

## Appendix E

### Rifle and Carbine

This appendix describes the Army-standard events for training through qualification of all Soldiers assigned the M16 rifle or M4 carbine. Once this training is successfully completed, Soldiers can progress to higher levels of marksmanship training or certification, and may use the weapon during any collective live-fire training events within the qualification period.

This appendix is an overview of the qualification standards. This appendix is divided into sections, one for each training event within the weapon's strategy, as well as CBRN, night requirements, and an authorized alternative course of fire. Commanders can use this appendix as a snapshot of the Army's requirement to achieve and sustain a level of weapons proficiency for their Soldiers who have a rifle and carbine assigned to them. Soldiers assigned multiple weapons and executing the rifle and carbine training strategy must also be qualified on their primary assigned individual weapon and equipment within the past qualification period based on the commanders MAL.

#### RIFLE AND CARBINE TRAINING STRATEGY

E-1. The standard IWTS format of six tables describes the training events. Each table explains the events with all associated resources required; ranges, simulators, simulations, ammunition, and time, as appropriate. Companies executing the training events apply the eight-step training model, as appropriate.

E-2. Table E-1 shows the rifle and carbine training strategy through qualification. The table information explains the sequence of training events, the days required, and the training time remaining to achieve live-fire proficiency.

**Table E-1. Individual weapons training strategy structure**

<b>Rifle and Carbine</b>	<b>Table I, PMI&amp;E</b>	<b>Table II, PLFS</b>	<b>Table III, Drills</b>	<b>Table IV, Basic</b>	<b>Table V, Practice</b>	<b>Table VI, QUAL</b>
		<i>Night</i>				<i>Day</i>
		CBRN				<i>Night*</i>
						<i>CBRN*</i>
	<b>PRQ</b>	<b>PRQ</b>	<b>PRQ</b>	<b>REQUIRED</b>		<b>REQUIRED</b>
	<b>Days Required</b>	0.5	0.5	0.5	1.0	1.0

**Legend:** CBRN – chemical, biological, radiological, and nuclear, PLFS – preliminary live-fire simulation, PMI&E – preliminary marksmanship instruction and evaluation, PRQ – prerequisite, QUAL – qualification

\*Conducted live-fire when simulator not available

## **Appendix E**

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E-3. Table E-2 illustrates the ammunition required for the rifle and carbine training strategy through qualification. The table includes the associated weapons by LIN and NSN, all training munitions including DDI requirements, and the live-fire training ammunition requirements.

E-4. The numbers displayed in the table replicate how much ammunition each firer is authorized to complete one iteration of each event within the training strategy through qualification. The munitions listed below do not include retraining, cross-training and demonstration munitions, or collective training requirements.

E-5. Training ammunition is not resourced to units with access to an approved simulator system for those tasks. Units with access to approved systems complete the night and CBRN qualification requirements in the authorized system only. Units without access to an approved simulator system conduct the night fire and CBRN qualifications under live-fire conditions at the completion of Table VI, Qualification training (see stage 2, stage 3, and stage 4).

**Table E-2. Rifle and carbine individual weapon training strategy ammunition requirements**

<i>DODIC</i>	<i>Munition Type</i>	<i>Table III, DRILLS</i>	<i>Table IV, BASIC</i>	<i>Table V, PRACTICE</i>	<i>Stage 1 Table VI, QUAL</i>	<i>Total</i>					
AB57	CTG, 5.56mm, ball, M855A1 EPR		45	40	40	125					
AB46	CTG, 5.56mm, single round, DDI, M199A1			1		1					
<b><i>Additional Requirements for Stage 2, 3, and 4 are authorized only when approved Simulation Systems are NOT Available</i></b>											
<i>DODIC</i>	<i>Munition Type</i>		<i>Stage 2 Day Fire, CBRN</i>	<i>Stage 3 Night Fire</i>	<i>Stage 4 Night Fire, CBRN</i>	<i>Total</i>					
AB57	CTG, 5.56mm, ball, M855A1 EPR		10	10	5	25					
AB74	CTG, 5.56mm, tracer, M856A1, EPR			10	5	15					
AB46	CTG, 5.56mm single round, DDI, M199A1		0	0	0	0					
<i>Model</i>	<i>LIN / NSN</i>		<i>Model</i>	<i>LIN / NSN</i>							
<b>M4</b>	R97234 / 1005-01-231-0973		<b>M16A2</b>	R95035 / 1005-01-128-9936							
<b>M4A1</b>	C06935 / 1005-01-382-0953		<b>M16A4</b>	R97175 / 1005-01-383-2872							
<b>Note.</b> Units are not resourced training ammunition for Table VI, Qualification, CBRN, or Table VI, Qualification, Night, when an authorized simulator system is provided as part of the basis of issue plan.											
<b>Legend:</b> CBRN – chemical, biological, radiological, and nuclear, CTG – cartridge, DDI – dummy, drilled, inert; DODIC – Department of Defense identification code, EPR – enhanced performance round, LIN – line item number, mm – millimeter, NSN – national stock number, QUAL – qualification course of fire											

## RIFLE AND CARBINE, TABLE I, PMI&E

E-6. The PMI&E event is a live-fire prerequisite that Soldiers must complete prior to executing any live-fire event for the rifle and carbine. Rifle and Carbine, Table I, PMI&E training consists of tasks that are critical to the safety of the firer, essential to the operation of the weapon assigned, or key to the effective employment of the weapon system. Leaders use Rifle and Carbine, Table I to test the Soldier's ability to accomplish these critical tasks correctly, effectively, and efficiently. Units conduct all tasks in a garrison environment prior to the live-fire weapons training density.

## **TASK, CONDITIONS, AND STANDARD**

E-7. Units are encouraged to conduct preparatory training prior to Table I training (for example, hip pocket training, sergeant's time training) to maximize available resources. Units will develop a written test evaluating the functional aspects of the weapon, ammunition, and critical skills articulated in TC 3-22.9. Soldiers must successfully complete Rifle and Carbine, Table I, PMI&E tasks within the training window T-6 though T-week for both active Army and Reserves. (See table E-3.)

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**Note.** Refer to TC 3-20.0 for more information on the training timelines for all live-fire prerequisites. Weapon specific and tactical employment information regarding rifle and carbine is in TC 3-22.9.

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E-8. At a minimum, Soldiers assigned an M4- or M16-series weapon are provided instruction and evaluation on the standard PMI&E topics described in TC 3-22.9. Units may add topics to their Table I, requirements, as necessary.

**Table E-3. Rifle and Carbine, Table I, Preliminary Marksmanship Instruction and Evaluation**

<b>Task:</b>	Demonstrate proficiency on the functional aspects of the weapon, ammunition, and critical skills necessary to correctly and safely employ the rifle and carbine.
<b>Conditions:</b>	In a garrison environment, given a rifle or carbine as assigned on the master authorization list for the unit. Provided the correct reference to conduct training: <ul style="list-style-type: none"><li>• TC 3-22.9.</li><li>• TM 9-1005-319-10.</li></ul>
<b>Standard:</b>	The Soldier must successfully pass PMI&E between T-6 And T-week prior to firing any live ammunition by receiving all GOs on demonstrated performance and achieving a passing score of 80 percent or higher on a written test.
<b>Legend:</b> PMI&E – preliminary marksmanship instruction and evaluation, TC – training circular, TM – training manual	

E-9. Table E-4 shows the training event design template for Rifle and Carbine, Table I, PMI&E. Units use the training event design templates to assist in the proper synchronization when developing their UTP.

**Table E-4. Training event design template for Rifle and Carbine, Table I**

<b>Rifle and Carbine, Table I, PMI&amp;E</b>					
EVENT NAME:	PMI&E		ENVIRONMENT:	LIVE	0.5
WEAPON:	M4 / M16		CONDITIONS:	HANDS ON	
CATEGORY:	FOUNDATION		PRIMARY FACILITY:	GARRISON	DAYS REQUIRED
PUBLICATION:	TC 3-22.9		ALTERNATE FACILITY:	CLASS	
REQUIRED:	YES		COMPONENT:	AC	120 SOLDIERS
EXTERNAL EVAL:	OPTIONAL		FREQUENCY:	2	
VALID FOR:	T+6		ANNUAL DAYS TOTAL:	1	
<b>TABLE</b>					
	I	II	III	IV	V
	PMI&E	PLFS	DRILLS	BASIC	PRACTICE
	REQUIRED				4.0
WHEN EXECUTED:	T-6 through T-X				TNG DAYS TO QUAL
CONDEMNATION CRITERIA (CC)	RULE 1	RULE 2	RULE 3	RULE 4	RULE 5
	TIME	KEY LEADER TURNOVER	COMMANDER ASSESSMENT	SUBORDINATE ELEMENT PROFICIENCY	SPECIALTY PROFICIENCY
<b>Remarks:</b> Each Soldier assigned an individual weapon must successfully complete Table I, PMI&E, between T-6 and T-X, prior to any live-fire event with the weapon. <b>Note:</b> Table I should be completed prior to any other table to ensure the Soldier understands the proper functioning and immediate action for the weapon. <b>Legend:</b> AC – active component (known as Active Duty), CLASS - classroom, EVAL – evaluation, PLFS – preliminary live-fire simulation, PMI&E – preliminary marksmanship instruction and evaluation, QUAL – qualification, RC – Reserve Component (known as Reserves), T+6 – training week or month plus six, TC – training circular, T-X – training event exercise, TNG DAYS TO QUAL – number of training days remaining on the critical path to weapon's qualification					

## TRAINING PLAN

E-10. Table E-5, on page E-6, shows the Rifle and Carbine, Table I, PMI&E training plan's tasks. Soldiers must demonstrate proficiency on these tasks to receive credit. Leaders and trainers must be proficient on these tasks prior to conducting training and testing.

**Table E-5. Rifle and Carbine, Table I, Preliminary Marksmanship Instruction and Evaluation training plan**

Reference	Topic or Task
TC 3-22.9	Ammunition identification
TC 3-22.9	Rules of fire arms safety
TC 3-22.9	Weapons safety status
TC 3-22.9	Weapons control status
TC 3-22.9	Cycle of function, rifle and carbine
TC 3-20.31-4	Conduct of fire (fire commands)
TC 3-22.9	Magazine change, rifle and carbine, emergency
TC 3-22.9	Magazine change, rifle and carbine, tactical
TC 3-22.9	Preliminary marksmanship instruction and evaluation (PMI&E), rifle and carbine
071-COM-0032	Maintain an M16-series rifle / M4-series rifle carbine
071-COM-0029	Perform a function check on an M16-series rifle / M4-series carbine
071-705-0011	Mount the M68 close combat optic (CCO) on a M16-series rifle or M4-series carbine
071-705-0005	Mount the M150 rifle combat optic (RCO) on a M16-series rifle or M4-series carbine
071-705-0015	Boresight a backup iron sights (BUIS) on a M16A4 rifle or M4-series carbine
071-705-0013	Boresight the M68 close combat optic (CCO) on a M16-series rifle or M4-series carbine
071-705-0007	Boresight the M150 rifle combat optic (RCO) on a M16-series rifle or M4-series carbine
071-COM-0031	Zero an M16-series rifle / M4-series carbine
071-705-0003	Zero an M68 sight (close combat optic) to a M16-series rifle / M4-series carbine
071-705-0008	Zero the M150 rifle combat optic (RCO) on a M16-series rifle or M4-series carbine
<b>Note:</b> ALL Soldiers assigned a rifle and carbine will conduct PMI&E. Soldiers will conduct maintain and functions check tasks only for the weapon they are assigned.	
<b>Legend:</b> COM – common, TC – training circular	

**RIFLE AND CARBINE, TABLE II, PRELIMINARY LIVE-FIRE SIMULATIONS**

E-11. The tasks in Table II, PLFS evaluate the Soldier's ability to engage single and multiple stationary targets from multiple stationary supported and unsupported firing positions, during day and limited visibility, and during CBRN conditions in a simulated combat environment. Soldiers are required to complete the simulations training plan prior to executing the Table II simulated qualification course of fire. Table II (see table E-6) is a live-fire prerequisite that Soldiers complete prior to any event using live ammunition (for example, Tables IV, V, and VI).

## TASK, CONDITIONS, AND STANDARD

E-12. Units must use the approved primary or alternate simulations to execute Table II tasks for record between T-6 and T-week for the upcoming weapons training density. Units must maintain the Soldiers' training records for 12 months. When conducting live-fire events, units must have the Soldier's Table II training records readily available on the range facility.

**Table E-6. Rifle and Carbine, Table II, Preliminary Live-Fire Simulations**

<b>Task:</b>	Demonstrate proficiency on the functional aspects of the weapon, ammunition, and critical skills necessary to correctly use the M16 rifle or M4 carbine with associated equipment.
<b>Conditions:</b>	<p>Given the following:</p> <ul style="list-style-type: none"> <li>• Fully mission capable weapon and equipment as assigned on the master authorization list for the unit.</li> <li>• Full combat uniform, issued equipment, and protective mask (if assigned).</li> <li>• An authorized simulations device with standard training model and rifle or carbine, Table II, Gate to Live Fire (GTLF) event.</li> </ul>
<b>Standard:</b>	Demonstrate proficiency on select rifle and carbine tasks and successfully complete the GTLF event between T-6 and T-week prior to firing any live ammunition.

E-13. Table E-7 shows the general training information for planning purposes for the rifle and carbine, Table II. The training event design template provides key training information to develop the UTP for their Soldiers.

**Table E-7. Training event design template for rifle and carbine, Table II, Preliminary-Live-Fire Simulations**

<i>Rifle and Carbine, Table II, PLFS</i>									
EVENT NAME:	PLFS	ENVIRONMENT:	VIRTUAL	0.5					
WEAPON:	M4 / M16	CONDITIONS:	TADSS						
CATEGORY:	FOUNDATION	PRIMARY FACILITY:	S / SVT	DAYS REQUIRED					
PUBLICATION:	TC 3-22.9	ALTERNATE FACILITY:	EST						
REQUIRED:	YES	COMPONENT:	AC	120 SOLDIERS	THROUGHPUT				
EXTERNAL EVAL:	OPTIONAL	FREQUENCY:	2						
VALID FOR:	T+6	ANNUAL DAYS TOTAL:	1	0.5					
TABLE									
	I	II	III DRILLS	IV BASIC	V PRACTICE				
	PMI&E	PLFS			QUAL				
	REQUIRED				3.5				
WHEN EXECUTED:	T-6 through T-X				TNG DAYS TO QUAL				
CONDEMNATION CRITERIA (CC)	RULE 1	RULE 2	RULE 3	RULE 4	RULE 5				
	TIME	KEY LEADER TURNOVER	COMMANDER ASSESSMENT	SUBORDINATE ELEMENT PROFICIENCY	SPECIALTY PROFICIENCY				
				STAFF SECTION PROFICIENCY					
<b>Remarks:</b> Each Soldier assigned an individual weapon must successfully complete Table II, PLFS, between T-6 and T-X, prior to any live-fire event with the weapon.									
<b>Legend:</b> AC – active component (known as active duty), EST – engagement skills trainer, EVAL – evaluation, PLFS – preliminary live-fire simulation, PMI&E – preliminary marksmanship instruction and evaluation, QUAL – qualification, RC – Reserve Component (known as Reserves), S / SVT – soldier and squad virtual trainer, TADSS – training aids, devices, simulators, and simulations, TC – training circular, T+6 – training week or month plus six, T-X – training event exercise, TNG DAYS TO QUAL – number of training days remaining on the critical path to weapon's qualification									

## SIMULATIONS

E-14. Each Soldier is authorized simulations usage for weapons training and sustainment based on their component. The authorized hours of training are cumulative annually to enable completing all required training prior to the execution of Table II training. Table E-8 shows the annual hours authorized per Soldier by component:

**Table E-8. Annual simulations authorizations table**

<i>Simulation Time Authorizations (hours)</i>	
<i>Active Army</i>	<i>Reserves</i>
12.0	6.0

E-15. Table E-9 shows the primary and alternate simulations systems. Primary systems are the preferred method to deliver the appropriate training program to the Soldier. Alternate systems provide the minimum form, fit, and function capabilities to build the firer's skill and experience on basic tasks. The unit determines how to use the simulations hours authorized per Soldier within the fiscal year.

**Table E-9. Rifle and Carbine, Table II, Primary and alternate authorized systems**

<i>System</i>	<i>Primary</i>	<i>Alternate</i>	<i>Remarks</i>
Soldier and Squad Virtual Trainer (S / SVT)	X		
Engagement skills trainer		X	Serves as a primary training device until S / SVT suite availability and accessibility are established Army-wide.
Dry-fire engagement drills		X	Least preferred method. Commanders should review dry-fire drill tasks and effectiveness prior to authorizing use.

**Note.** For any other device or system not listed, the unit should contact the Maneuver Center of Excellence for possible system evaluation or to inquire if an approved training plan is available. Units are not authorized to develop training plans on systems not specifically authorized when authorized systems are available for training.

Individual weapons virtual simulation systems can support no more than five firers per suite at a time. The standard simulations bay is composed of two suites, allowing ten firers to train in a firing order. The unit should develop a rotational plan to accommodate the number of Soldiers training.

## TRAINING PLAN

E-16. Soldiers train on their weapon within the simulation system's training plan. For simulation systems without an integrated training plan, operators must select the appropriate scenarios based on the system's IUH.

E-17. The simulations rifle and carbine training plan culminates in the system's GTLF. Units may elect to train additional, advanced tactical engagement scenarios but must conduct grouping practice, CBRN, night fire, and the GTLF exercises at a minimum, as listed in table E-10, on page E-10.

**Table E-10. Rifle and carbine simulations training plan**

<b>Aiming Device</b>	<b>Task</b>	<b>Exercise Name</b>	<b>Required GTLF</b>
<b>Iron Sights</b>	1	Grouping and Zeroing	REQ
	2	Confirmation and Hold-Offs	REQ
	3	Table V, Practice	REQ
	4	<b>Table VI, Qualification</b>	<b>GTLF</b>
	5	CBRN Fire	REQ
	6	Night Fire	REQ
<b>Optics</b>	7	Grouping and Zeroing	REQ
	8	Confirmation and Hold-Offs	REQ
	9	Table V, Practice	REQ
	10	<b>Table VI, Qualification</b>	<b>GTLF</b>
	11	CBRN Fire	REQ
	12	Night Fire	REQ

**Legend:** CBRN – chemical, biological, radiological, and nuclear, GTLF – gate to live fire,  
REQ – required

## RIFLE AND CARBINE, TABLE III, DRILLS

E-18. Table III, Drills, is a series of physical actions (drills) that a Soldier completes with their assigned weapon and equipment in a repetitious manner to demonstrate proficiency in weapons handling and movement. Soldiers must complete the tasks in this table prior to any live-fire event including grouping procedures.

## TASK, CONDITIONS, AND STANDARD

E-19. Typically, units conduct, Table III training in a round-robin manner where the primary trainer is the team leader, squad leader, or assigned NCO. Table III's task, conditions, and standards are shown in table E-11.

**Table E-11. Rifle and Carbine, Table III, Drills, task, conditions, and standard**

<b>Task:</b>	Demonstrate proficiency on the functional aspects of the weapon, ammunition, and critical skills necessary to correctly use the M16 rifle or M4 carbine with associated assigned equipment.
<b>Conditions:</b>	Given the following: <ul style="list-style-type: none"> <li>Fully mission capable, weapon and equipment as assigned on the master authorization list for the unit.</li> <li>Checklist of required actions and time standards found in Training Circular 3-22.9 and associated individual task report described in this section.</li> </ul>
<b>Standard:</b>	The Soldier successfully demonstrates proficiency by passing weapons handling, manipulation, and movement tasks listed in the training plan between T-6 and T-week prior to firing any live ammunition.

E-20. Table E-12 shows the general training information for planning purposes for Rifle and Carbine, Table III. The training event design template provides key training information so planners can develop the UTP for their Soldiers.

**Table E-12. Training event design template for rifle and carbine, Table III, Drills**

<i>Rifle and Carbine, Table III, Drills</i>						
EVENT NAME:	DRILLS		ENVIRONMENT:		LIVE	0.5
WEAPON:	M4 / M16		CONDITIONS:		HANDS ON	
CATEGORY:	FOUNDATION		PRIMARY FACILITY:		GARRISON	DAYS REQUIRED
PUBLICATION:	TC 3-22.9		ALTERNATE FACILITY:		TA	
REQUIRED:	YES		COMPONENT:	AC	RC	120 SOLDIERS
EXTERNAL EVAL:	FIRST LINE LEADER		FREQUENCY:	2	1	
VALID FOR:	T+6		ANNUAL DAYS TOTAL:	1	0.5	THROUGHPUT
	<b>TABLE</b>					
	I	II	III	IV	V	VI
	PMI&E	PLFS	DRILLS	BASIC	PRACTICE	QUAL
			REQUIRED			3.0
WHEN EXECUTED:	T-6 through T-X or T-X					TNG DAYS TO QUAL
CONDEMNATION CRITERIA (CC)	RULE 1	RULE 2	RULE 3	RULE 4	RULE 5	RULE 6
	TIME	KEY LEADER TURNOVER	COMMANDER ASSESSMENT	SUBORDINATE ELEMENT PROFICIENCY	SPECIALTY PROFICIENCY	STAFF SECTION PROFICIENCY
<b>Remarks:</b> Each Soldier assigned an individual weapon must successfully complete Table III, between T-6 and T-X, prior to any live-fire event with the weapon. Table III should be used as concurrent training on Tables IV, V, and VI while Soldiers are awaiting training in a firing order or between day and night phases.						
<b>Legend:</b> AC – active component (known as active duty), EVAL – evaluation, PLFS – preliminary live-fire simulation, PMI&E – preliminary marksmanship instruction and evaluation, QUAL – qualification, RC – Reserve Component (known as Reserves), T+6 – training week or month plus six, TA – training area, TC – training circular, T-X – training event exercise, TNG DAYS TO QUAL – number of training days remaining on the critical path to weapon's qualification						

## TRAINING PLAN

E-21. Table E-13, on page E-12, lists the individual tasks for each of the rifle and carbine Table III drills. The individual task reports for the drills are in a shared folder on AKO. The hyperlink to this folder is in the reference section at the back of this publication.

**Table E-13. Rifle and carbine, Table III, Drills individual training plan**

Task	Task Name
1	Precombat checks
2	Load and conduct status check
3	Carry positions
4	Fight down
5	Fight up
6	Go to prone
7*	Transition from primary weapon to secondary weapon
8	Reload
9	Clear malfunction
10	Unload / show clear

**Note.** Where the individual task reports are not available on the Army Training Network, the individual task reports for these drills are in a shared folder on Army Knowledge Online. The hyperlink to this folder is in the reference section at the back of this publication.

\* This drill is only for Soldiers assigned multiple individual weapons or Soldiers assigned an individual weapon with a special purpose weapon.

E-22. Units may add to the drills listed in table E-13, but may not remove any from Table III. Units developing additional drills are encouraged to provide the details of the drill, evaluation process, and timing considerations to the proponent of this publication for possible inclusion into future updates.

