 12 GA Shotgun, M500S Mossberg 12 GA Shotgun, M500A1 Mossberg 12 GA Shotgun, M500A2 12 GA Shotgun, M590 Mossberg 12 GA Shotgun*
T.O. 11W3-6-2-1	*Intermediate Maintenance Instructions with Illustrated Parts Breakdown Military Shotgun, 12 Gage, Pump Action Model 870, with Adapter Part Number 32911*

A1.7. M249 Automatic Rifle References	
T.O. 11W3-5-5-51	*Operator's Manual, Machinegun, 5.56mm M249*
T.O. 11W3-5-5-52	*Organizational and Direct Support Maintenance Manual (Including Repair Parts and Special Tools List), Machinegun, 5.56mm M249 W/Equip.*
FM 23-14	*M249 Light Machinegun in the Automatic Rifle Role*
A1.8. Night Vision Device References	
T.O. 12S10-2PVS4-1	*Operator's Manual Night Vision Sight, Individual Served Weapon, AN/PVS-4*
T.O. 12S10-2PVS4-2	*Organizational, Direct Support, and General Support Maintenance Manual Including Parts and Special Tools List, Night Vision Sight AN/PVS-4*
T.O. 12S10-2PVS4-4	*Organizational and Direct Support Maintenance Repair Parts and Special Tools List for Night Vision Sight Individual Served Weapon, AN/PVS-4*
T.O. 12S10-2PVS5-1	*Operator's Manual Night Vision Goggles, Ground Use, AN/PVS-5, AN/PVS-5/A, AN-PVS-5B, AN/PVS-5C*
T.O. 12S10-2PVS5-2-1	*Supplementary Manual, Intermediate Maintenance Instruction Night Vision Goggles, AN/PVS-5 and AN/PVS-5A*
T.O. 12S10-2PVS5-22	*Unit and Direct Support Maintenance and Aviation Unit /Intermediate Maintenance, Including Repair Parts and Special Tools List, Night Vision Goggles, Ground Use, AN/PVS-5, -5A*
T.O. 12S10-2PVS7-11	*Operator's Manual Night Vision Goggle, AN/PVS-7B and AN/PVS-7D*
T.O. 12S10-2PVS7-12	*Unit and Direct Support Maintenance Manual (Including Repair Parts and Special Tools List) Night Vision Goggles AN/PVS-7B*
T.O. 12S10-2PVS7-22	*Organizational, Direct Support, General Support Maintenance, Night Vision Goggle, AN/PVS-7A*
TM 11-5855-214-10	*Operator's Manual Night Vision Sight, Crew Served Weapon, AN/TVS-5*

TM 11-5855-262-10-1	*Operator's Manual Night Vision Goggle, AN/PVS-7A*
TM 11-5855-297-12&P	*Operator's and Unit Maintenance Manual (Including Repair Parts and Special Tools List) Aiming Light, Infrared, AN/PAQ-4A*
TM 11-5855-306-10	*Operator's Manual for Monocular Night Vision Device AN-PVS 14*
TM 11-5855-301-12&P	*Operator's and Unit Maintenance Manual (Including Repair Parts and Special Tools List) Light, Aiming, Infrared, AN/PAQ-4B, AN/PAQ-4C*
AP90100	*Operator's Manual, Laser Aiming Lighting Projector System (LALPS), Havis Shields Equipment Corporation Advantage Point Aiming Light Assembly* (commercial publication)
TM 11-5855-306-10	*Operator's Manual Monocular Night Vision Device (MNVD) AN/PVS-14*
A1.9. Targets, Scopes, Adapters, Tools, and Other Weapon Related References	
SW370-B5-OPI-010	*Day Optical Scope with Adapter to Fit the M4A1Carbine* (Trijicon Operator's Manual)
TM 9-1240-415-13&P	*Operator, Unit, and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Telescope, Straight: M145 Machine Gun Optic*
T.O. 11W2-3-3-2	*Organizational and Intermediate Maintenance Instructions, M6 and M7 Bayonet-Knife and M10 Scabbard*
T.O. 11W2-15-5-1	*Operator's Instruction, Redfield Rifle Scope and Mount, P/N M700-40XB* (Remington Arms Inc) (Commercial Manual)
T.O. 32-1-2	*Use of Hand Tools*
T.O. 32-1-101	*Use and Care of Hand Tools and Measuring Tools*
T.O. 32-1-151	*Hand, Measuring and Power Tools*
T.O. 34-1-3	*Inspection and Maintenance, Machine and Shop Equipment*
T.O. 35E20-4-22-1	*Operation, Maintenance, and Overhaul Instruction with IPB, PN 11214-4094-100, shipping Container -200, -300, M16* (Green Plastic M16 Containers)
T.O. 43E11-1-121	*Small Arms Targets and Target Material*
T.O. 49A1-21-11	*Operator's and Organizational Maintenance Manual Telescope, Observation: M49, W/E*
TM 9-1240-413-12&P	*Operator and Unit Maintenance Manual Including Repair Parts and Special Tools List for M68 Sight, Reflex, w/Quick Release and Mount*

A1.10. Abbreviations and Acronyms

AETC - Air Education and Training Command

AFCAT - Air Force Catalog

AFCESA- Air Force Civil Engineer Support Agency

AFH - Air Force Handbook

AFI - Air Force Instruction

AFMAN - Air Force Manual

AFMC - Air Force Materiel Command

AFOSH - Air Force Occupational Safety and Health

AFOSI - Air Force Office of Special Investigations

AFOSI PPC - Air Force Office of Special Investigations, Practical Pistol Course

AFPD - Air Force Policy Directive

AFQC - Air Force Qualification Course

AFRC - Air Force Reserve Command

AFSC - Air Force Specialty Code

ANG - Air National Guard

BCE - Base Civil Engineer

BEEF - Base Engineer Emergency Force

BMT - Basic Military Training

CA - Combat Arms

CE - Civil Engineer

CY - Calendar Year

DM – Designated Marksman

DoD - Department of Defense

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

HQ AFOSI/XP - Headquarters Air Force Office of Special Investigations, Director of Plans

HQ AFOSI/XPP - Headquarters Air Force Office of Special Investigations, Organizational Policy Division

HQ AFSFC - Headquarters Air Force Security Forces Center

LAW - Light Antitank Weapon

MAJCOM - Major Command

OI - Operating Instruction

SAEMR - Small Arms Expert Marksmanship Ribbon

SF - Security Forces

SPC - Specialized Pistol Course

SRC – Specialized Rifle Course

STD - Standard

TO - Technical Order

TRQC – Tactical Rifle Qualification Course

TTP - Tactics, Techniques and Procedures

A1.19. 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 Operations - Operations involving the use of US military forces to achieve US objectives, usually in response to an emerging or unexpected crisis. Contingency operations may evolve into sustained military operations.

Deployment - The relocation of forces and material to desired areas of operations. Deployment encompasses all activities from origin or home station through destination, specifically including intra-continental United States, inter-theater, and intra-theater movement legs, staging, and holding areas.

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 weapons are fired and where no one may move in front/forward of during firing. Usually a 4-inch wide 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).

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.

Range - An area reserved and normally equipped for qualification/practice in weapons delivery and/or shooting at targets.

Ready Line - The line located behind the firing line. Serves as a "staging" area for shooters to receive prefire range commands. Usually identified by a 4-inch-wide yellow line located at least 6 feet behind the firing line.

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, weapons training facilities, associated impact areas, and maneuver training areas within the installation/ community boundary.

Trainer - A trained and certified person who teaches personnel to perform specific tasks through OJT methods. Also, equipment the trainer uses to teach personnel specified tasks.

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