## RIFLE AND CARBINE, TABLE IV, BASIC

E-23. Units conduct drills listed in Rifle and Carbine, Table IV, Basic with live ammunition on an approved range facility. Table IV is for all firers to evaluate their ability to consistently place shot groups within a designated bullseye target at 25 meters. Units conduct this table only after successful completion of the live-fire prerequisite tables (Tables I, II, and III). During home station training, Soldiers must complete Table IV tasks prior to progressing to any other training event. Units conduct Table IV tasks on an automated record fire range (known as ARF) or other approved facility.

## TASK, CONDITIONS, AND STANDARD

E-24. Firers conduct Table IV tasks from the prone supported firing position 25 meters from the targets outlined in this chapter. Table IV tasks reinforce and build upon the skills Soldiers learned in the previous training events. Units conduct Table IV training in four stages: Stage 1, Grouping; Stage 2, Zeroing; Stage 3, Confirmation at True Distance; and Stage 4, Application of Hold-Offs. Table E-14 provides the task, conditions, and standards for Table IV.

**Table E-14. Rifle and carbine, Table IV, Basic**

<b>Task:</b>	Conduct grouping, zeroing, confirmation of zero at distance, and slow fire engagement procedures proficiency with the M4- or M16-series weapon with the primary optic.
<b>Conditions:</b>	<p>Given the following:</p> <ul style="list-style-type: none"> <li>• Fully mission capable weapon, magazine pouches, and magazines.</li> <li>• Authorized range facility, full-caliber ammunition, and approved targetry.</li> <li>• Unit selected method of zeroing (as described in Training Circular 3-22.9).</li> </ul>
<b>Standard:</b>	<p>Grouping – Successfully group by placing four of five rounds in two consecutive five-round shot groups within a 6 minute of angle (MOA) circle (threshold) or 4 MOA (objective) at 25-meters.</p> <p>Zeroing – Successfully place four of five rounds in two consecutive shot groups within the 6 MOA circle (threshold) or 4 MOA (objective) surrounding the appropriate point of impact on the A8 zero target at 25-meters.</p> <p>Confirmation at Distance – After completion of the 25 meter zero, the Soldier must successfully hit a properly presented E-type target with a minimum of four of five (80-percent) shots.</p> <p>Application of Hold-Offs – After completion of confirmation at distance stage the Soldier must successfully hit a properly presented 100 meter E-type target with a minimum of four of five (80-percent) shots then the Soldier must also successfully hit a properly presented 200 meter E-type target with a minimum of four of five (80-percent) shots.</p>

E-25. Table E-15, on page E-14, shows the training event design template for the Table IV, Basic. Units conduct this event on an authorized live-fire facility, typically an ARF range. See TC 25-8 for additional information on authorized range facilities.

**Table E-15. Training event design template for rifle and carbine, Table IV, Basic**

<i>Rifle and Carbine, Table IV, Basic</i>								
EVENT NAME:	BASIC		ENVIRONMENT:		LIVE	1.0		
WEAPON:	M4 / M16		CONDITIONS:		LIVE FIRE			
CATEGORY:	FOUNDATION		PRIMARY FACILITY:		ARF	DAYS REQUIRED		
PUBLICATION:	TC 3-22.9		ALTERNATE FACILITY:		MRF			
REQUIRED:	YES		COMPONENT:	AC	RC	120 SOLDIERS		
EXTERNAL EVAL:	COACH		FREQUENCY:	2	1			
VALID FOR:	T-X		ANNUAL DAYS TOTAL:	2	1	THROUGHPUT		
TABLE								
I            II            III			IV		V            VI			
PMI&E      PLFS      DRILLS			BASIC		PRACTICE      QUAL			
PRQ      PRQ      PRQ			REQUIRED		2.0			
WHEN EXECUTED:			T-X		TNG DAYS TO QUAL			
CONDEMNATION CRITERIA (CC)	RULE 1	RULE 2	RULE 3	RULE 4	RULE 5	RULE 6		
	TIME	KEY LEADER TURNOVER	COMMANDER ASSESSMENT	SUBORDINATE ELEMENT PROFICIENCY	SPECIALTY PROFICIENCY	STAFF SECTION PROFICIENCY		
<b>Remarks:</b> Each Soldier assigned an individual weapon must successfully complete Table IV, Basic.								
<b>Legend:</b> AC – active component (known as active duty), ARF – automated record fire range, EVAL – evaluation, MRF – modified record fire range or similar, PLFS – preliminary live-fire simulation, PMI&E – preliminary marksmanship instruction and evaluation, PRQ – prerequisite, QUAL – qualification, RC – Reserve Component (known as Reserves), TC – training circular, T-X – training event exercise, TNG DAYS TO QUAL – number of training days remaining on the critical path to weapon's qualification								

## AMMUNITION

E-26. All Soldiers assigned a rifle or carbine on a unit MAL must complete all four stages of Rifle and Carbine, Table IV prior to advancing to Table V or Table VI training. Units conduct the table tasks to demonstrate the Soldier's ability to place well-aimed shots at or near the intended point of impact of a target consistently.

E-27. Firers conduct Table IV training based on their primary optic assigned. Firers, who are not assigned the M68, close combat optic (known as CCO) or the M150, rifle combat optic (known as RCO), complete the iron sight tasks only. Firers assigned the M68 or M150 must complete the backup iron sight (known as BUIS) and CCO or RCO grouping and zeroing. Firers with the backup iron sight and optic conduct confirmation at distance and application of hold-offs with the primary aiming device only. Table E-16 shows the optics, the line item number, and the associated national stock numbers that are authorized ammunition for the BUIS and primary optic.

**Table E-16. Table IV, Basic, primary optics**

<i>Optic</i>	<i>LIN</i>	<i>NSN</i>		
BUIS		1005-01-484-8000		
M68, CCO	S60288	1240-01-411-1265	1240-01-540-3690	1240-01-576-6134
M150, RCO	S45729	1240-01-557-1897		
<p><b>Note.</b> All firers will complete grouping, zeroing, confirmation at distance, and application of hold-offs with primary aiming device.</p> <p>Only firers assigned the M68 CCO are authorized the second iteration of grouping and zeroing ammunition for their BUIS.</p> <p>On weapons assigned the M150, RCO, the BUIS must be removed for use to achieve the appropriate eye relief. No training ammunition is authorized for zeroing the BUIS on weapons assigned the M150.</p>				
<b>Legend:</b> BUIS – backup iron sight, CCO – close combat optic, LIN – line item number, NSN – national stock number, RCO – rifle combat optic				

E-28. To effectively plan and forecast for sufficient training ammunition, the unit should refer to the ammunition requirements listed in table E-17, on page E-16. Units must identify the total number of firers and should plan for unscheduled firers and necessary retraining by increasing their forecasted training ammunition appropriately.

**Table E-17. Table IV, Basic, ammunition authorizations**

<b>Optic</b>	<b>Stages</b>	<b>DODIC</b>	<b>Nomenclature</b>	<b>Quantity</b>	<b>Remarks</b>
Iron sight, CCO, or RCO as the primary optic	Stage 1 Grouping	AB57	CTG 5.56mm ball, M855A1 EPR	15	Three each, five-round shot groups.
	Stage 2 Zeroing	AB57	CTG 5.56mm ball, M855A1 EPR	15	Three each, five-round shot groups after grouping exercise complete.
	Stage 3 Confirmation at Distance	AB57	CTG 5.56mm ball, M855A1 EPR	5	One each, five-round shot group.
	Stage 4 Application of Hold-Offs	AB57	CTG 5.56mm ball, M855A1 EPR	10	One each, five-round shot group for 100 meter target and 200 meter target.
CCO BUIS*	Stage 1 Grouping	AB57	CTG 5.56mm ball, M855A1 EPR	15	Three each, five-round shot groups.
	Stage 2 Zeroing	AB57	CTG 5.56mm ball, M855A1 EPR	15	Three each, five-round shot groups after grouping exercise complete.
	Stage 3 Confirmation at Distance	AB57	CTG 5.56mm ball, M855A1 EPR	5	One each, five-round shot group <i>only after successful zeroing the primary optic.</i>
	Stage 4 Application of Hold-Offs	AB57	CTG 5.56mm ball, M855A1 EPR	10	One each, five-round shot group for 100 meter target and 200 meter target.
<b>Note.</b>					
* - All firers will complete grouping, zeroing, and confirmation at distance with their primary aiming device. Only firers assigned the M68 close combat optic (CCO) are authorized the second iteration of grouping and zeroing ammunition for the BUIS.					
<b>Legend:</b> BUIS – backup iron sight, CTG – cartridge, DODIC – Department of Defense identification code, EPR – enhanced performance round, mm – millimeter, RCO – rifle combat optic					

E-29. The ammunition NCO with a supporting ammunition detail loads the magazines with both training ammunition, as shown in tables E-18 and E-19, for iron sight, BUIS, CCO, and RCO tasks.

**Table E-18. Rifle and Carbine, Table IV, ammunition breakdown, iron sights / backup iron sight per firer**

<b>Magazine</b>	<b>Stages</b>	<b>AB57 5.56mm Ball</b>	<b>Total Rounds per Magazine</b>
1	Stage 1 Grouping	5 each	5 rounds
2	Stage 1 Grouping	5 each	5 rounds
3	Stage 1 Grouping	5 each	5 rounds
4	Stage 2 Zero	5 each	5 rounds
5	Stage 2 Zero	5 each	5 rounds
6	Stage 2 Zero	5 each	5 rounds
7	Stage 3 Confirmation	5 each	5 rounds
8	Stage 4 Application of Hold-off	10 each	10 rounds
<b>Total:</b>		45 rounds	45 rounds
<b>Note:</b> When zero confirmation cannot be fired on the scheduled range facility, units should include that task with associated ammunition in their Table V, Practice event. The task is integrated in the Table V scenario, prior to the first Table V engagement.			
<b>Legend:</b> mm – millimeter			

**Table E-19. Rifle and Carbine, Table IV, ammunition breakdown, close combat optic / rifle combat optic per firer**

<b>Magazine</b>	<b>Stages</b>	<b>AB57 5.56mm Ball</b>	<b>Total Rounds per Magazine</b>
1	Stage 1 Grouping	5 each	5 rounds
2	Stage 1 Grouping	5 each	5 rounds
3	Stage 1 Grouping	5 each	5 rounds
4	Stage 2 Zero	5 each	5 rounds
5	Stage 2 Zero	5 each	5 rounds
6	Stage 2 Zero	5 each	5 rounds
7	Stage 3 Confirmation	5 each	5 rounds
8	Stage 4 Application of Hold-off	10 each	10 rounds
<b>Total:</b>		45 rounds	45 rounds
<b>Legend:</b> mm – millimeter			

## RANGE FACILITIES

E-30. Table E-20 shows the Army-standard range facilities designed to support rifle and carbine, Table IV, Basic training. Units reference their installation's range operations SOP or local training regulation to identify the weapon specific range facilities on the supporting installation. Units use their RFMSS system for all scheduling.

**Table E-20. Rifle and carbine, Table IV, Basic authorized range facilities and targetry**

<b>Table IV, Stages</b>	<b>Range Facility</b>			
	<b>ARF</b>	<b>MRF</b>	<b>QTR</b>	<b>Zero</b>
Stage 1 Grouping 25 meters	P	P	P	A
Stage 2 Zeroing 25 meters				
Stage 3 Confirmation at Distance	P	P	P	N/A
Stage 4 Application of Hold-Offs	P	P	P	N/A

**Legend:** A – alternate facility, ARF – automated record fire range, MRF – modified record fire range or similar, N/A – not applicable, P – primary facility, QTR – qualification training range, Zero – basic 10 meter / 25 meter firing range (zero)

## TARGETRY

E-31. Table IV, Grouping and Zeroing requires a minimum of three targets per firer, placed on a target frame as shown on figure E-1. The targets are placed on a frame with backer board at the 25-meter line. This is a static target presentation and does not use the automated targets on the primary range facility. During the preparation phase, leaders should be familiar with the targetry used, the target frames and their proper emplacement, and the firing sequence of the engagements. Figure E-2, on page E-20, shows the primary targets and their proper positioning on the primary range facility.

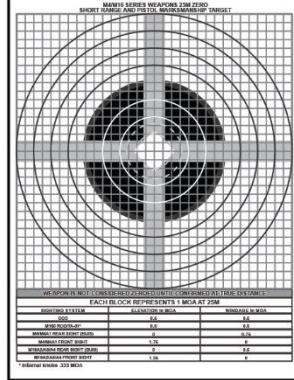
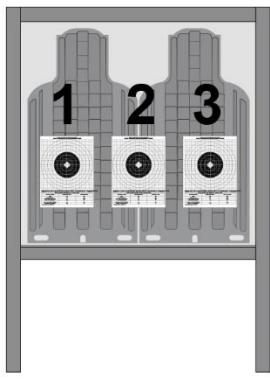
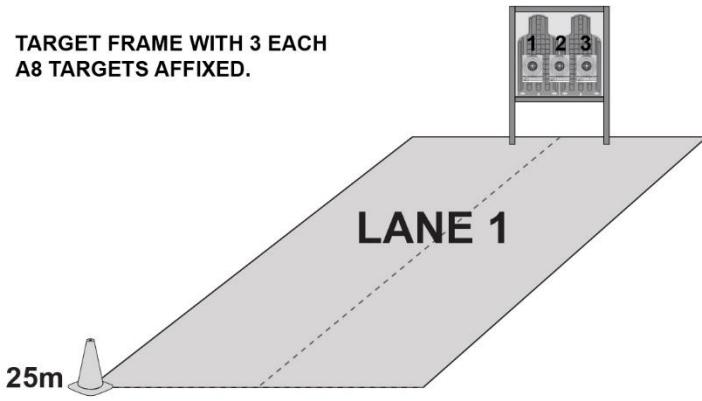
<b>Table IV Stages</b>	<b>Targetry</b>
Stage 1, Grouping 25 meters	<p>A8 target zero M4- / M16-series weapons 25-meters zero. Short range and pistol marksmanship target.</p> <p>NSN 6920-01-660-9191</p>
Stage 2, Zeroing 25 meters	 <p>633663\</p>
Stage 3, Confirmation at distance and Stage 4, Application of Hold-offs	<p>E-1, target, silhouette: plastic, polyethylene, kneeling</p> <p>NSN 6920-00-071-4780</p>
D-1 Target, 3-dimensional: plastic, mannequin, kneeling	 
<b>Legend:</b> NSN – national stock number	

Figure E-1. Rifle and carbine, Table IV, target requirements example

<b>Rifle and Carbine, Table IV, Stage 1, Grouping and Stage 2, Zeroing Target Placement</b>	
<b>Authorized Targetry</b>	<b>Target Placement Layout</b>
	
<p><b>Note:</b> Units may use as many A8 targets as needed to suit the instruction. This example provides one target for every two groupings, including one target for both zeroing groups. Units should clearly identify the engagement number for each five-round grouping (shown as 1 through 3 above).</p>	
 <p>TARGET FRAME WITH 3 EACH A8 TARGETS AFFIXED.</p> <p>25m</p> <p>BASELINE</p> <p>LANE 1</p>	
<p><b>Legend:</b> m – meter</p>	

**Figure E-2. Rifle and carbine, Table IV, stages 1 and 2, target requirements example**

## CONDUCT OF THE RANGE

E-32. Leaders teach Soldiers the objectives of grouping and the importance of the functional elements of the shot process (see TC 3-22.9). Units conduct Table IV training using eight separate engagements at targets that are 25 meters from the static firing point, with a zero confirmation target at distance (300-meter standard) and application of hold-offs at the 100 meter and 200-meter targets. Firers use one A8 target for two groupings. Soldiers complete the engagements in the sequence shown in table E-21. The A8 target is the only authorized zero target.

**Table E-21. Rifle and carbine, Table IV, firing sequence example**

<b>Sequence / Magazine</b>	<b>AB57 5.56mm Ball</b>	<b>Target Frame</b>	<b>Target Type</b>
1 Group 1	5 each	1	A8
2 Group 2	5 each	1	A8
3 Group 3	5 each	2	A8
4 Group 4	5 each	2	A8
5 Zero 1	5 each	3	A8
6 Zero 2	5 each	3	A8
7 Confirm at Distance	5 each	300 meter	E-type
8 Application of Hold-Offs	10 each	100 meter and 200 meter	E-type
<b>Legend:</b> mm - millimeter			

E-33. To complete Table IV training successfully, firers must meet the unit directed standard (threshold or objective) for their iron sight and BUIS and CCO and RCO when assigned. Table E-22, provides each threshold and objective standard for a shot group, grouping exercise, and zeroing. Once zeroing is complete, firers must conduct stages 3 and 4 to complete Table IV.

**Table E-22. Shot group, grouping, and zeroing standards**

<b>Type</b>	<b>Standard</b>		<b>Requirement</b>
	<b>Threshold</b>	<b>Objective</b>	
Shot group	6 MOA	4 MOA	Four of five rounds
Grouping	6 MOA	4 MOA	Two shot groups to standard
Begin zeroing			Grouping standard met
Zero	6 MOA	4 MOA	Standard shot group centered at the POA or applicable offset for optic being zeroed.

**Legend:** MOA – minute of angle, POA – point of aim

E-34. Figure E-3 through E-20, on pages E-23 through page E-40, provide the sequence of the engagements, with a basic example of the standards for a shot group, grouping, and zeroing procedure. This is a guide for the leader. See the appropriate TMs and TC 3-22.9 for detailed instructions.

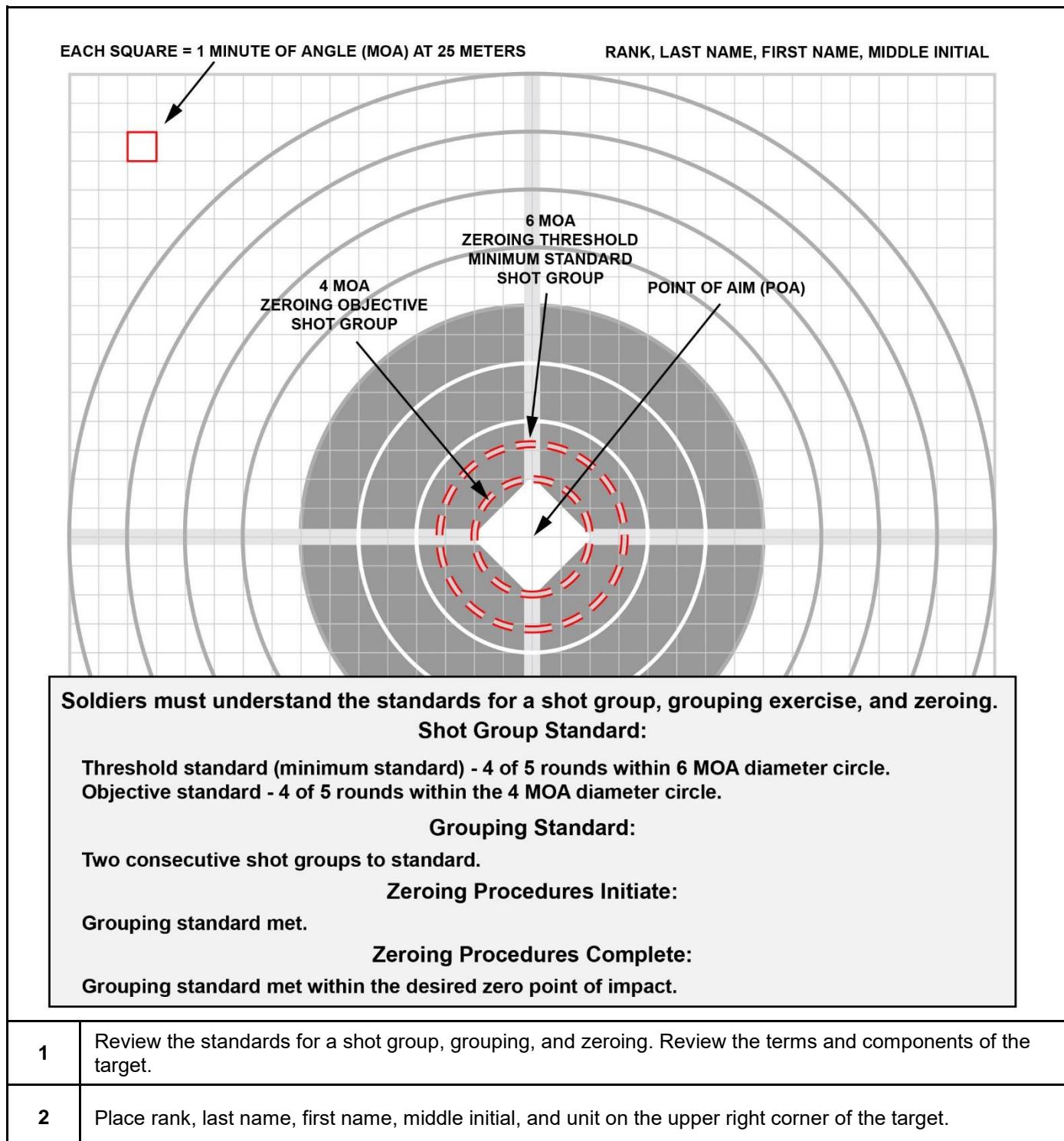


Figure E-3. Rifle and Carbine, Table IV, standards

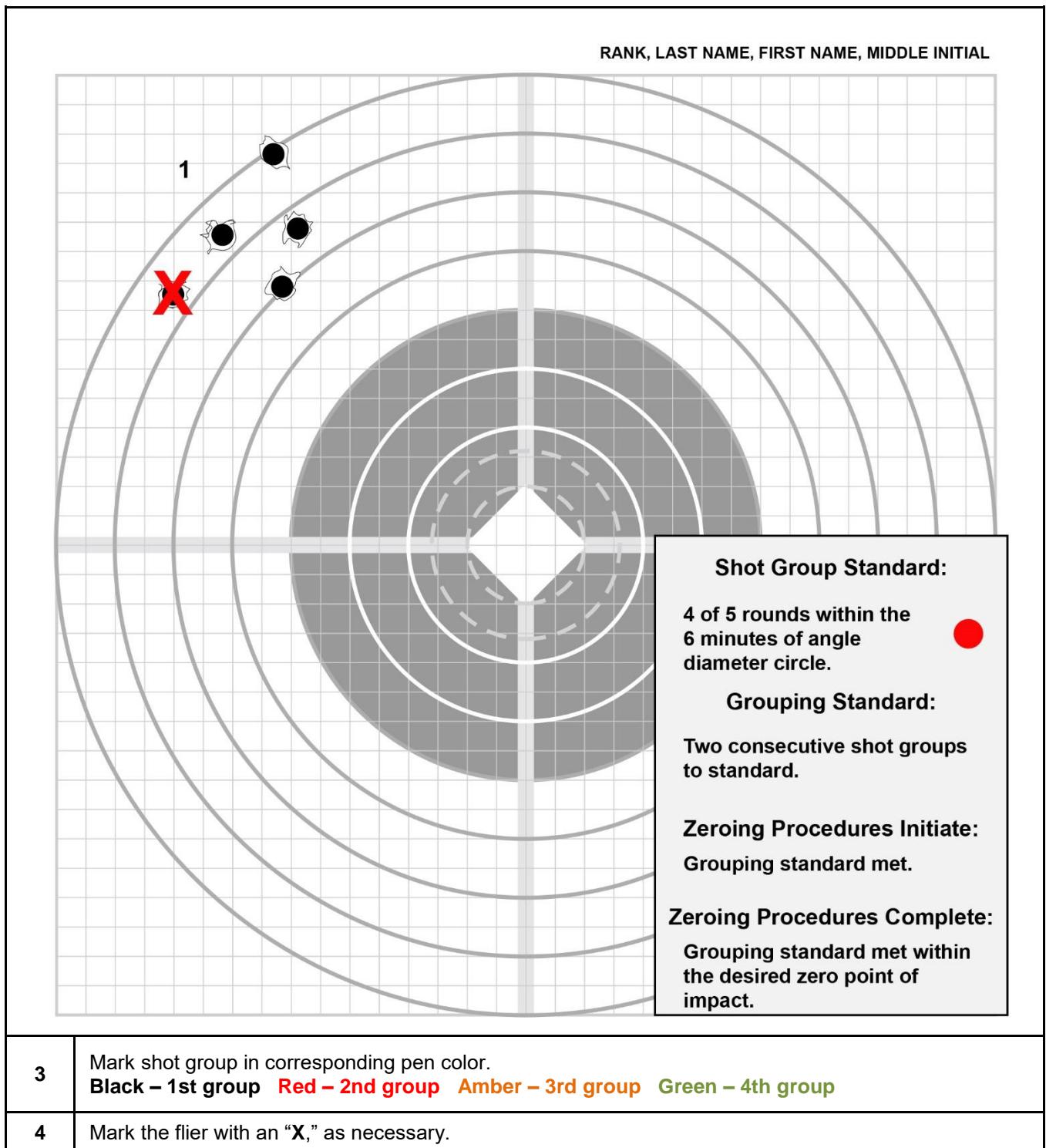
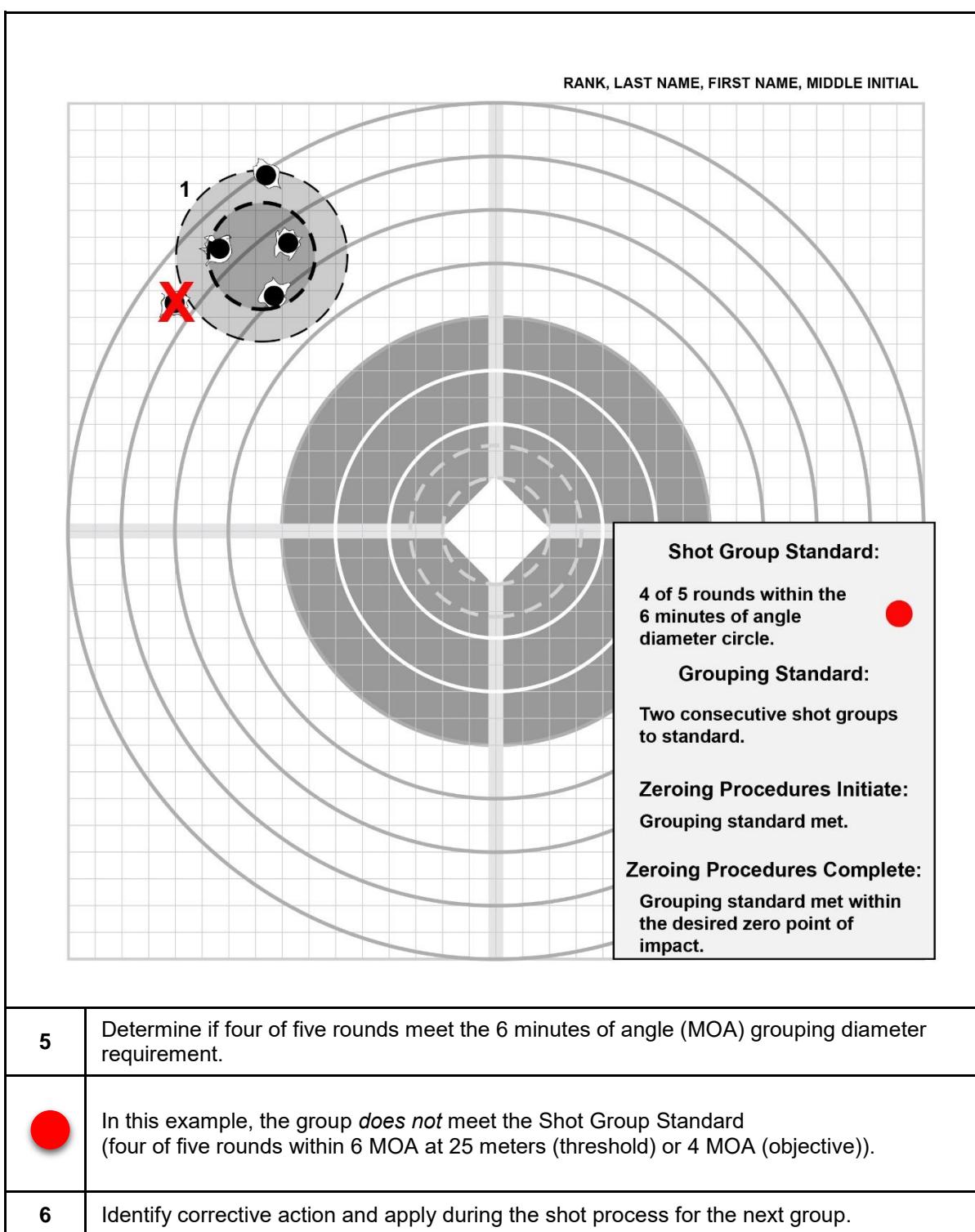
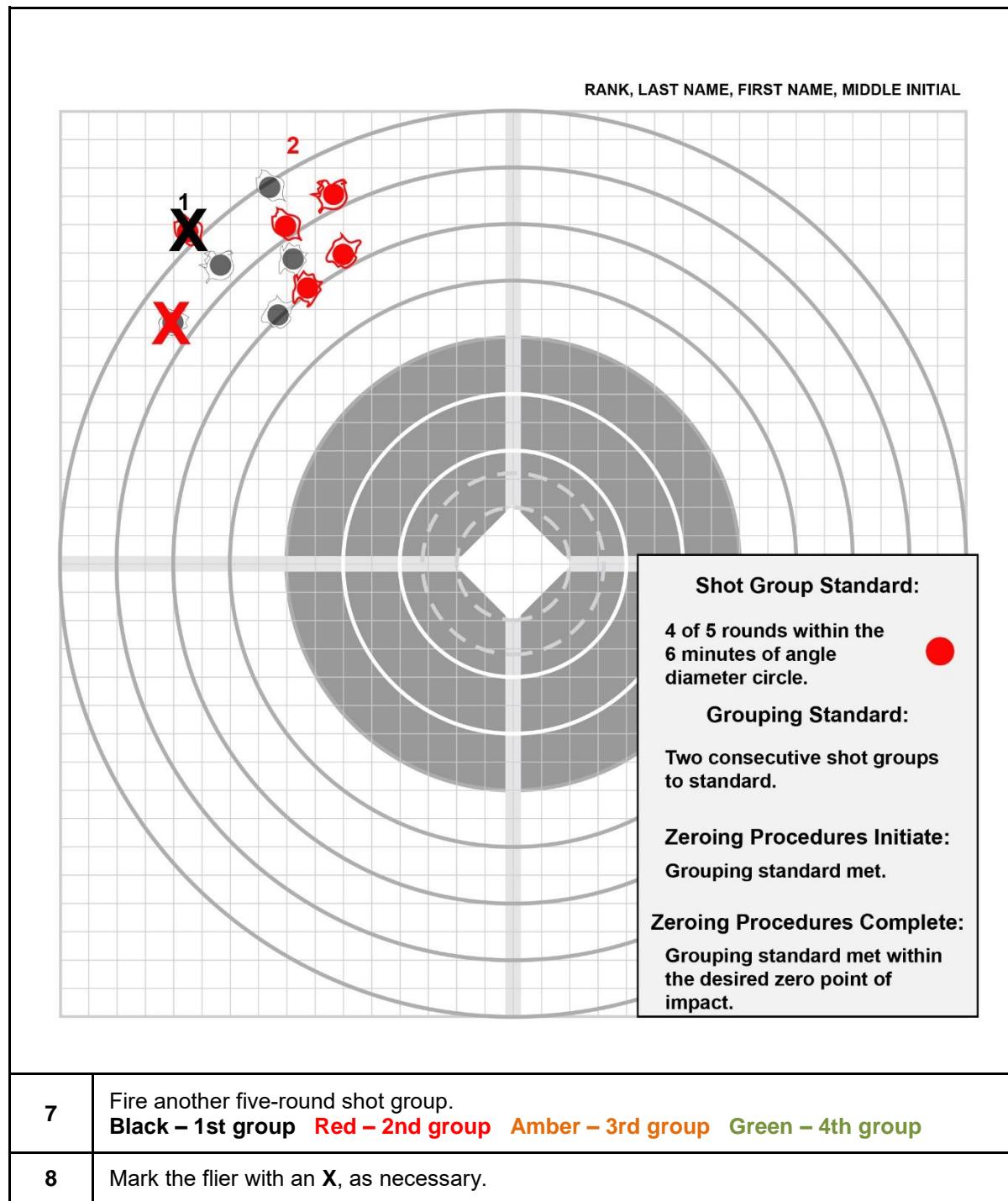
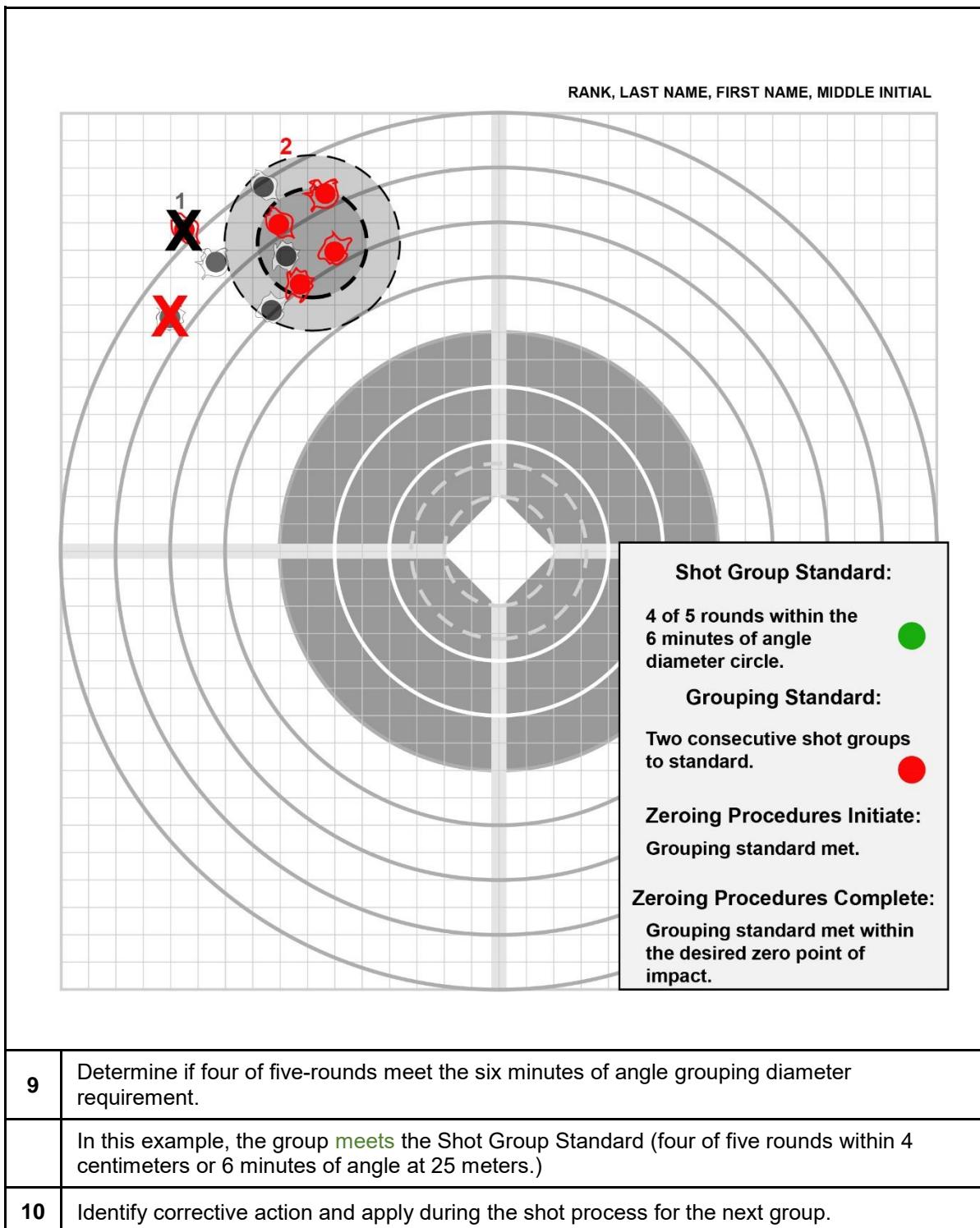


Figure E-4. Rifle and carbine group 1

**Figure E-5. Rifle and carbine group 1 grouping standard determination**



**Figure E-6. Rifle and carbine group 2**

**Figure E-7. Rifle and carbine group 2 standard determination**

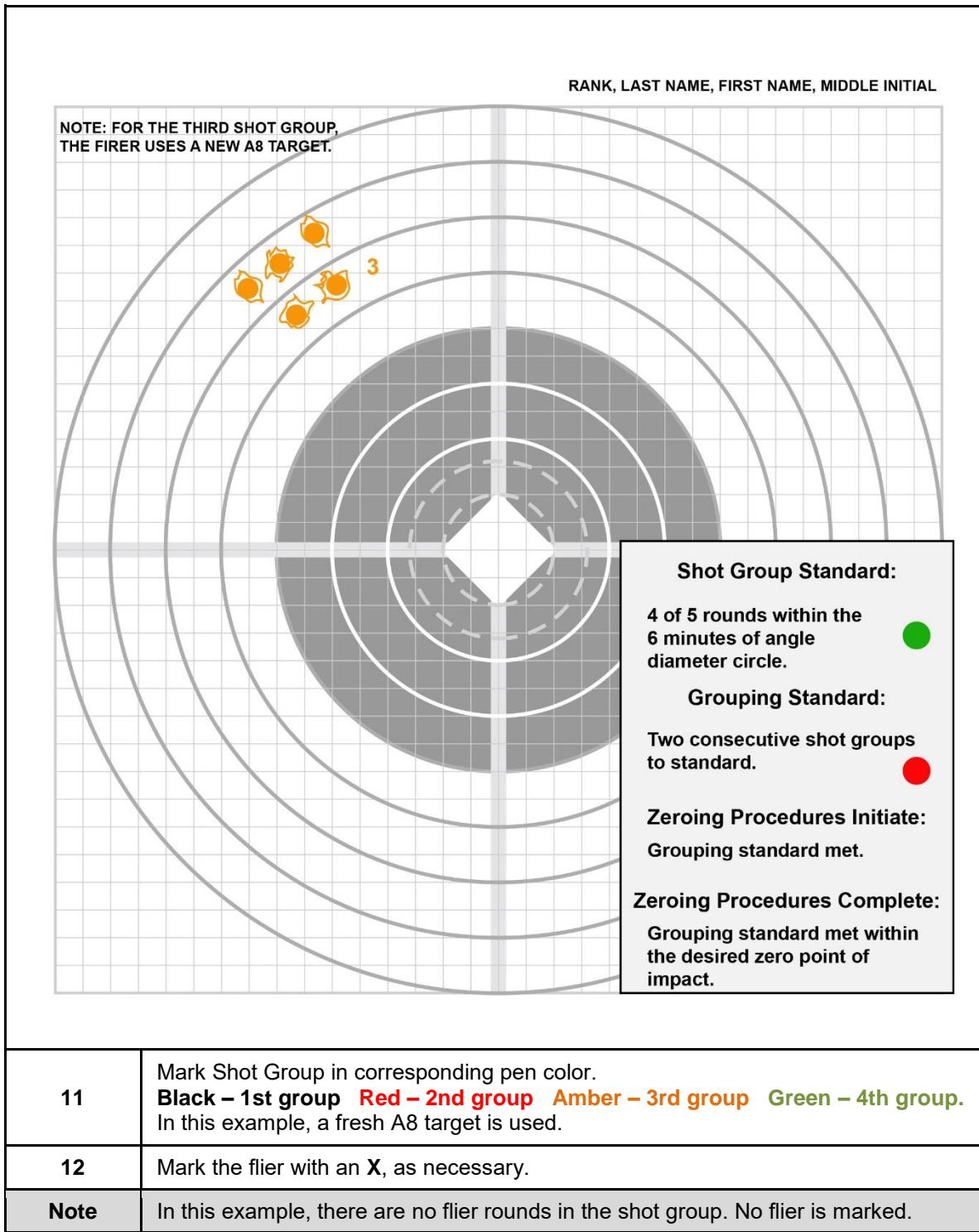
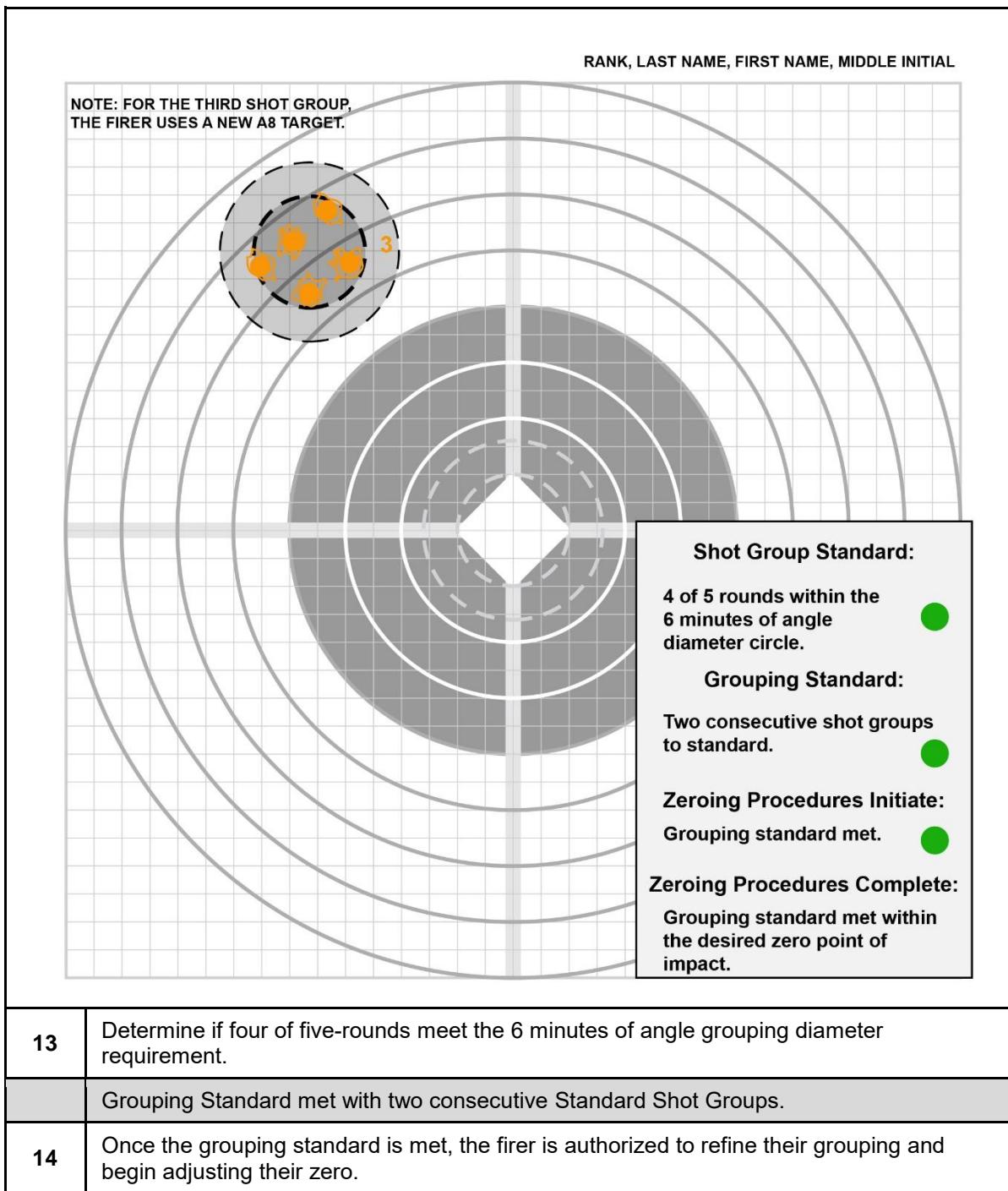
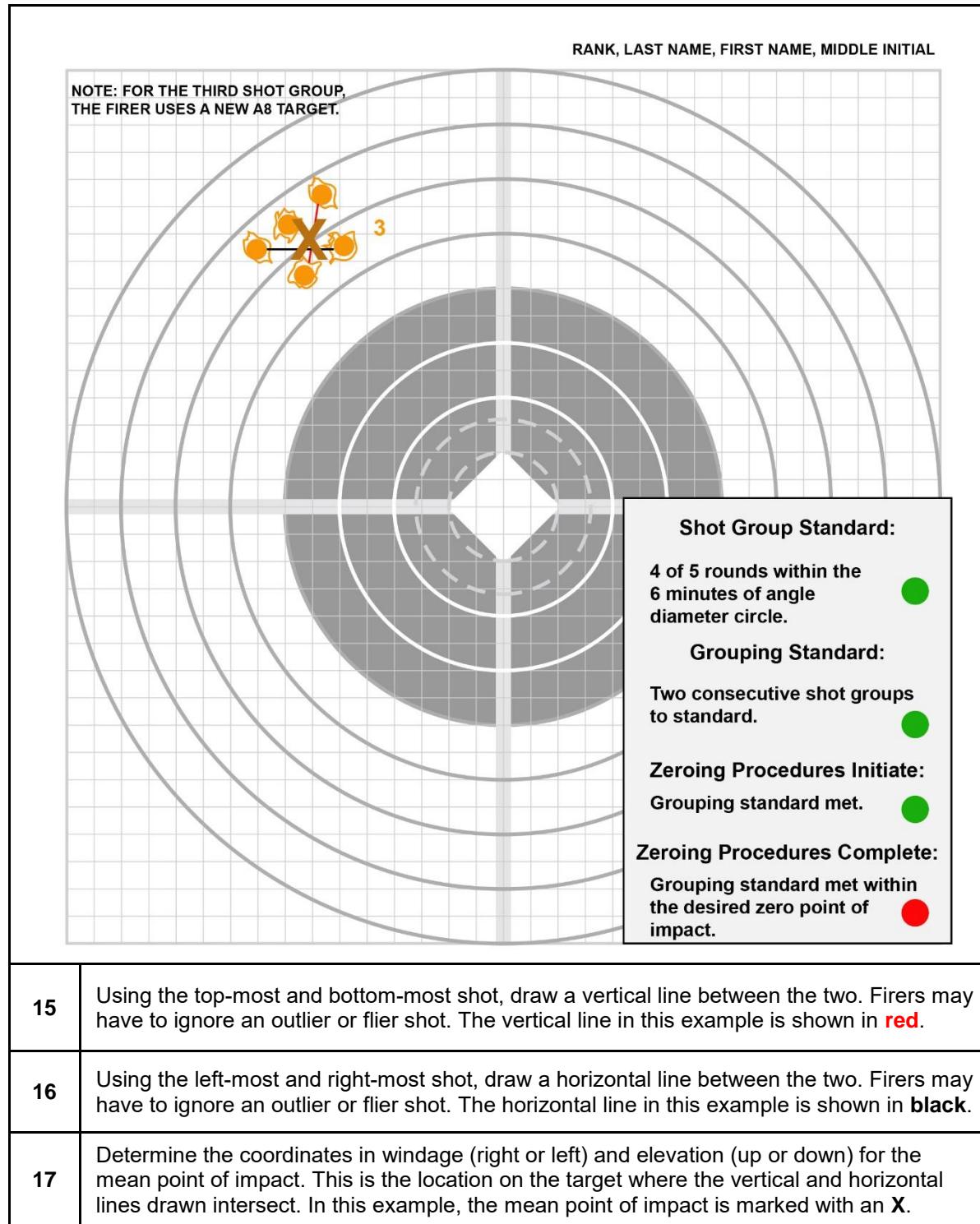


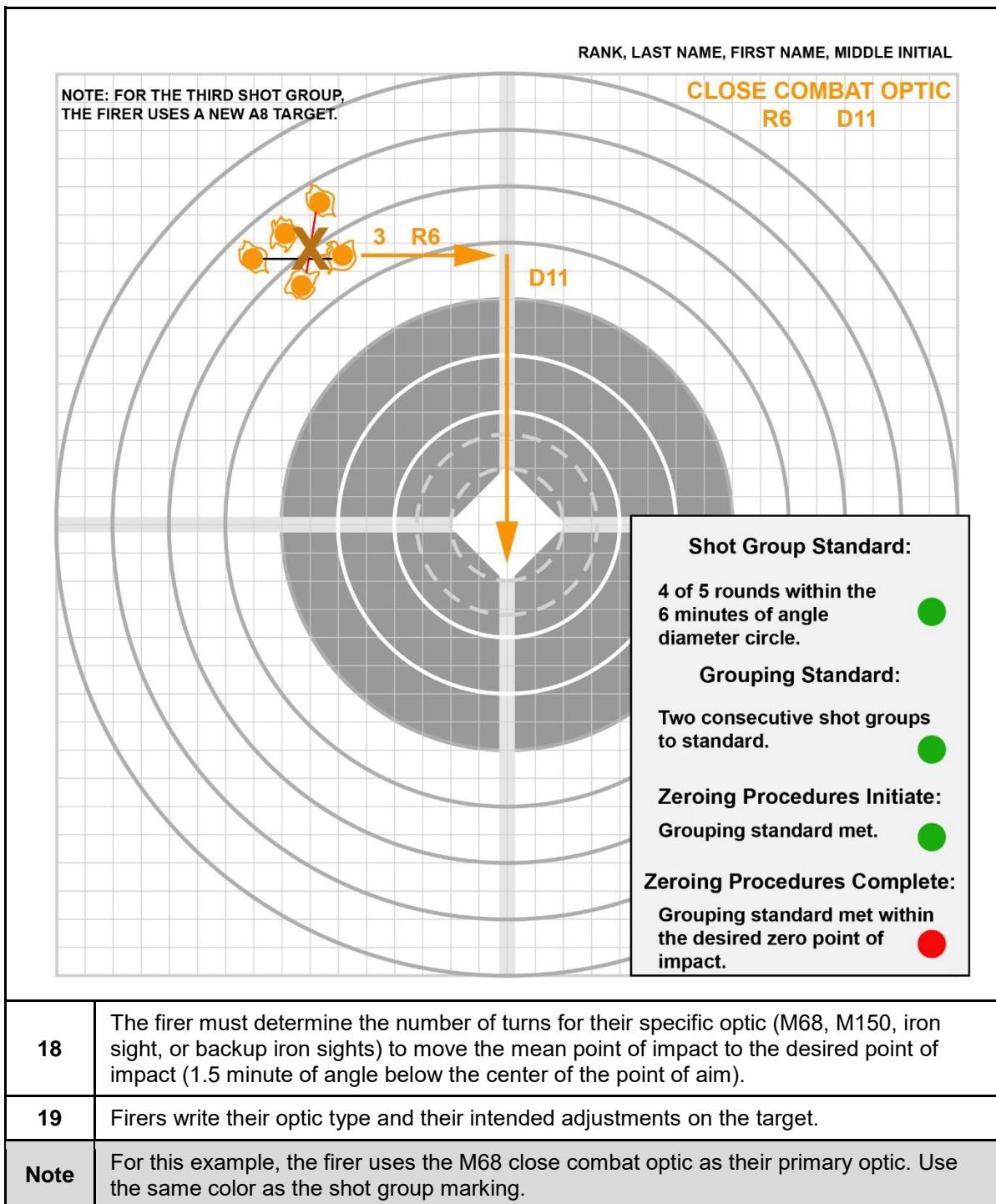
Figure E-8. Rifle and carbine group 3



**Figure E-9. Rifle and carbine group 3 grouping standard determination**



**Figure E-10. Rifle and carbine group 3 mean point of impact determination**

**Figure E-11. Rifle and carbine mean point of impact adjustment determination**

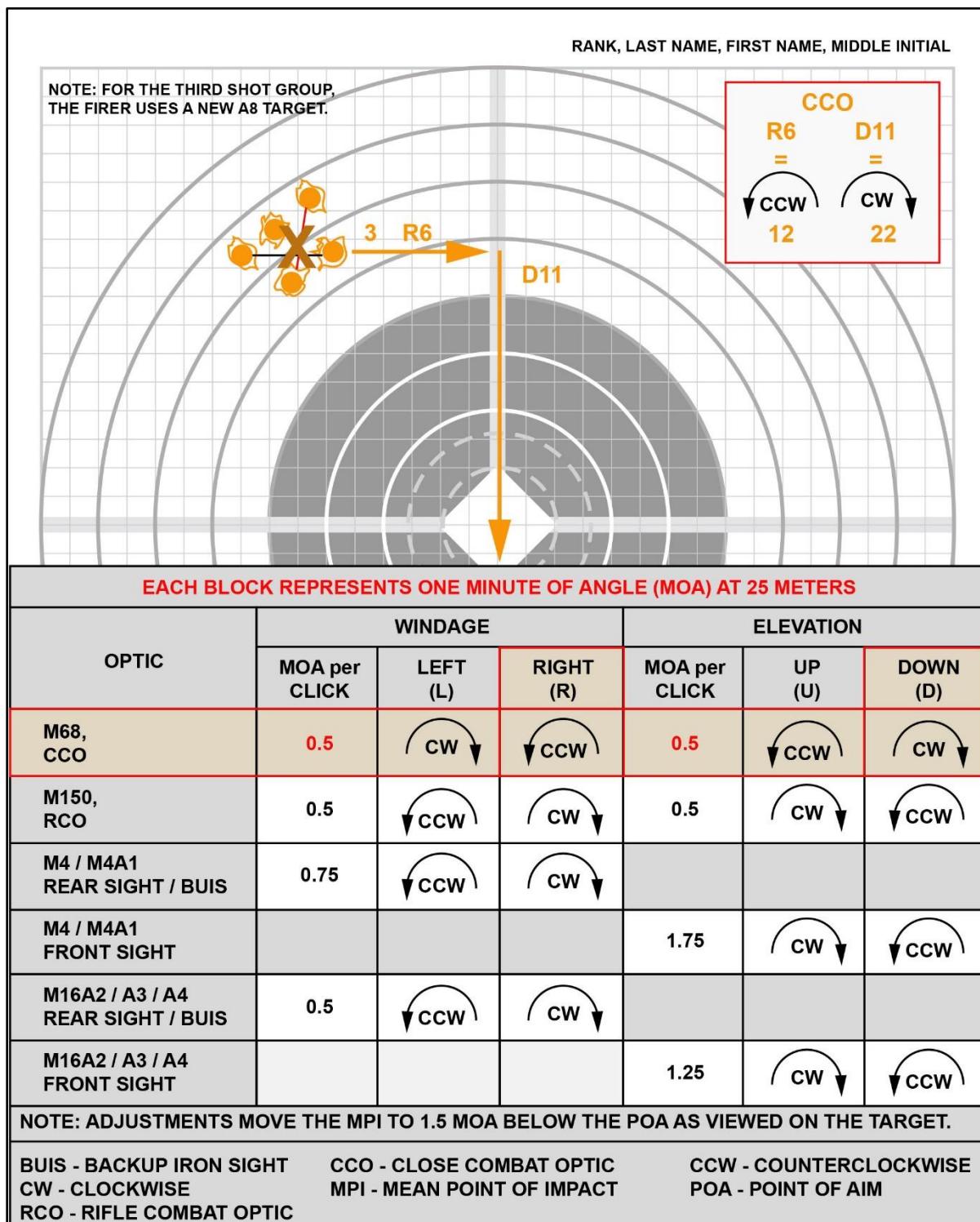
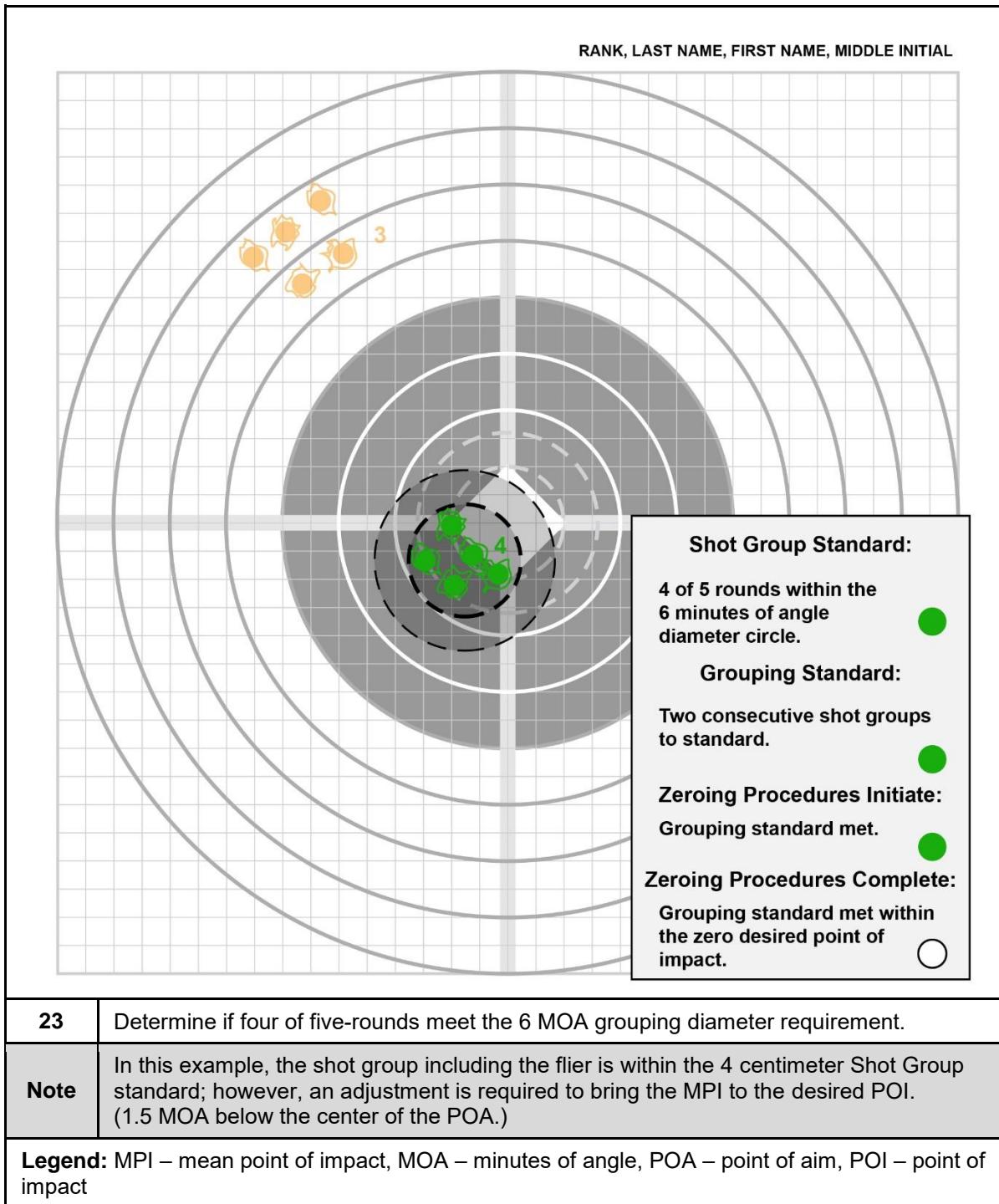


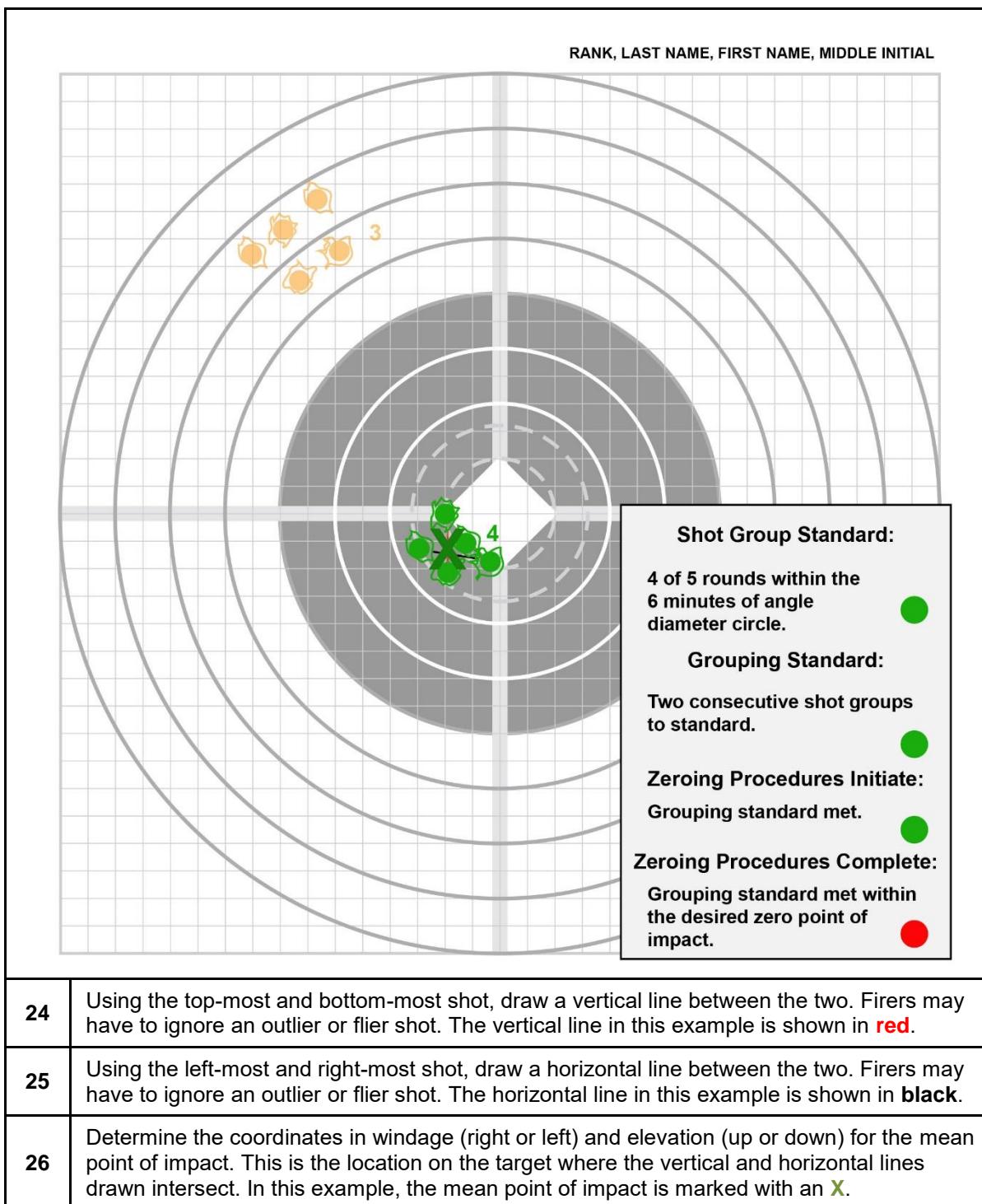
Figure E-12. Rifle and carbine mean point of impact adjustment

	RANK, LAST NAME, FIRST NAME, MIDDLE INITIAL
<p><b>NOTE: FOR THE THIRD SHOT GROUP, THE FIRER USES A NEW A8 TARGET.</b></p>	
<div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Shot Group Standard:</b> 4 of 5 rounds within the 6 minutes of angle diameter circle. <span style="color: green;">●</span></p> <p><b>Grouping Standard:</b> Two consecutive shot groups to standard. <span style="color: green;">●</span></p> <p><b>Zeroing Procedures Initiate:</b> Grouping standard met. <span style="color: green;">●</span></p> <p><b>Zeroing Procedures Complete:</b> Grouping standard met within the desired zero point of impact. <span style="color: red;">●</span></p> </div>	
20	Firers make their adjustments to their optics, as required, and fire their next shot group.
21	Mark Shot Group in corresponding pen color. <b>Black – 1st group   Red – 2nd group   Amber – 3rd group   Green – 4th group</b>
22	Mark the flier with an X, as necessary.

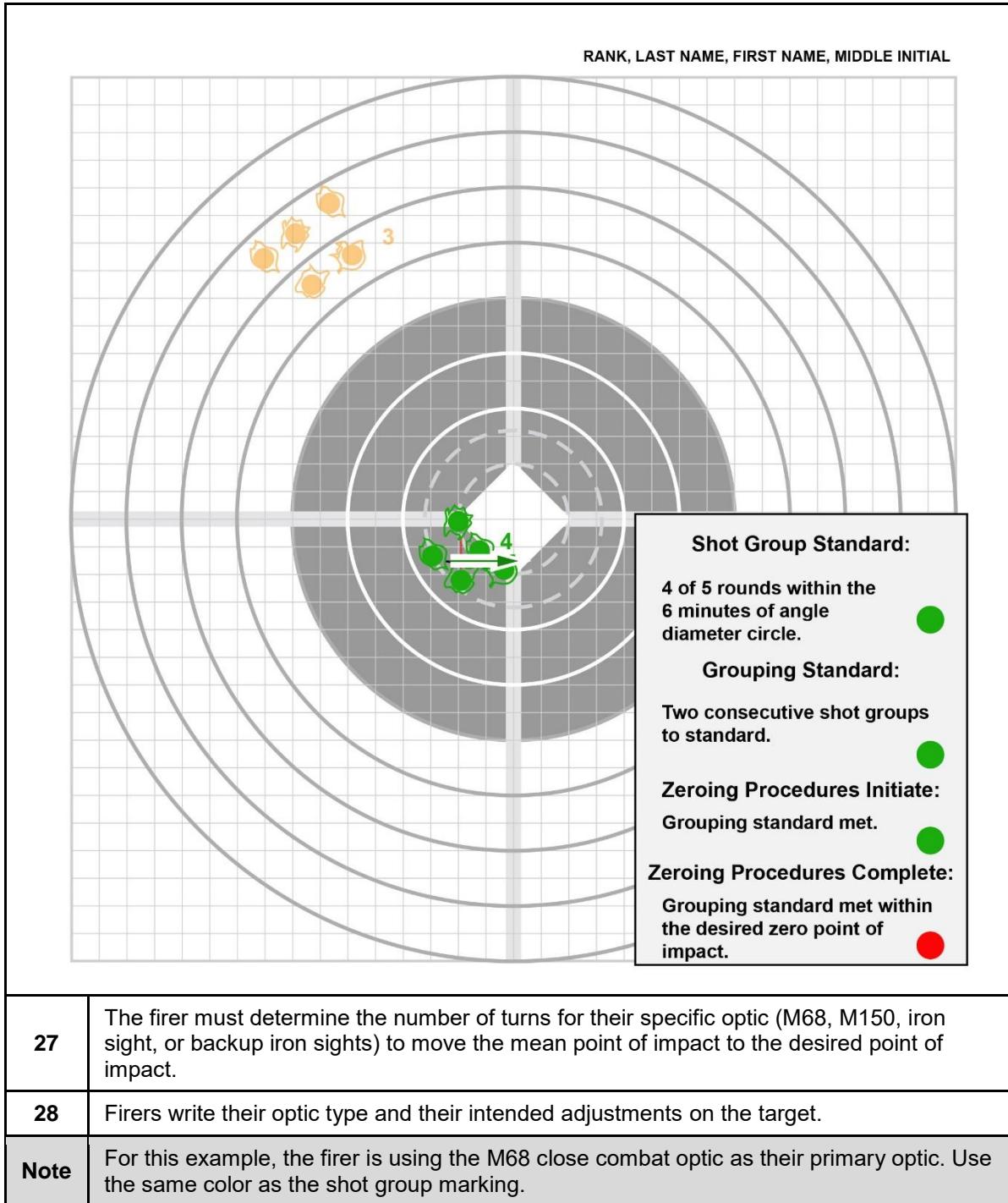
Figure E-13. Rifle and carbine zero group 1



**Figure E-14. Rifle and carbine zero group 1 standard determination**



**Figure E-15. Rifle and carbine zero group 1 mean point of impact determination**



**Figure E-16. Rifle and carbine mean point of impact adjustment determination**

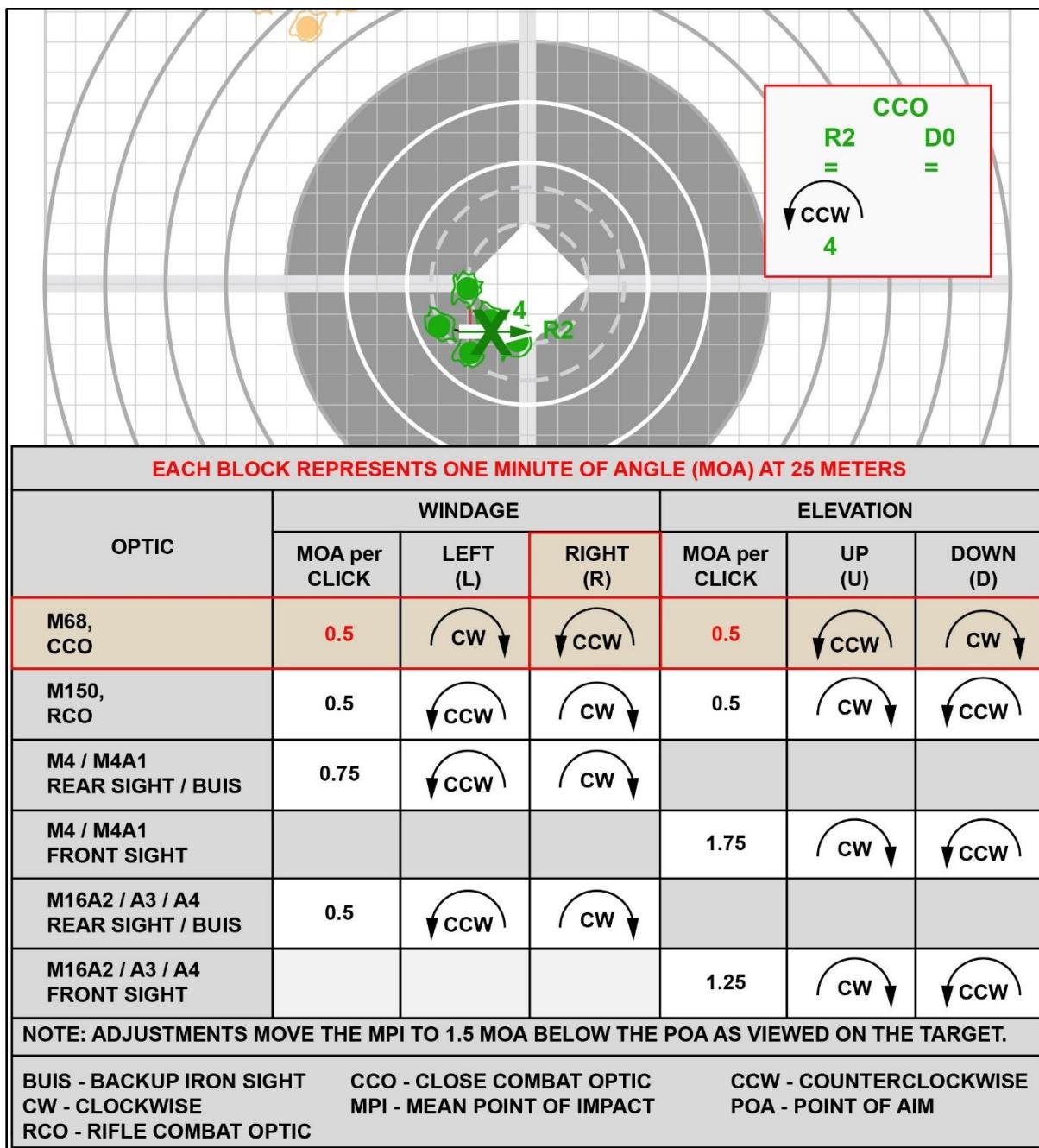
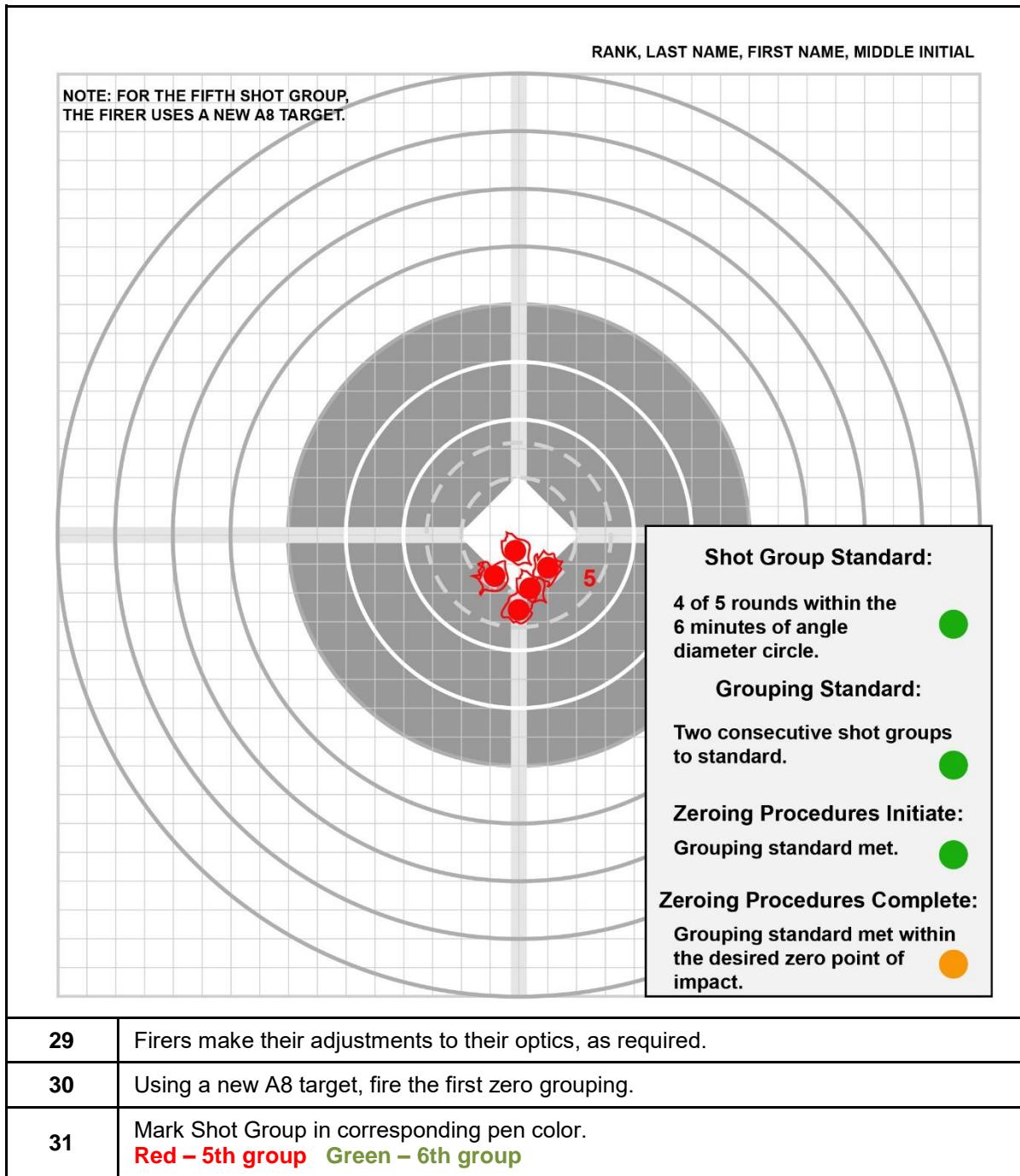


Figure E-17. Rifle and carbine mean point of impact adjustment application



**Figure E-18. Rifle and carbine zero group 2**

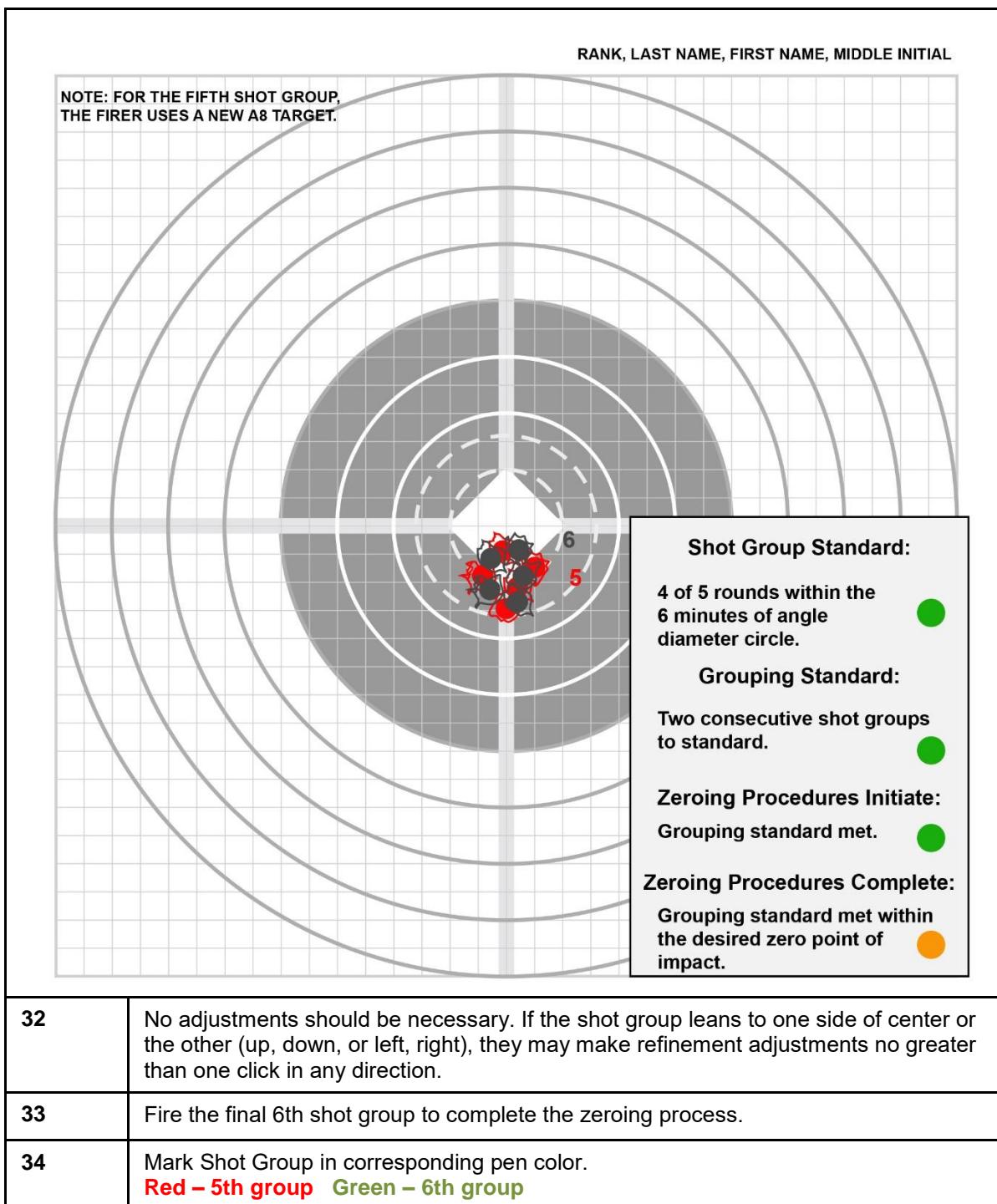


Figure E-19. Rifle and carbine zero group 3

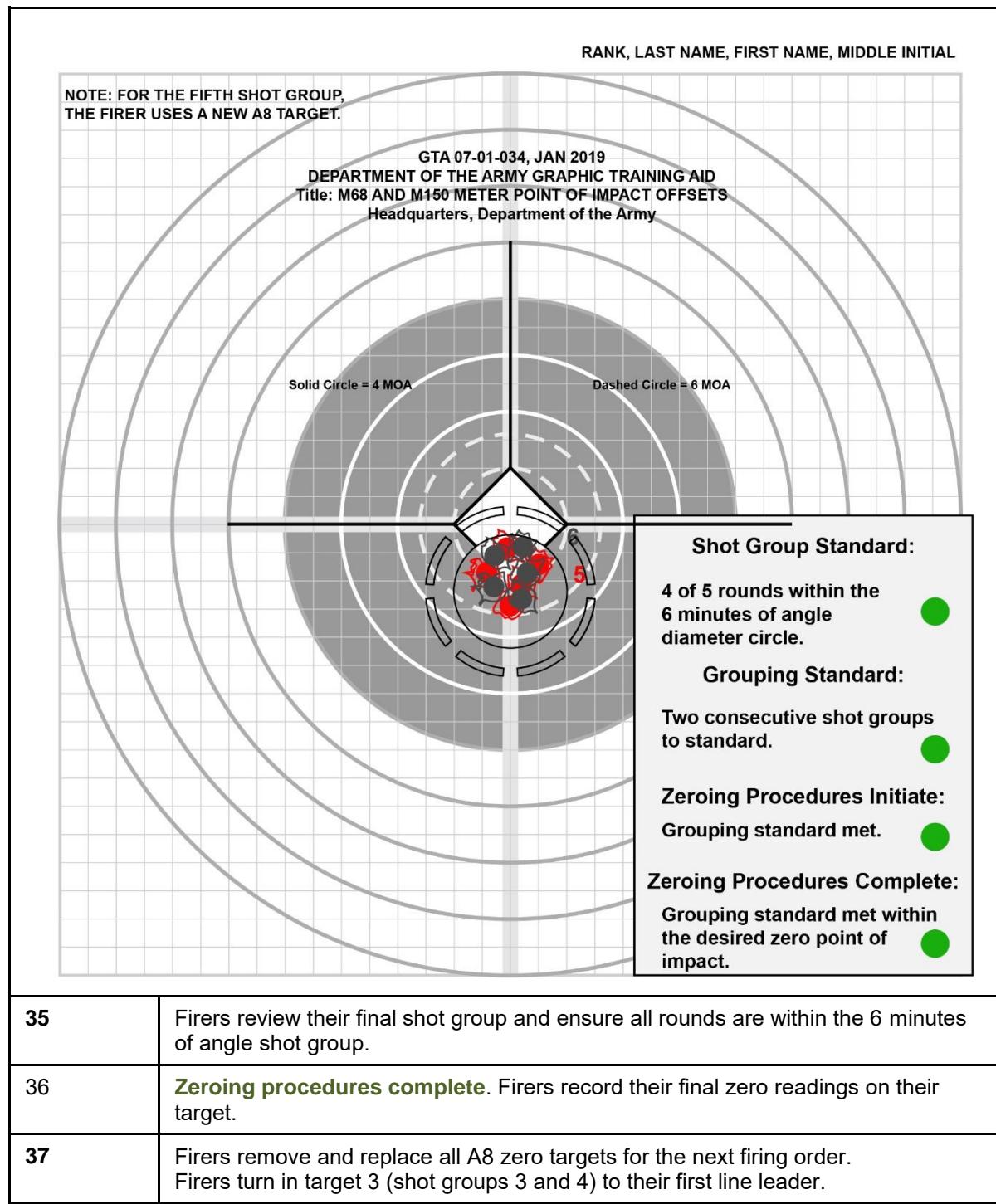
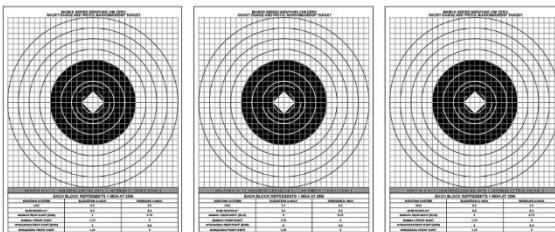


Figure E-20. Rifle and carbine zero standard achieved

E-35. Soldiers begin Table IV training by moving into the firing position following administrative commands from the tower operator. Administrative commands control the flow of the range, movement of personnel, and other command and control purposes. Table E-23 provides an example of the administrative commands for moving a new firing order into position.

E-36. Soldiers enter the range and move to their firing points. Once at the firing point, firers assume a standing firing position with rifle and carbines in a green weapons safety status. Firers fire the tasks in Table IV from the prone, supported position for each group.

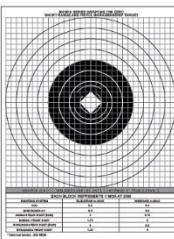
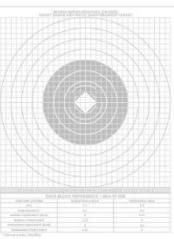
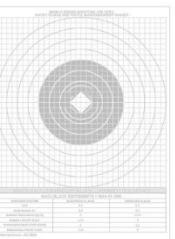
**Table E-23. Table IV, new firing order, conduct of the range example**

<i>New Firing Order, Conduct of the Range</i>								
			Task	Target	Target Type			
	1	2	3	New Firing Order	N/A			
			Rounds per Target	DODIC	Time (Seconds)			
				N/A	AB57			
TOWER			SOLDIER ACTION					
<b>FIRERS ARE IN A GREEN STATUS</b>								
<b>FIRING ORDER (ONE) —</b> <b>CONDUCT OF THE RANGE</b> <b>SECURE YOUR WEAPON AND AMMUNITION</b> <b>ONCE COMPLETE, MOVE TO YOUR FIRING POINT.</b>								
<b>FIRERS ARE IN A GREEN STATUS</b>								
<b>Once all firers are at their FIRING POINT, the tower continues.</b>								
<b>Legend:</b> DODIC – Department of Defense identification code, N/A – not applicable								

**Note.** During any engagement when a malfunction occurs, Soldiers must apply immediate action to their weapon then continue the engagement, as appropriate. When immediate or remedial action does not correct the malfunction, Soldiers notify their respective lane safety.

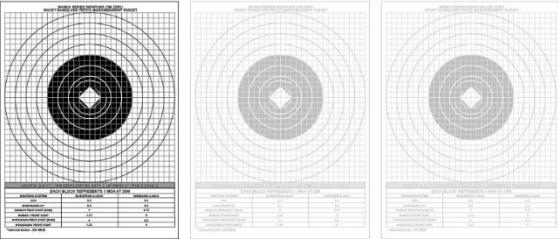
E-37. As soon as the tower operator confirms all firers are at the appropriate firing point, the tower operator initiates the first engagement. Table E-24 lists the commands for the first engagement.

**Table E-24. Table IV, engagement 1, first shot group, conduct of fire example**

<i>Table IV, Engagement 1 – First Shot Group</i>		
  	<b>Group</b>  <b>1</b>	<b>Target</b>  <b>A8</b>
	<b>Rounds per Engagement</b>  <b>DODIC</b>	<b>Target Type</b>  <b>Zero / Bull Ring</b>
	 <b>5</b>	<b>Time (Seconds)</b>  <b>AB57/ AB46</b>
<b>TOWER</b>	<b>SOLDIER ACTION</b>	
<b>WEAPONS SAFETY STATUS</b> <b>RED</b>	<b>GO TO PRONE MAKE READY</b>	<b>Soldier moves to the PRONE supported position, establishes a good firing position, and loads one five-round magazine.</b>
<b>ALERT</b>	<b>FIRERS</b>	
<b>TARGET DESCRIPTION</b>	<b>TARGET ONE</b>	Soldier acquires the designated A8 target.
<b>DIRECTION</b>	<b>FRONT</b>	
<b>RANGE</b>	<b>CLOSE QUARTERS</b>	
<b>CONTROL</b>	<b>FIVE ROUNDS</b> <b>SLOW FIRE</b> <b>WEAPONS FREE</b> <b>WEAPONS FREE</b>	
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	<b>Soldier begins slow firing a five-round shot group, ensuring the same point of aim for each round.</b>
<b>TOWER AWAITS ALL FIRERS TO COMPLETE THE FIVE-ROUND GROUP</b>		
<b>TERMINATION</b>	<b>CEASE FIRE</b> <b>CEASE FIRE</b>	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.
<b>WEAPONS SAFETY STATUS</b> <b>GREEN</b>	<b>GO GREEN</b> <b>SHOW CLEAR</b>	<b>Soldiers clear their weapons, show clear to the lane safety.</b>
<b>Once all firers are complete, the tower directs: MOVE TO THE TARGET AND REVIEW YOUR SHOT GROUP. ONCE COMPLETE, RETURN TO THE FIRING POINT.</b>		
<b>Legend:</b> DODIC – Department of Defense identification code		

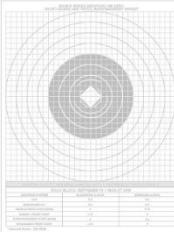
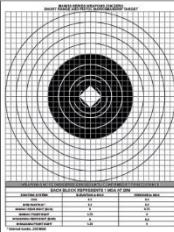
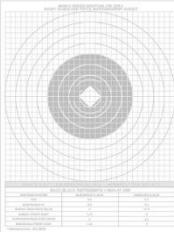
E-38. Once all firers have completed the first group, the firer and coach analyze the group to determine if improvements to the firer's shot process are required. They mark the group prior to returning to the firing line. After all firers have returned from downrange the tower operator prepares for engagement 2, shown in table E-25. The tower operator's initial command initiates the firer to GO TO PRONE and MAKE READY.

**Table E-25. Table IV, engagement 2, second shot group, conduct of fire example**

<i>Table IV, Engagement 2 – Second Shot Group</i>												
			Group	Target	Target Type							
			2	A8	Zero / Bull Ring							
			Rounds per Engagement	DODIC	Time (Seconds)							
			5	AB57/ AB46	NO LIMIT							
TOWER			SOLDIER ACTION									
WEAPONS SAFETY STATUS RED	GO TO PRONE MAKE READY	Soldier moves to the PRONE supported position, establishes a good firing position, and loads one five-round magazine.										
ALERT	FIRERS											
TARGET DESCRIPTION	TARGET ONE	Soldier acquires the designated A8 target.										
DIRECTION	FRONT											
RANGE	CLOSE QUARTERS	Soldier acquires the target and identifies the target's point of aim (POA).										
CONTROL	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE											
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier begins slow firing a five-round shot group, ensuring the same point of aim for each round.										
TOWER AWAITS ALL FIRERS TO COMPLETE THE FIVE-ROUND GROUP												
TERMINATION	CEASE FIRE CEASE FIRE	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.										
WEAPONS SAFETY STATUS GREEN	GO GREEN SHOW CLEAR	Soldiers clear their weapons, show clear to the lane safety.										
Once all firers are complete, the tower directs: MOVE TO THE TARGET AND REVIEW YOUR SHOT GROUP. ONCE COMPLETE, RETURN TO THE FIRING POINT.												
Legend: DODIC – Department of Defense identification code												

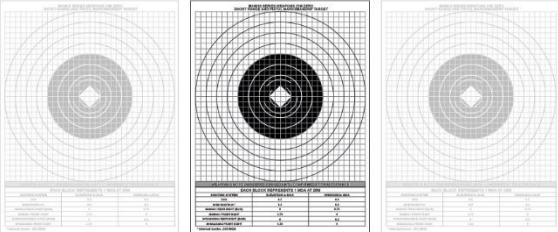
E-39. After completing the second group, the firer and coach analyze the group to determine if improvements to the firer's shot process are required and mark the group. Firers, who successfully demonstrate the ability to group, determine required adjustments and apply them to the aiming device. After all firers have returned to the firing line, the tower operator prepares for engagement 3 (see table E-26).

**Table E-26. Table IV, engagement 3, third shot group, conduct of fire example**

<i>Table IV, Engagement 3 – Third Shot Group</i>												
			Group	Target	Target Type							
1 	2 	3 	3	A8	Zero / Bull Ring							
			Rounds per Engagement	DODIC	Time (Seconds)							
			5	AB57	NO LIMIT							
TOWER			SOLDIER ACTION									
WEAPONS SAFETY STATUS RED	GO TO PRONE MAKE READY	Soldier moves to the PRONE supported position, establishes a good firing position, and loads one five-round magazine.										
ALERT	FIRERS											
TARGET DESCRIPTION	TARGET TWO	Soldier acquires the designated A8 target.										
DIRECTION	FRONT											
RANGE	CLOSE QUARTERS	Soldier acquires the target and identifies the target's point of aim (POA).										
CONTROL	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE											
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier begins slow firing a five-round shot group, ensuring the same point of aim for each round.										
TOWER AWAITS ALL FIRERS TO COMPLETE THE FIVE-ROUND GROUP												
TERMINATION	CEASE FIRE CEASE FIRE	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.										
WEAPONS SAFETY STATUS GREEN	GO GREEN SHOW CLEAR	Soldiers clear their weapons, show clear to the lane safety.										
Once all firers are complete, the tower directs: MOVE TO THE TARGET AND REVIEW YOUR SHOT GROUP. ONCE COMPLETE, RETURN TO THE FIRING POINT.												
Legend: DODIC – Department of Defense identification code												

E-40. Once all firers have completed the third group, annotated the appropriate adjustments on their target, and applied the adjustments to their weapon or optic, the tower operator prepares for engagement 4, shown in table E-27. Leaders should remove Soldiers who have not demonstrated the ability to group from the firing line and direct them to the appropriate area to receive remedial training.

**Table E-27. Table IV, engagement 4, zeroing group one, conduct of fire example**

<i>Table IV, Engagement 4 – Zeroing Group One</i>												
			Group	Target	Target Type							
			4	A8	Zero / Bull Ring							
			Rounds per Engagement	DODIC	Time (Seconds)							
			5	AB57	NO LIMIT							
TOWER			SOLDIER ACTION									
WEAPONS SAFETY STATUS RED	GO TO PRONE MAKE READY	Soldier moves to the PRONE supported position, establishes a good firing position, and loads one five-round magazine.										
ALERT	FIRERS											
TARGET DESCRIPTION	TARGET TWO	Soldier acquires the designated A8 target.										
DIRECTION	FRONT											
RANGE	CLOSE QUARTERS	Soldier acquires the target and identifies the target's point of aim (POA).										
CONTROL	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE											
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier begins slow firing a five-round shot group, ensuring the same point of aim for each round.										
TOWER AWAIT ALL FIRERS TO COMPLETE THE FIVE-ROUND GROUP												
TERMINATION	CEASE FIRE CEASE FIRE	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.										
WEAPONS SAFETY STATUS GREEN	GO GREEN SHOW CLEAR	Soldiers clear their weapons, show clear to the lane safety.										
Once all firers are complete, the tower directs: MOVE TO THE TARGET AND REVIEW YOUR SHOT GROUP. ONCE COMPLETE, RETURN TO THE FIRING POINT.												
Legend: DODIC – Department of Defense identification code												

## Appendix E

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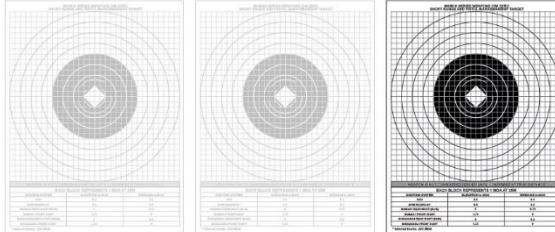
E-41. Once all firers have completed the first zeroing group, annotated the appropriate adjustments on their targets, and applied the adjustments to their weapons or optics, the tower operator prepares for engagement 5, shown in table E-28.

**Table E-28. Table IV, engagement 5, zeroing group two, conduct of fire example**

Table IV, Engagement 5 – Zeroing Group Two												
1                    2                    3			Zeroing Group	Target	Target Type							
	1	A8	Zero / Bull Ring									
			Rounds per Engagement	DODIC	Time (Seconds)							
			5	AB57	NO LIMIT							
TOWER			SOLDIER ACTION									
WEAPONS SAFETY STATUS RED	GO TO PRONE MAKE READY	Soldier moves to the PRONE supported position, establishes a good firing position, and loads one five-round magazine.										
ALERT	FIRERS											
TARGET DESCRIPTION	TARGET THREE	Soldier acquires the designated A8 target.										
DIRECTION	FRONT											
RANGE	CLOSE QUARTERS	Soldier acquires the target and identifies the target's point of aim (POA).										
CONTROL	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE											
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier begins slow firing a five-round shot group, ensuring the same point of aim for each round.										
TOWER AWAITS ALL FIRERS TO COMPLETE THE FIVE-ROUND GROUP												
TERMINATION	CEASE FIRE CEASE FIRE	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.										
WEAPONS SAFETY STATUS GREEN	GO GREEN SHOW CLEAR	Soldiers clear their weapons, show clear to the lane safety.										
Once all firers are complete, the tower directs: MOVE TO THE TARGET AND REVIEW YOUR SHOT GROUP. ONCE COMPLETE, RETURN TO THE FIRING POINT.												
Legend: DODIC – Department of Defense identification code												

E-42. Once all firers have completed zeroing group two, annotated the appropriate adjustments on their targets, and applied the adjustments to their weapons or optics, the tower operator prepares for engagement 6, shown in table E-29. The tower operator's initial command initiates the firer to GO TO PRONE and MAKE READY.

**Table E-29. Table IV, engagement 6, zeroing group three, conduct of fire example**

<i>Table IV, Engagement 6 – Zeroing Group Three</i>													
			Zeroing Group	Target	Target Type								
TOWER	SOLDIER ACTION												
WEAPONS SAFETY STATUS RED	GO TO PRONE MAKE READY		Soldier moves to the PRONE supported position, establishes a good firing position, and loads one five-round magazine.										
ALERT	FIRERS												
TARGET DESCRIPTION	TARGET THREE												
DIRECTION	FRONT												
RANGE	CLOSE QUARTERS												
CONTROL	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE												
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION												
TOWER AWAITS ALL FIRERS TO COMPLETE THE FIVE-ROUND GROUP													
TERMINATION	CEASE FIRE CEASE FIRE												
WEAPONS SAFETY STATUS GREEN	GO GREEN SHOW CLEAR												
Once all firers are complete, the tower directs: MOVE TO THE TARGET, REVIEW YOUR SHOT GROUP, REMOVE TARGETS AND REPLACE WITH FRESH TARGETS. ONCE COMPLETE, RETURN TO THE FIRING POINT.													
Legend: DODIC – Department of Defense identification code													

E-43. Once all firers have recovered their targets and placed fresh A8 targets on the target frame, firers collect their brass, ammunition, and magazines from their firing positions after which the lane safety clears them. Once complete, the lane safety communicates the WSS to the tower operator and the tower operator issues an administrative command moving the Soldiers off the range.

E-44. The tower operator may direct certain firers to remain on the firing point, as necessary. Those firers include Soldiers assigned both a BUIS and CCO or RCO, and who still need to zero the second aiming device. Those Soldiers require additional ammunition to complete the requisite tasks.

E-45. During the range reconnaissance, the unit determines if the 25-meter target frame interferes with the firer's ability to acquire and engage the zero confirmation target. Where the 25-meter target frame presents a line-of-sight issue to the zero confirmation target, units should bypass the confirmation process. When the zero confirmation target cannot be safely or effectively used with the 25-meter target frame emplaced, units conduct confirmation at distance (one each, five-round magazine) by—

- Completing all firing orders through grouping and zeroing tasks, then removing the target frames from the range while in a cold or dry status.
- Completing stage 3 confirmation at distance and stage 4 application of hold-offs prior to conducting Table V (when using a separate facility).

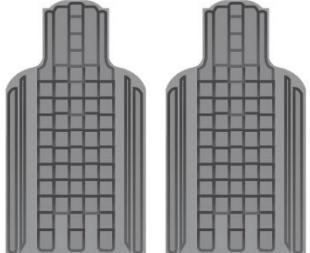
E-46. Table E-30 and Table E-31, on page E-50, provides the conduct of fire for stage 3 and stage 4. All firers must have completed making adjustments to their aiming devices and recorded their final zero information for their weapon and optic prior to confirming at distance or applying hold-offs to the 100-meter and 200 -meter target. All weapons are initially in a green status.

**Table E-30. Table IV, engagement 7, confirmation of distance, conduct of fire example**

<i>Table IV, Engagement 7 – Zero Confirmation at Distance</i>					
 <b>300 meter</b> (Unit may select different zero range based on their SOP, TTP, or mission requirements).	<b>Zero Confirmation</b>	<b>Target</b>	<b>Target Type</b>		
	1	E-1 or D-1	Silhouette, kneeling (hit-bob mode)		
	<b>Rounds per Engagement</b>	<b>DODIC</b>	<b>Time (Seconds)</b>		
	5	AB57	NO LIMIT		
<b>TOWER</b>		<b>SOLDIER ACTION</b>			
<b>WEAPONS SAFETY STATUS RED</b>	<b>GO TO PRONE MAKE READY</b>	Soldier moves to the PRONE supported position, establishes a good firing position, and loads one five-round magazine.			
ALERT	FIRERS				
<b>TARGET DESCRIPTION</b>	TROOP	Soldier acquires the zero confirmation target.			
<b>DIRECTION</b>	FRONT				
<b>RANGE</b>	THREE-HUNDRED	Soldier acquires the target and identifies the target's center of visible mass (known as CoVM).			
<b>CONTROL</b>	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE				
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	Soldier begins slow firing a five-round shot group, ensuring the same point of aim for each round.			
<b>ONCE ALL FIRERS ARE COMPLETE WITH THE FIVE-ROUND CONFIRMATION AT DISTANCE:</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.			
<b>WEAPONS SAFETY STATUS GREEN</b>	<b>GO GREEN SHOW CLEAR</b>	Soldiers clear their weapons, show clear to the lane safety.			
<b>Firer's should achieve four of five hits to successfully complete confirmation at distance. The tower should identify any firer that has not met the confirmation standard and move those Soldiers to the retraining location.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, SOP – standard operating procedure, TTP – tactics, techniques, and procedures,					

E-47. Once all firers have completed stage 3, they remain in place and await further instructions from the tower operator. The tower operator instructs them to reload and prepare for stage 4. Table E-31 shows an example of the conduct of fire for Table IV, stage 4.

**Table E-31. Table IV, engagement 8, application of hold-offs, conduct of fire example**

<i>Table IV, Engagement 8 – Application of Hold-Offs</i>					
 <b>100 and 200 meter</b>	<b>Application of Hold-Offs</b>	<b>Target</b>	<b>Target Type</b>		
	1	E-1 or D-1	Silhouette, kneeling (hit-bob mode)		
	<b>Rounds per Engagement</b>	<b>DODIC</b>	<b>Time (Seconds)</b>		
	10	AB57	55		
<b>TOWER</b>		<b>SOLDIER ACTION</b>			
<b>WEAPONS SAFETY STATUS</b> <b>RED</b>	<b>MAKE READY</b>	<b>Soldier remains in the PRONE supported position, establishes a good firing position, and loads one 10-round magazine.</b>			
<b>ALERT</b>	<b>FIRERS</b>				
<b>TARGET DESCRIPTION</b>	<b>TROOPS</b>	Soldier acquires the 100 meter target.			
<b>DIRECTION</b>	<b>FRONT</b>				
<b>RANGE</b>	<b>ONE-HUNDRED AND TWO HUNDRED</b>	Soldier acquires the target and identifies the target's center of visible mass (known as CoVM).			
<b>CONTROL</b>	<b>FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE</b>				
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	<b>Soldier begins slow firing a five-round shot group, applying the appropriate hold-off at the 100 meter target and again at the 200 meter target.</b>			
<b>ONCE ALL FIRERS ARE COMPLETE WITH THE 10-ROUND APPLICATION OF HOLD-OFF:</b>					
<b>TERMINATION</b>	<b>CEASE FIRE CEASE FIRE</b>	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.			
<b>WEAPONS SAFETY STATUS</b> <b>GREEN</b>	<b>GO GREEN SHOW CLEAR</b>	<b>Soldiers clear their weapons, show clear to the lane safety.</b>			
<b>Firer's should achieve 4 of 5 hits on each target to successfully complete application of hold-offs. The tower should identify any firer that has not met the standard and move those Soldiers to the retraining location.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, SOP – standard operating procedure, TTP – tactics, techniques, and procedures,					

E-48. Once all firers have been verified green by the lane safety, the tower operator directs the firing order off the baseline. The tower operator must identify Soldiers who have failed to achieve the confirmation at distance standard (4 of 5 hits at zeroing distance) and move those Soldiers to a predetermined retraining location.

E-49. Table E-32 provides a generic example of the conduct of the range instructions to change firing orders. All firers on the range are in a green status.

**Table E-32. Table IV, completed firing order, conduct of the range example**

<i>Completed Firing Order, Conduct of the Range</i>					
<b>FIRING ORDER COMPLETE</b>	<b>Task</b>	<b>Target</b>	<b>Target Type</b>		
	Completed Firing Order	N/A	N/A		
	Rounds per Target	DODIC	Time (Seconds)		
	N/A	N/A	NO LIMIT		
<b>TOWER</b>	<b>SOLDIER ACTION</b>				
<b>FIRERS ARE IN A GREEN STATUS</b>					
<b>CONDUCT OF THE RANGE</b>	SECURE YOUR DUNNAGE, MAGAZINES, AND AMMUNITION  ONCE SET, MOVE TO THE BASELINE ENTRY CONTROL POINT	Firers secure weapon and ammunition dunnage and move to the designated location.			
<b>ONCE ALL FIRERS HAVE EXITED THROUGH THE BASELINE ENTRY CONTROL POINT, THE TOWER DIRECTS THE MOVEMENT OF THE NEXT FIRING ORDER.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, N/A – not applicable					

E-50. Leaders review the shot groups with their Soldiers and collect their grouping and zeroing targets for an AAR and verification of zeroing data. Leaders should maintain a record of the zeroing information, and review the targets for any firer errors during the shot process.

E-51. The tower operator records the completion of the firing order in the tower log and includes the number of Soldiers trained. This information is tabulated at the end of the firing day to change the firing status of the range to a cold and dry status with range operations.

## RIFLE AND CARBINE, TABLE V, PRACTICE

E-52. Table V, Practice, is a practice table to use in preparation for the qualification course of fire. Table V tasks challenge firers with single and multiple stationary targets between 50- and 300-meters, from the prone unsupported, prone supported, kneeling supported, and standing supported firing positions. Leaders use Table V to train the firer to engage single and multiple targets placed in a tactical array using their primary optic and to apply the functional elements of the shot process. In a timed scenario, the firer experiences and learns target prioritization and weapons manipulation. This event is purposely more rigorous than the qualification event where the targets are presented in a rapid tempo. The time to transition between firing

positions and tactical reloading are reduced during this event. The practice event induces periodic weapon malfunctions using DDI munitions in the firers' magazines in a random fashion. Table V occurs on an ARF or comparable range facility.

## **TASK, CONDITIONS, AND STANDARD**

E-53. Table E-33 outlines the tasks, conditions, and standards for Table V training. The firer conducting the event should know the tasks, conditions, and standards and should explain them during the range briefing conduct.

**Table E-33. Rifle and Carbine, Table V, Practice**

<b>Task:</b>	Engage and defeat single and multiple threats at varying ranges from supported or unsupported standing, kneeling, and prone firing positions, during day and limited visibility conditions using ball ammunition.
<b>Conditions:</b>	Given the following: <ul style="list-style-type: none"><li>• Fully mission capable weapon as assigned on the master authorization list for the unit.</li><li>• Full combat uniform, issued equipment, and protective mask.</li><li>• Authorized range facility.</li><li>• Full-scale, approved targetry in standard scenario engagement sequences.</li><li>• Authorized ammunition.</li></ul>
<b>Standard:</b>	Demonstrate engagement proficiency by hitting 70 percent (28 of 40) of all presented targets in the time allotted.

E-54. Table E-34 shows the training event design template for Rifle and Carbine, Table V, Practice. Leaders conduct this event on an authorized live-fire facility, typically an ARF or comparable range facility. See TC 25-8 for additional information on authorized range facilities.

**Table E-34. Training event design template for Rifle and Carbine, Table V, Practice**

<b>Rifle and Carbine, Table V, Practice</b>					
EVENT NAME:	PRACTICE	ENVIRONMENT:		LIVE	1.0
WEAPON:	M4 / M16	CONDITIONS:		LIVE FIRE	
CATEGORY:	FOUNDATION	PRIMARY FACILITY:		ARF	DAYS REQUIRED
PUBLICATION:	TC 3-22.9	ALTERNATE FACILITY:		QTR	
REQUIRED:	OPT	COMPONENT:	AC	RC	120 SOLDIERS
RECORD:	DA Form 7801	FREQUENCY:	2	1	
VALID FOR:	T-X	ANNUAL DAYS TOTAL:	2	1	THROUGHPUT
<b>TABLE</b>					
I		II	III	IV	V
PMI&E		PLFS	DRILLS	BASIC	PRACTICE
PRQ		PRQ	PRQ		1.0
WHEN EXECUTED:				T-X	TNG DAYS TO QUAL
CONDEMNATION CRITERIA (CC)	RULE 1	RULE 2	RULE 3	RULE 4	RULE 5
	TIME	KEY LEADER TURNOVER	COMMANDER ASSESSMENT	SUBORDINATE ELEMENT PROFICIENCY	SPECIALTY PROFICIENCY
					STAFF SECTION PROFICIENCY
<b>Remarks:</b> Each Soldier assigned an individual weapon <i>should</i> successfully complete Table V, Practice, to gain experience with and confidence in their weapon, aiming devices, and skill.					
<b>Legend:</b> AC – active component (known as active duty), ARF – automated record fire range or similar, DA – Department of the Army, OPT – optional, PLFS – preliminary live-fire simulation, PMI&E – preliminary marksmanship instruction and evaluation, PRQ – prerequisite, QTR – qualification training range, QUAL – qualification, RC – Reserve Component (known as Reserves), TC – training circular, T-X – training event exercise, TNG DAYS TO QUAL – number of training days remaining on the critical path to weapon's qualification					

## AMMUNITION

E-55. All Soldiers assigned a rifle or carbine on a unit MAL should complete the tasks listed in Rifle and Carbine, Table V, Practice prior to advancing to Table VI, Qualification tasks. Leaders conduct this event to demonstrate the Soldier's proficiency to employ a rifle or carbine during a close quarters fight prior to conducting the qualification course of fire, Table VI.

E-56. To effectively plan and forecast for sufficient training ammunition, the unit uses the ammunition requirements listed in table E-35, on page E-54. Units need to identify the number of firers and should plan for unscheduled firers and necessary retraining by increasing their forecasted training, as appropriate.

**Table E-35. Rifle and Carbine, Table V, Practice ammunition requirements**

<b>Training Event</b>	<b>DODIC</b>	<b>Nomenclature</b>	<b>Quantity</b>	<b>Remarks</b>
Table IV, Stage 3 Confirmation at Distance	AB57	CTG, 5.56mm, ball, M855A1 EPR	5	Conducted prior to Table V on the ARF or comparable facility when range restrictions or line-of-sight issues prevent completion of the task during Table IV.
Table IV, Stage 4 Application of Hold-Offs	AB57	CTG, 5.56mm, ball, M855A1 EPR	10	Conducted prior to Table V on the ARF or comparable facility when range restrictions or line-of-sight issues prevent completion of the task during Table IV.
<b>Note.</b> Table IV, Stages 3 and 4 must be completed before Table V, Stage 1.				
Table V, Stage 1 Practice	AB57	CTG, 5.56mm, ball, M855A1 EPR	40	One round per target is required.
	AB46	CTG, 5.56mm, single round, DDI), M199A1	1	Used to reinforce clearing malfunctions and to identify recoil anticipation.
<b>Legend:</b> ARF – automated record fire range, CTG – cartridge, DDI – dummy, drilled, inert; DODIC – Department of Defense identification code, EPR – enhanced performance round, mm – millimeter				

E-57. Table V is an automated timed event that consists of four live-fire phases. Leaders issue every firer ammunition as shown in table E-36 to conduct the event to standard. Firers place these magazines in their magazine pouches. Staging or pre-positioning magazines is not authorized for the conduct of Table V training.

**Table E-36. Rifle and Carbine, Table V, Practice ammunition breakdown**

<b>Phase</b>	<b>Sequence / Magazine</b>	<b>AB57 5.56mm, Ball</b>	<b>AB46 5.56mm, DDI</b>	<b>Magazine Total Rounds</b>	
Prone, unsupported	1	10 each	1 round random	10 rounds	
Prone, supported	2	10 each		10 rounds	
Kneeling, supported	3	10 each		10 rounds	
Standing, supported	4	10 each		10 rounds	
<b>Note:</b> Units will place one single DDI AB46 round into one of the firers' four magazines. The DDI rounds may not be the first or last rounds loaded in that magazine.					
In lieu of DDI ammunition, units may use expended cartridges. Blank ammunition is NOT authorized on a live fire range.					
<b>Legend:</b> DDI – dummy, drilled, inert; mm – millimeter					

## RANGE FACILITIES

E-58. Table E-37 shows the Army-standard range facilities specifically designed to support rifle and carbine, Table V, Practice. Units must refer to their installation's range operations SOPs or local training regulation to identify the weapon-specific range facilities. Units use their RFMSS system for all scheduling.

**Table E-37. Rifle and Carbine, Table V, Practice authorized range facilities**

<i>Table V</i>	<i>Targetry</i>	<i>Range Facility</i>	
		<i>ARF</i>	<i>QTR</i>
Practice	E-type, E1, target, silhouette: plastic, polyethylene, kneeling  (NSN: 6920-00-071-4780)	P	A
	F-type, F-1, target, silhouette: plastic, polyethylene, prone  (NSN 6920-00-071-4589)		
	D-type, D1, target, sihouette: plastic, mannequin, kneeling  (NSN 6920-01-164-9625)	P	A
	D-type, D-2, target, 3-Dimensional: plastic, mannequin, prone  (NSN 6920-01-387-6397)		
<b>Legend:</b> A – alternate, ARF- automated record fire range, NSN – national stock number, P – primary, QTR – qualification training range			

## TARGETRY

E-59. Table V tasks require silhouette targetry, either E-type, F-type, or D-type targets on the range. Leaders must confirm the type and capability of the range's targetry, lifting mechanisms, and simulators. They must also identify any unit requirements. During the preparation phase, leaders should be familiar with the targetry used and the sequence of the firing events. Figure E-21 shows the authorized targetry used during Table V training.

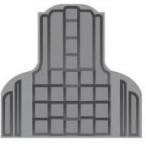
<b>E-1</b> <b>Target, silhouette: plastic, polyethylene, kneeling</b> <b>NSN 6920-00-071-4780</b>	<b>D-1</b> <b>Target, 3-dimensional: plastic, mannequin, kneeling</b> <b>NSN 6920-01-164-9625</b>
	
<b>F-1</b> <b>Target, silhouette: plastic, polyethylene, prone</b> <b>NSN 6920-00-071-4589</b>	<b>D-2</b> <b>Target, 3-dimensional: plastic, mannequin, prone</b> <b>NSN 6920-01-387-6397</b>
	
Prone targets are used only on the 50-meter RIGHT emplacement.	
<b>Notes:</b>  Use of the E-1 or D-1 kneeling targets is at the discretion of the installation. Both represent dismounted, kneeling Infantry targets on small arms and maneuver facilities.  Use F-1 or D-2 on the right 50-meter target emplacement only.  Use of the G-2 prone target is not authorized.	
<b>Legend:</b> NSN – national stock number	

Figure E-21. Table V, authorized target types

## SCENARIO ENGAGEMENTS

E-60. Targets are presented to the firer in single and multiple target arrays. Targets are presented so that 90-percent of the target is clearly visible to the firer from the expected or planned firing position. Targets are exposed to the firer based on the number of targets presented during the engagement as follows:

- Single target engagements are exposed for 3 seconds.
- Double target engagements are exposed for 5 seconds.
- Triple target engagements are exposed for 12 seconds.
- Quadruple target engagements are exposed for 16 seconds.

E-61. There is a 2-second delay between each engagement. After each phase (prone unsupported, prone supported, kneeling supported, and standing supported), there is an 8-second transition delay, which provides the firer time to conduct an emergency reload and assume the next specified position. Table E-38 shows the scenario engagement sequence for Table V training.

**Table E-38. Rifle and carbine, Table V, Practice, engagement sequence**

<i>Table V, Practice, Engagements 1 through 5, React to Contact, Transition to Prone, Unsupported</i>			
<b>Engagement</b>	<b>Target Type</b>	<b>Range</b>	<b>Exposure Time</b>
1	F-type	50 m RIGHT	3 sec
2	E-type	100 m	3 sec
3	E-type	150 m	3 sec
4	E-type	50 m LEFT	12 sec
	E-type	150 m	
	E-type	200 m	
5	E-type	150 m	16 sec
	E-type	200 m	
	E-type	250 m	
	E-type	300 m	
Prone, Unsupported, Time per Firing Order Total			56 sec
<b>Note:</b> There is a 5-second delay between the first and second engagement to allow the Soldier to go to prone. There is a 2-second delay between all other engagements in this table. An 8-second delay time is incorporated at the end of engagement 5 to facilitate magazine and firing position changes.			
<b>Legend:</b> m – meters; sec – seconds			

**Table E-38. Rifle and Carbine, Table V, Practice Engagement sequence (continued)**

<i>Table V, Practice, Engagements 6 through 10, Prone, Supported</i>			
<i>Engagement</i>	<i>Target Type</i>	<i>Range</i>	<i>Exposure Time</i>
6	E-type	100 m	3 sec
7	E-type	150 m	5 sec
	E-type	300 m	
8	E-type	200 m	5 sec
	E-type	300 m	
9	E-type	250 m	5 sec
	E-type	300 m	
10	E-type	150 m	12 sec
	E-type	250 m	
	E-type	300 m	
Prone, Supported, Time per Firing Order Total			46 sec
<b>Note:</b> There is a 2-second delay between all engagements. An 8-second delay time is incorporated at the end of engagement 10 to facilitate magazine and firing position changes.			
<b>Legend:</b> m – meters; sec – seconds			

**Table E-38. Rifle and Carbine, Table V, Practice engagement sequence (continued)**

<i>Table V, Practice, Engagements 11 through 14, Kneeling, Supported</i>			
<i>Engagement</i>	<i>Target Type</i>	<i>Range</i>	<i>Exposure Time</i>
11	E-type	50 m LEFT	12 sec
	E-type	100 m	
	E-type	200 m	
12	F-type	50 m RIGHT	5 sec
	E-type	200 m	
13	E-type	150 m	5 sec
	E-type	250 m	
14	E-type	100 m	12 sec
	E-type	150 m	
	E-type	200 m	
Kneeling, Supported, Time per Firing Order Total			48 sec
<b>Note:</b> There is a 2-second delay between all engagements. An 8-second delay time is incorporated at the end of engagement 14 to facilitate magazine and firing position changes.			
<b>Legend:</b> m – meters; sec – seconds			

**Table E-38. Rifle and Carbine, Table V, Practice engagement sequence (continued)**

<i>Table V, Practice, Engagements 15 through 18, Standing, Supported</i>			
<i>Engagement</i>	<i>Target Type</i>	<i>Range</i>	<i>Exposure Time</i>
15	E-type	50 m LEFT	5 sec
	E-type	100 m	
16	E-type	200 m	5 sec
	E-type	250 m	
17	F-type	50 m RIGHT	12 sec
	E-type	100 m	
	E-type	150 m	
18	E-type	100 m	12 sec
	E-type	200 m	
	E-type	250 m	
Standing, Supported, Time per Firing Order Total			40 sec
<b>Note:</b> There is a 2-second delay between all engagements.			
<b>Legend:</b> m – meters; sec – seconds			

E-62. Table E-39 provides the Table V, Practice, throughput schedule. Units use this table as a guide. The table portrays the overall efficiency of the range facility when conducting the training event. The table provides the overall throughput timetable based on the time the unit requires to remove one firing order from the firing positions and move the next firing order forward.

E-63. Three general movement schedules are available to assist firing order placements on the range, 2 minutes, 5 minutes, and 10 minutes. The more proficient a unit is at operating a small arms range facility, the greater the firer throughput on the facility. This schedule does not include time required for retraining, refire, or firers who have persistent problems using a reticle.

**Table E-39. Rifle and Carbine, Table V, Practice, throughput time schedule**

<b>Phase</b>	<b>Time to Execute</b>			<b>Remarks</b>			
Prone, Unsupported	0:56 seconds			Includes 2-seconds between engagements and 8-seconds transition to next phase.			
Prone, Supported	0:46 seconds						
Kneeling, Supported	0:48 seconds						
Standing, Supported	0:40 seconds						
Total Time Per Firing Order	<b>3:10 minutes</b>			Does not include administrative time to move firing order to or from their respective firing positions.			
<b>Total Number of Firing Orders</b>	<i>Table V Execution with Administration Time Between Firing Orders</i>			<i>Total Firer Throughput based on Range Configuration</i>			
	<b>2 min</b>	<b>5 min</b>	<b>10 min</b>	<b>16 Lane</b>	<b>32 Lane</b>		
2	11 min	17 min	27 min	<b>32</b>	<b>64</b>		
3	16 min	25 min	40 min	<b>48</b>	<b>96</b>		
4	21 min	33 min	53 min	<b>64</b>	<b>128</b>		
5	26 min	41 min	1 hr 6 min	<b>80</b>	<b>160</b>		
6	32 min	50 min	1 hr 20 min	<b>96</b>	<b>192</b>		
7	37 min	58 min	1 hr 33 min	<b>112</b>	<b>224</b>		
8	42 min	1 hr 6 min	1 hr 46 min	<b>128</b>	<b>256</b>		
9	47 min	1 hr 14 min	1 hr 59 min	<b>144</b>	<b>288</b>		
10	53 min	1 hr 23 min	2 hrs 13 min	<b>160</b>	<b>320</b>		
11	58 min	1 hr 31 min	2 hrs 26 min	<b>176</b>	<b>352</b>		
12	1 hr 3 min	1 hr 39 min	2 hrs 39 min	<b>192</b>	<b>384</b>		
13	1 hr 8 min	1 hr 47 min	2 hrs 52 min	<b>208</b>	<b>416</b>		
14	1 hr 14 min	1 hr 56 min	3 hrs 6 min	<b>224</b>	<b>448</b>		
15	1 hr 19 min	2 hrs 4 min	3 hrs 19 min	<b>240</b>	<b>480</b>		
16	1 hr 24 min	2 hrs 12 min	3 hrs 32 min	<b>256</b>	<b>512</b>		
17	1 hr 29 min	2 hrs 20 min	3 hrs 45 min	<b>272</b>	<b>544</b>		
18	1 hr 35 min	2 hrs 29 min	3 hrs 59 min	<b>288</b>	<b>576</b>		
19	1 hr 40 min	2 hrs 37 min	4 hrs 12 min	<b>304</b>	<b>608</b>		
20	1 hr 45 min	2 hrs 45 min	4 hrs 25 min	<b>320</b>	<b>640</b>		

**Legend:** hr – hour; hrs – hours, min – minutes

## CONDUCT OF THE RANGE

E-64. Leaders instruct Soldiers on the objectives of the tasks in Table V and the importance of the functional elements of the shot process. Table V contains 18 firing tasks with an administrative pause programmed at the end of each phase to facilitate emergency reloading and changing positions.

E-65. Soldiers enter the range and move to their firing points. Once at the firing point, firers assume a standing firing position with rifle and carbines in a green status. Firers fire Table V from the ready at varying firing positions throughout the duration of the course of fire, where—

- Tasks 1 through 5 are fired from the prone, unsupported firing position.
- Tasks 6 through 10 are fired from the prone, supported firing position.
- Tasks 11 through 14 are fired from the kneeling, supported firing position.
- Tasks 15 through 18 are fired from the standing, supported firing position.

E-66. Firers must hit a minimum of 28 of the 40 targets presented (70 percent) to successfully pass the event. It is not required for Soldiers to complete this table successfully before conducting Table VI tasks. This event is purposefully more rigorous than the qualification event where the targets are presented in a rapid tempo, and the time to transition between firing positions and tactical reloading are reduced. This practice event induces periodic weapon malfunctions using DDI munitions into the firers' magazines in a random fashion. The leader annotates the official record of training on DA Form 7801.

E-67. Soldiers begin Table V training by moving into the firing position following administrative commands from the tower operator. The tower operator uses administrative commands to control the flow of the range, movement of personnel, and other command and control purposes. Table E-40 is an example of the administrative commands for moving a new firing order into position.

**Table E-40. Table V, new firing order, conduct of the range example**

<i>New Firing Order, Conduct of the Range</i>					
<b>PRACTICE</b>	<b>Task</b>	<b>Target</b>	<b>Target Type</b>		
	New Firing Order	N/A	N/A		
	Rounds per Target	DODIC	Time (Seconds)		
	N/A	AB57 AB46	NO LIMIT		
<b>TOWER</b>	<b>SOLDIER ACTION</b>				
<b>CONDUCT OF THE RANGE</b>	<b>SECURE YOUR AMMUNITION AND MOVE TO YOUR FIRING POINT</b>	<b>Soldiers secure their weapon in a GREEN status, their training ammunition in four magazines, and move to the designated firing point.</b>			
<b>Once all firers are complete, conduct of the range continues.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, N/A – not applicable					

E-68. If the unit cannot complete the zero confirmation task during Table IV training, the unit must provide one each, five-round magazine to each firer. The firing order conducts the confirm zero at distance task prior to beginning Table V tasks. This may be done sequentially (recommended) or the unit may conduct all required zero confirmations prior to initiating Table V training.

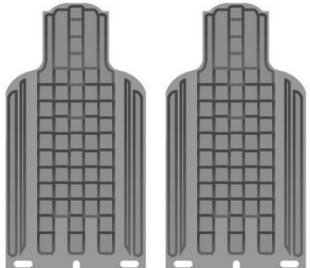
E-69. Units can use table E-41 to complete the confirmation at distance task. Firers must have one five-round magazine to conduct the event. Firers are in a green status at their assigned firing point.

**Table E-41. Table IV, engagement 7, confirmation at distance, conduct of fire example**

<i>Table IV, Engagement 7 – Zero Confirmation at Distance</i>					
 <b>300 meter</b> (Unit may select different zero range based on their SOP, TTP, or mission requirements).	<b>Zero</b>	<b>Target</b>	<b>Target Type</b>		
	1	E-1 or D-1	Silhouette, kneeling (bob-mode)		
	<b>Rounds per Engagement</b>	<b>DODIC</b>	<b>Time (Seconds)</b>		
	5	AB57	NO LIMIT		
<b>TOWER</b>		<b>SOLDIER ACTION</b>			
<b>WEAPONS SAFETY STATUS</b> <b>RED</b>	<b>GO TO PRONE MAKE READY</b>	Soldier moves to the PRONE supported position, establishes a good firing position, and loads one five-round magazine.			
<b>ALERT</b>	FIRERS				
<b>TARGET DESCRIPTION</b>	TROOP	Soldier acquires the zero confirmation target.			
<b>DIRECTION</b>	FRONT				
<b>RANGE</b>	THREE-HUNDRED	Soldier acquires the target and identifies the target's center of visible mass (known as CoVM).			
<b>CONTROL</b>	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE				
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	Soldier begins slow firing a five-round shot group, ensuring the same point of aim for each round.			
<b>ONCE ALL FIRERS ARE COMPLETE WITH THE FIVE-ROUND CONFIRMATION AT DISTANCE:</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.			
<b>WEAPONS SAFETY STATUS</b> <b>GREEN</b>	<b>GO GREEN SHOW CLEAR</b>	Soldiers clear their weapons, show clear to the lane safety.			
<b>Firer's should achieve four of five hits at distance to successfully complete confirmation at distance. The tower should identify any firer that has not met the confirmation standard and move those Soldiers to retraining location.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, SOP – standard operating procedure, TTP – tactics, techniques, and procedures					

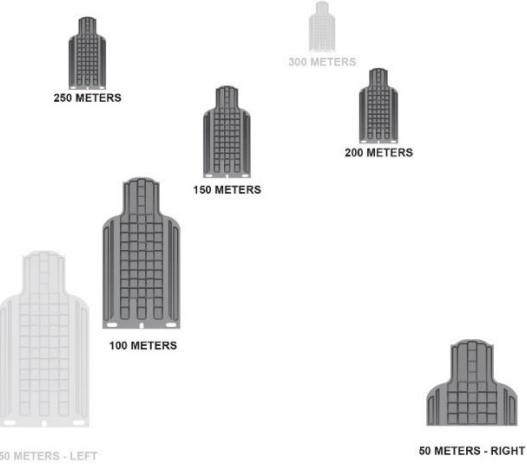
E-70. Once all firers have completed stage 3, they remain in place and await further instructions from the tower operator. The tower operator instructs them to reload and prepare for stage 4. Table E-42 shows the conduct of fire example for Table IV, stage 4.

**Table E-42. Table IV, engagement 8, application of hold-offs, conduct of fire example**

<i>Table IV, Engagement 8 – Application of Hold-Offs</i>					
 <b>100 and 200 meter</b>	<b>Stage</b>	<b>Target</b>	<b>Target Type</b>		
	<b>4</b>	E-1 or D-1	Silhouette, kneeling (bob-mode)		
	<b>Rounds per Engagement</b>	<b>DODIC</b>	<b>Time (Seconds)</b>		
	10	AB57	55		
<b>TOWER</b>		<b>SOLDIER ACTION</b>			
<b>WEAPONS SAFETY STATUS</b> RED	<b>MAKE READY</b>	Soldier remains in the PRONE supported position, establishes a good firing position, and loads one 10-round magazine.			
<b>ALERT</b>	FIRERS				
<b>TARGET DESCRIPTION</b>	TROOPS	Soldier acquires the 100 meter target.			
<b>DIRECTION</b>	FRONT				
<b>RANGE</b>	ONE-HUNDRED AND TWO HUNDRED	Soldier acquires the target and identifies the target's center of visible mass (known as CoVM).			
<b>CONTROL</b>	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE				
<b>EXECUTION</b>	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier begins slow firing a five-round shot group, applying the appropriate hold-off at the 100 meter target and again at the 200 meter target.			
<b>ONCE ALL FIRERS ARE COMPLETE WITH THE 10-ROUND APPLICATION OF HOLD-OFFS</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.			
<b>WEAPONS SAFETY STATUS</b> GREEN	GO GREEN SHOW CLEAR	Soldiers clear their weapons, show clear to the lane safety.			
<b>Firer's should achieve four of five hits at distance to successfully complete application of hold-offs. The tower should identify any firer that has not met the standard and move those Soldiers to retraining location.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, SOP – standard operating procedure, TTP – tactics, techniques, and procedures					

E-71. The following engagement sequence guide initiates the Table V tasks scenario. Tables E-43 through E-46, on pages E-65 through E-68, are the engagement sequences with a generic conduct of fire process for the tower operator.

**Table E-43. Table V, engagement 1 through 5, conduct of fire example**

Engagement 1 through 5 – Day, Prone, Unsupported					
	Engagement	Target	Target Type		
	1 through 5	E-1 F-1	Point		
	Rounds	DODIC	Time (Seconds)		
					
<p><b>TOWER</b></p>			<b>SOLDIER ACTION</b>		
<b>WEAPONS SAFETY STATUS RED</b>	<b>MAKE READY</b>	<b>Soldier assumes a STANDING UNSUPPORTED firing position and loads one 11-round* magazine.</b>			
ALERT	CONTACT				
<b>TARGET DESCRIPTION</b>	TROOPS				
<b>DIRECTION</b>	FRONT				
<b>RANGE</b>	MID-RANGE				
<b>METHOD</b>	NEAR TO FAR				
<b>CONTROL</b>	WEAPONS FREE WEAPONS FREE	Soldier moves the weapon from SAFE to FIRE, and begins the target acquisition process.			
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	Soldier engages the first target from the STANDING UNSUPPORTED firing position then goes to the PRONE UNSUPPORTED firing position. Soldier acquires, prioritizes, and engages targets with one round per target.			
<b>TOWER AWAITS COMPLETION OF ENGAGEMENT 5 THEN PROCEEDS IMMEDIATELY</b>					
<b>WEAPONS SAFETY STATUS REMAINS RED</b>					
<b>Note:</b> There is a 5-second delay between the first and second engagement to allow the Soldier to go to prone. There is a 2-second delay between all other engagements in this table. There is an 8-second delay at the end of the phase to support changing the magazine and changing the firing position. * DDI is randomly placed in one of the four magazines.					
<b>Legend:</b> DDI – drilled, dummy, inert, DODIC – Department of Defense identification code, m – meter					

**Table E-44 Table V, engagement 6 through 10, conduct of fire example**

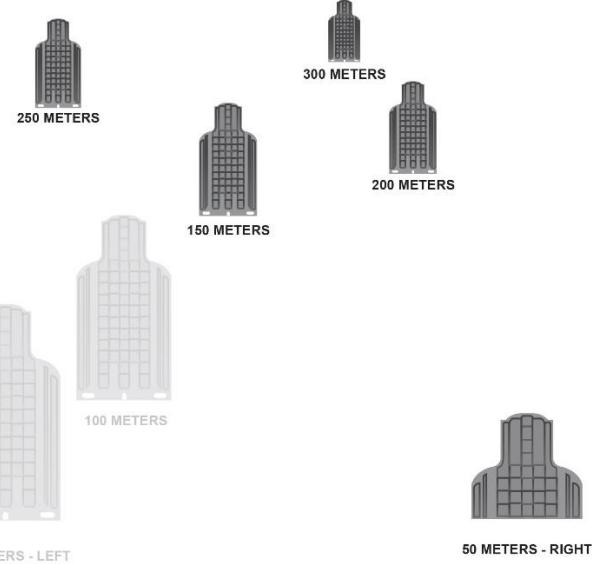
<i>Engagement 6 through 10 – Day, Prone, Supported</i>		
	Engagement	Target
	6 through 10	E-1
Rounds	DODIC	Time (Seconds)
1 magazine, 11 rounds*	AB57 (10) AB46 (1)*	46
TOWER	SOLDIER ACTION	
WEAPONS SAFETY STATUS RED	<i>Although the firer's bolt should be locked to the rear, the tower must treat all weapons as if in a RED status</i>	Soldier remains in the PRONE position, at the READY and may RELOAD or await instructions.
CONTROL	GO TO PRONE SUPPORTED  RELOAD	The Soldier conducts an emergency RELOAD and establishes a PRONE, SUPPORTED position and prepares to engage.
TOWER AWAITS THE END OF THE 8-SECOND TRANSITION THEN PROCEEDS		
WEAPONS SAFETY STATUS REMAINS RED		
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier acquires, prioritizes, and engages targets with one round per target.
TOWER AWAITS COMPLETION OF ENGAGEMENT 10 THEN PROCEEDS IMMEDIATELY		
WEAPONS SAFETY STATUS REMAINS RED		
<p><b>Note:</b> There is a 2-second delay between all engagements. There is an 8-second delay at the end of the phase to support changing the magazine and changing the firing position.</p> <p>* DDI is randomly placed in one of the four magazines.</p>		
<b>Legend:</b> DDI - drilled, dummy, inert, DODIC – Department of Defense identification code, m – meter		

Table E-45. Table V, engagement 11 through 14, conduct of fire example

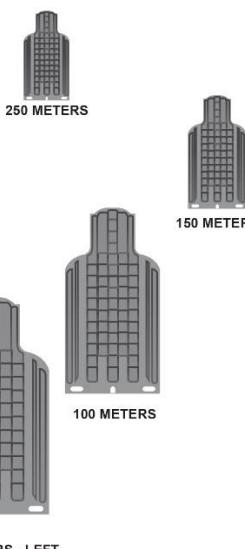
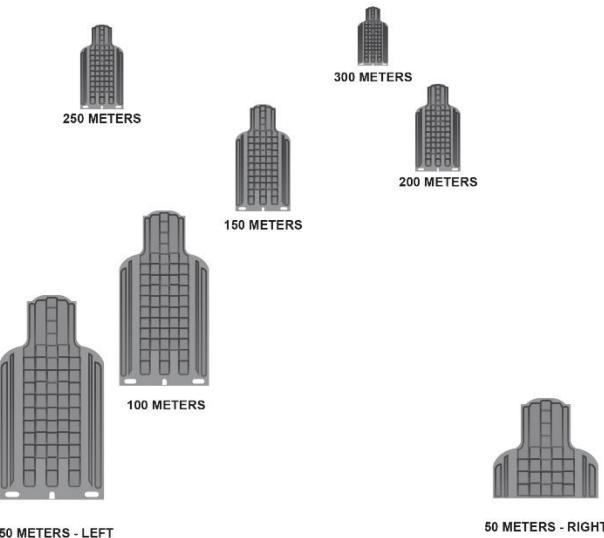
Engagement 11 through 14 – Kneeling, Supported		
	Engagement	Target
	11 through 14	E-1 F-1
	Rounds	DODIC
	1 magazine, 11 rounds*	AB57 (10) AB46 (1)*
		48
TOWER		SOLDIER ACTION
WEAPONS SAFETY STATUS RED	<i>Although the firer's bolt should be locked to the rear, the tower must treat all weapons as if in a RED status.</i>	
CONTROL	RELOAD FIGHT UP	The Soldier conducts an emergency RELOAD and assumes the KNEELING, SUPPORTED position.
TOWER AWAITS THE END OF THE 8-SECOND TRANSITION THEN PROCEEDS		
WEAPONS SAFETY STATUS REMAINS RED		
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier acquires, prioritizes, and engages targets with one round per target.
TOWER AWAITS COMPLETION OF ENGAGEMENT 14 THEN PROCEEDS		
WEAPONS SAFETY STATUS REMAINS RED		
<b>Note:</b> There is a 2-second delay between all engagements. There is an 8-second delay at the end of the phase to support changing the magazine and changing the firing position. * DDI is randomly placed in one of the four magazines.		
<b>Legend:</b> DDI – drilled, dummy, inert, DODIC – Department of Defense identification code, m – meter		

Table E-46. Table V, engagement 15 through 18, conduct of fire example

Engagement 15 through 18 – Standing, Supported					
		Engagement	Target		
		15 through 18	E-1 F-1		
		Rounds	DODIC		
		Time (Seconds)			
		1 magazine, 11 rounds*	AB57 (10) AB46 (1)*		
50 METERS - LEFT		40			
TOWER		SOLDIER ACTION			
WEAPONS SAFETY STATUS RED	Although the firer's bolt should be locked to the rear, the tower must treat all weapons as if in a RED status.	Soldier remains at the READY and may RELOAD or await instructions.			
CONTROL	RELOAD FIGHT UP	The Soldier conducts an emergency RELOAD and assumes the STANDING, SUPPORTED position.			
TOWER AWAITS THE END OF THE 8-SECOND TRANSITION THEN PROCEEDS					
WEAPONS SAFETY STATUS REMAINS RED					
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier acquires, prioritizes, and engages targets with one round per target.			
TOWER AWAITS COMPLETION OF ENGAGEMENT 18 THEN PROCEEDS					
WEAPONS SAFETY STATUS REMAINS RED					
<p><b>Note:</b> There is a 2-second delay between all engagements. This completes the day firing phase for Table V training. There are no alibis authorized. Any remaining ammunition is returned to the ammunition issue point for redistribution.</p> <p>* DDI is randomly placed in one of the four magazines.</p>					
<b>Legend:</b> DDI – drilled, dummy, inert, DODIC – Department of Defense identification code, m – meter					

E-72. A lane safety clears the firers upon their completion of Table V and collecting their dunnage. A lane safety verifies the clearing prior to the Soldiers moving from their firing point. Once the lane safety clears all Soldiers, the lane safety communicates the WSS to the tower operator and the tower operator issues an administrative command to move the completed Soldiers off the range. Table E-47 has an example of this command, also.

**Table E-47. Table V, completed firing order, conduct of the range example**

Firing Order Complete					
FIRING ORDER COMPLETE	Task	Target	Target Type		
	Completed Firing Order	N/A	N/A		
	Rounds per Target	DODIC	Time (Seconds)		
N/A		N/A	NO LIMIT		
TOWER	SOLDIER ACTION				
<b>TOWER MUST ASSUME ALL FIRERS' WEAPON SAFETY STATUS IS RED</b>					
TERMINATION	CEASE FIRE CEASE FIRE	Soldiers stop firing and place weapons on SAFE.			
WEAPONS SAFETY STATUS GREEN	GO GREEN GO GREEN ONCE VERIFIED BY THE RSO,	Soldiers clear their weapon and wait to be inspected by a lane safety.			
SECURE WEAPON					
CONDUCT OF THE RANGE	FIRERS SECURE YOUR DUNNAGE MOVE TO THE BASELINE.	Firers secure weapon, DDI, and ammunition dunnage and move to the designated location.			
<b>Once all firers return to the baseline, tower directs the firing order off the range.</b>					
<b>Legend:</b> DDI – drilled, dummy, inert, DODIC – Department of Defense identification code, N/A – not applicable, RSO – range safety officer					

E-73. As soon as the lane safety clears the completed firing order, the tower operator moves a new firing order into position and the process repeats itself until all firers have successfully completed Table V, Practice event. The tower operator moves all identified firers who require retraining to the appropriate concurrent training location.

## RIFLE AND CARBINE, TABLE VI, QUALIFICATION

E-74. Leaders use Table VI, Qualification, demonstrate the firer's proficiency at common engagement and tactical skills. Table VI tasks challenge firers with single and multiple stationary targets between 50 and 300 meters from the prone unsupported, prone supported, kneeling supported, and standing supported firing positions. Table VI tasks evaluate the firer's ability to engage single and multiple targets placed in a tactical array using their primary optic and applying the functional elements of the shot process. In a timed scenario, the firer demonstrates target prioritization and weapons manipulation. Table VI occurs on an ARF or comparable range facility.

### TASK, CONDITIONS, AND STANDARD

E-75. Table E-48 outlines the task, conditions, and standard for the conduct of Table VI tasks. The firer conducting the event should know the task, conditions, and standards and should explain them during the conduct of the range briefing.

**Table E-48. Rifle and Carbine, Table VI, Qualification task, conditions, and standard**

<b>Task:</b>	Engage and defeat single and multiple threats at varying ranges from supported and unsupported standing, kneeling, and prone firing positions, during day and limited visibility conditions using ball ammunition.
<b>Conditions:</b>	<p>Given the following:</p> <ul style="list-style-type: none"> <li>• Fully mission capable weapon as assigned on the master authorization list for the unit.</li> <li>• Full combat uniform, issued equipment, and protective mask.</li> <li>• Authorized range facility.</li> <li>• Authorized simulator system (Day Fire, CBRN; Night Fire and Night Fire, CBRN).</li> <li>• Full-scale, approved targetry in standard scenario engagement sequences.</li> <li>• Authorized ammunition.</li> </ul>
<b>Standard:</b>	<p>Demonstrate engagement proficiency by stage, such that:</p> <ul style="list-style-type: none"> <li>• Stage 1 – Day Fire – hit 57.5 percent (23 of 40) of all presented targets in the time allotted.</li> <li>• Stage 2 – Day Fire, CBRN – receive a GO by successfully hitting 70-percent (7 of 10) of targets presented while operating in a notional chemical environment.</li> <li>• Stage 3 – Night Fire – receive a GO by successfully hitting 70-percent (14 of 20) of targets presented during limited visibility conditions.</li> <li>• Stage 4 – Night Fire, CBRN – receive a GO by successfully hitting 70-percent (7 of 10) of targets presented while operating in a notional chemical environment.</li> </ul>
<b>Note.</b>	Units supported by an authorized simulation system conduct Day Fire, CBRN (Stage 2), Night Fire (Stage 3), and Night Fire, CBRN (Stage 4) portions of Table VI in their simulated system.
	Units that do not have an assigned authorized simulator system complete stage 2 through 4, live, under live-fire conditions, at the end of Stage 1, Day, Unlimited Visibility.
<b>Legend:</b>	CBRN – chemical, biological, radiological, and nuclear

E-76. Table E-49 shows the training event design template for Rifle and Carbine, Table VI, Qualification. Units conduct this event on an authorized live-fire facility, typically an ARF or comparable range facility. See TC 25-8 for additional information on authorized range facilities.

**Table E-49. Training event design template for Rifle and Carbine, Table VI, Qualification**

<b>Rifle and Carbine, Table VI, Qualification Live-Fire Proficiency Gate</b>					
EVENT NAME:	QUALIFICATION	ENVIRONMENT:		LIVE	1.0
WEAPON:	M4 / M16	CONDITIONS:		LIVE FIRE	
CATEGORY:	FOUNDATION	PRIMARY FACILITY:		ARF	DAYS REQUIRED
PUBLICATION:	TC 3-22.9	ALTERNATE FACILITY:		QTR	
REQUIRED:	YES	COMPONENT:	AC	RC	120 SOLDIERS
RECORD:	DA Form 7801	FREQUENCY:	2	1	
VALID FOR:	12 MONTHS	ANNUAL DAYS TOTAL:	2	1	THROUGHPUT
	<b>TABLE</b>				
	I	II	III	IV	V
	PMI&E	PLFS	DRILLS	BASIC	PRACTICE
	PRQ	PRQ	PRQ		
					REQUIRED
WHEN EXECUTED:					T-X
CONDEMNATION CRITERIA (CC)	RULE 1	RULE 2	RULE 3	RULE 4	RULE 5
	TIME	KEY LEADER TURNOVER	COMMANDER ASSESSMENT	SUBORDINATE ELEMENT PROFICIENCY	SPECIALTY PROFICIENCY
					STAFF SECTION PROFICIENCY
<b>Remarks:</b> Each Soldier assigned an individual weapon <i>must</i> successfully complete Table VI, Qualification tasks to meet their live-fire proficiency gate. The live-fire proficiency gate is required for any Soldier to participate in <i>any collective live-fire event</i> .					
<b>Note:</b> Table III tasks should be used as concurrent training on Tables IV, V, and VI while Soldiers are awaiting training in a firing order or between day and night phases.					
<b>Legend:</b> AC – active component (known as active duty), ARF – automated record fire range, DA – Department of the Army, PLFS – preliminary live-fire simulation, PMI&E – preliminary marksmanship instruction and evaluation, PRQ – prerequisite, QTR – qualification training range, QUAL – qualification, RC – Reserve Component (known as Reserves), TC – training circular, T-X – training event exercise,					

E-77. Due to the varying training environments required for Soldiers to demonstrate proficiency with their weapons, this course of fire is conducted in stages. Units that have access to an approved simulations system complete stage 2, stage 3, and stage 4 in that system. Only units without access to an approved simulator system receive the training ammunition to conduct all stages as live-fire scenarios during qualification. The stages are conditions based as described in table E-50.

**Table E-50. Stage descriptions, Rifle and Carbine, Table VI, Qualification**

<b>Stage</b>	<b>Conditions</b>	<b>Virtual</b>	<b>Live</b>	<b>Remarks</b>
<b>Stage 1</b>	Day Fire	N/A	P	All Soldiers complete stage 1 live under live-fire conditions.
<b>Stage 2</b>	Day Fire, CBRN	P	A	Completed after stage 1.
<b>Stage 3</b>	Night Fire	P	A	Completed after stage 2.
<b>Stage 4</b>	Night Fire, CBRN	P	A	Completed after stage 3.
<b>Note:</b> No firer may use virtual systems to complete Stage 1, Rifle and Carbine, Table VI, Qualification.				
<b>Legend:</b> A – authorized only when no approved simulator system is available to the unit, CBRN – chemical, biological, radiological, and nuclear, P – primary method of execution, NA – not applicable.				

## AMMUNITION

E-78. All Soldiers assigned a rifle or carbine on a unit MAL must complete Rifle and Carbine, Table VI, Qualification training. Soldiers conduct this event to demonstrate their proficiency to employ a rifle or carbine against mid-range threats.

E-79. To effectively plan and forecast for sufficient training ammunition, the unit uses the ammunition requirements listed in table E-51. Units identify the total number of firers and should plan for unscheduled firers and necessary retraining by increasing their forecasted training as appropriate.

**Table E-51. Rifle and Carbine, Table VI, Qualification ammunition requirements**

<b>Stage</b>	<b>Event</b>	<b>DODIC</b>	<b>Nomenclature</b>	<b>QTY</b>	<b>Remarks</b>
Table IV, Stage 3	Confirmation at Distance	AB57	CTG, 5.56mm, ball, M855A1 EPR	5	Conducted prior to Table VI on the ARF or comparable facility when range restrictions or line-of-sight issues prevent completion of the task during Table IV.
Table IV, Stage 4	Application of Hold-Offs	AB57	CTG, 5.56mm, ball, M855A1 EPR	10	Conducted prior to Table VI on the ARF or comparable facility when range restrictions or line-of-sight issues prevent completion of the task during Table IV.
<b>Note.</b> Table IV, Stages 3 and 4 must be completed before Table VI, Stage 1.					
<b>Stage 1</b>	Day Fire	AB57	CTG, 5.56mm, ball, M855A1 EPR	40	One round per target is required.
<b>Stage 2</b>	Day Fire, CBRN	AB57	CTG, 5.56mm, ball, M855A1 EPR	10	When authorized simulator system is available, no rounds are authorized.
<b>Stage 3</b>	Night Fire	AB57	CTG, 5.56mm, ball, M855A1 EPR	10	
		AB74	CTG, 5.56mm, tracer, M856A1, EPR	10	One round per target is required when live fire authorized.
<b>Stage 4</b>	Night Fire, CBRN	AB57	CTG, 5.56mm, ball, M855A1 EPR	5	
		AB74	CTG, 5.56mm, tracer, M856A1, EPR	5	

**Legend:** ARF – automated record fire range, CBRN – chemical, biological, radiological, and nuclear, CTG – cartridge, DODIC – Department of Defense identification code, EPR – enhanced performance round, mm – millimeter; QTY – quantity

E-80. Table VI is an automated timed event of four, live-fire phases. Leaders issue ammunition to every firer as shown in table E-52, on page E-74, to conduct the event to standard. Firers place these magazines in their magazine pouches. Staging or pre-positioning magazines is not authorized for the conduct of Table VI training.

**Table E-52. Rifle and Carbine, Table VI, Qualification ammunition breakdown**

<b>Stage</b>	<b>Event</b>	<b>Phase</b>	<b>Sequence Magazine</b>	<b>AB57 5.56mm Ball</b>	<b>AB74 5.56mm Tracer</b>	<b>Magazine Total Rounds</b>
<b>Stage 1</b>	<b>Day Fire</b>	Prone, unsupported	1	10 each		10 rounds
		Prone, supported	2	10 each		10 rounds
		Kneeling, supported	3	10 each		10 rounds
		Standing, supported	4	10 each		10 rounds
<b>Stage 2</b>	<b>Day Fire, CBRN</b>	Standing, unsupported	5	10 each		10 rounds
<b>Stage 3</b>	<b>Night Fire</b>	Kneeling, supported	1	5 each	5 each	10 rounds
		Standing, supported	2	5 each	5 each	10 rounds
<b>Stage 4</b>	<b>Night Fire, CBRN</b>	Standing, unsupported	3	5 each	5 each	10 rounds
<b>Note:</b> The DDI rounds may not be used during stage 1, day fire, of Table VI, Qualification. Stages 2, 3, and 4 are conducted live under live-fire conditions only when authorized (an approved simulator system is unavailable.) <b>Legend:</b> CBRN – chemical, biological, radiological, and nuclear; DDI – dummy, drilled, inert; mm – millimeter						

## RANGE FACILITIES

E-81. Table E-53 shows the Army-standard range facilities specifically designed to support the tasks listed in Rifle and Carbine, Table VI, Qualification. Units must refer to their installation's range operations SOPs or local training regulation to identify the weapon-specific range facilities. Units will use their RFMSS system for all scheduling.

**Table E-53. Rifle and Carbine, Table VI, Qualification authorized range facilities**

<i>Table VI</i>	<i>Targetry</i>	<i>Range Facility</i>	
		<i>ARF</i>	<i>QTR</i>
Qualification	E-type, E1, target, silhouette: plastic, polyethylene, kneeling  (NSN: 6920-00-071-4780)  F-type, F-1, target, silhouette: plastic, polyethylene, prone  (NSN 6920-00-071-4589)	P	A
	D-type, D1, target, silhouette: plastic, mannequin, kneeling  (NSN 6920-01-164-9625)  D-type, D-2, target, 3-Dimensional: plastic, mannequin, prone  (NSN 6920-01-387-6397)	P	A
<b>Legend:</b> A – alternate, ARF- automated record fire range, NSN – national stock number, P – primary, QTR – qualification training range			

## TARGETERY

E-82. Table VI tasks require silhouette targery, either E-type, F-type, or D-type targets on the range. The leader must confirm the type and capability of the range's targery, lifting mechanisms, simulators, and identify any unit requirements. During the preparation phase, leaders should be familiar with the targery and the sequence of the firing events. Figure E-22 shows the authorized targery used with Table VI.

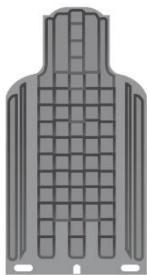
<b>E-1</b> <b>Target, silhouette: plastic, polyethylene, kneeling</b> <b>NSN 6920-00-071-4780</b>	<b>D-1</b> <b>Target, 3-dimensional: plastic, mannequin, kneeling</b> <b>NSN 6920-01-164-9625</b>
	
<b>F-1</b> <b>Target, silhouette: plastic, polyethylene, prone</b> <b>NSN 6920-00-071-4589</b>	<b>D-2</b> <b>Target, 3-dimensional: plastic, mannequin, prone</b> <b>NSN 6920-01-387-6397</b>
	
<p>Prone targets are used only on the 50-meter RIGHT emplacement.</p>	
<p><b>Notes:</b></p> <p>Use of E-1 or D-1 kneeling targets is at the discretion of the installation. Both represent dismounted, kneeling Infantry targets on small arms and maneuver facilities.</p> <p>Use F-1 or D-2 on the right 50-meter target emplacement only.</p> <p>Use of G-2 prone targets is not authorized.</p>	
<p><b>Legend:</b> NSN – national stock number</p>	

Figure E-22. Table VI, authorized target types

## STAGE 1 – DAY FIRE

E-83. Stage 1, Day Fire is a required event as part of rifle and carbine qualification. (See table E-53.) Leaders use stage 1 to evaluate the firer's ability to engage targets at varying ranges from common firing positions. At a minimum, Soldiers are required to fire this course of fire while wearing individual combat equipment. All Soldiers assigned a rifle and carbine must complete this course of fire as part of their qualification.

## AMMUNITION

E-84. To effectively plan and forecast for sufficient training ammunition, the unit uses the ammunition requirements listed in table E-54 and table E-55. Units need to identify the total number of firers and should plan for unscheduled firers and necessary retraining by increasing their forecasted training ammunition, as appropriate.

**Table E-54. Stage 1, Day Fire, ammunition requirements**

<b>Stage 1</b>	<b>DODIC</b>	<b>Nomenclature</b>	<b>Quantity</b>	<b>Remarks</b>
Day Fire	AB57	CTG, 5.56mm, BALL, M855A1 EPR	40	1 round is authorized for each target presented.

**Legend:** CTG – cartridge, DODIC – Department of Defense identification code, EPR – enhanced performance round, mm – millimeter

**Table E-55. Rifle and Carbine, Table VI, Qualification, Stage 1, Day Fire, ammunition breakdown**

<b>Stage 1</b>	<b>Phase</b>	<b>Sequence Magazine</b>	<b>AB57 5.56mm Ball</b>	<b>Magazine Total Rounds</b>
<b>Day Fire</b>	Prone, unsupported	1	10 each	10 rounds
	Prone, supported	2	10 each	10 rounds
	Kneeling, supported	3	10 each	10 rounds
	Standing, supported	4	10 each	10 rounds

**Legend:** mm – millimeter

## SCENARIO ENGAGEMENTS

E-85. Targets are presented to the firer in single and multiple target arrays. Targets are presented such that 90 percent of the target is clearly visible to the firer from the expected or planned firing position. Targets are exposed to the firer based on the number of targets presented during the engagement as follows:

- Single target engagements are exposed for 5-seconds.
- Double target engagements are exposed for 8-seconds.
- Triple target engagements are exposed for 12-seconds.
- Quadruple target engagements are exposed for 16-seconds.

E-86. There is a 3-second delay between each engagement. After each phase (prone unsupported, prone supported, kneeling supported, and standing supported), there is a 10-second transition delay providing the firer time to conduct an emergency reload and assume the next specified position. Table E-56 shows the scenario engagement sequence for Table VI.

**Table E-56. Rifle and Carbine Table VI, Qualification, Stage 1, Day Fire, engagement sequence**

<i>Table VI, Qualification, Engagements 1 through 5, React to Contact, Transition to Prone, Unsupported</i>			
<b>Engagement</b>	<b>Target Type</b>	<b>Range</b>	<b>Exposure Time</b>
1	F-type	50 m RIGHT	5 sec
2	E-type	100 m	5 sec
3	E-type	150 m	5 sec
4	E-type	50 m LEFT	12 sec
	E-type	150 m	
	E-type	200 m	
5	E-type	150 m	16 sec
	E-type	200 m	
	E-type	250 m	
	E-type	300 m	
Prone, Unsupported, Time per Firing Order Total			67 sec
<b>Note:</b> There is a 5-second delay between the first and second engagement to allow the Soldier to go to prone. There is a 3-second delay between all other engagements in this table. A 10-second delay time is incorporated at the end of engagement 5 to facilitate reload and firing position changes.			
<b>Legend:</b> m – meters; sec – seconds			

**Table E-56. Rifle and Carbine, Table VI, Qualification, Stage 1, Day Fire, engagement sequence (continued)**

<i>Table VI, Qualification, Engagements 6 through 10, Prone, Supported</i>			
<i>Engagement</i>	<i>Target Type</i>	<i>Range</i>	<i>Exposure Time</i>
6	E-type	100 m	5 sec
7	E-type	150 m	8 sec
	E-type	300 m	
8	E-type	200 m	8 sec
	E-type	300 m	
9	E-type	250 m	8 sec
	E-type	300 m	
10	E-type	150 m	12 sec
	E-type	250 m	
	E-type	300 m	
Prone, Supported, Time per Firing Order Total			63 sec
<b>Note:</b> There is a 3-second delay between all engagements. A 10-second delay time is incorporated at the end of engagement 10 to facilitate reload and firing position changes.			
<b>Legend:</b> m – meters; sec – seconds			

**Table E-56. Rifle and Carbine, Table VI, Qualification, engagement sequence (continued)**

<i>Table VI, Qualification, Engagements 11 through 14, Kneeling, Supported</i>			
<i>Engagement</i>	<i>Target Type</i>	<i>Range</i>	<i>Exposure Time</i>
11	E-type	50 m LEFT	12 sec
	E-type	100 m	
	E-type	200 m	
12	F-type	50 m RIGHT	8 sec
	E-type	200 m	
13	E-type	150 m	8 sec
	E-type	250 m	
14	E-type	100 m	12 sec
	E-type	150 m	
	E-type	200 m	
Kneeling, Supported, Time per Firing Order Total			59 sec
<b>Note:</b> There is a 3-second delay between all engagements. A 10-second delay time is incorporated at the end of engagement 14 to facilitate reload and firing position changes.			
<b>Legend:</b> m – meters; sec – seconds			

**Table E-56. Rifle and Carbine, Table VI, Qualification, engagement sequence (continued)**

<i>Table VI, Qualification, Engagements 15 through 18, Standing, Supported</i>			
<b>Engagement</b>	<b>Target Type</b>	<b>Range</b>	<b>Exposure Time</b>
15	E-type	50 m LEFT	8 sec
	E-type	100 m	
16	E-type	200 m	8 sec
	E-type	250 m	
17	F-type	50 m RIGHT	12 sec
	E-type	100 m	
	E-type	150 m	
18	E-type	100 m	12 sec
	E-type	200 m	
	E-type	250 m	
Standing, Supported, Time per Firing Order Total			49 sec
<b>Note:</b> There is a 3-second delay between all engagements.			
<b>Legend:</b> m – meters; sec – seconds			

E-87. Units use throughput schedules as a guide to portray the overall efficiency of the range facility when conducting the training event. The throughput schedule provides the overall throughput timetable, based on the time the unit requires to remove one firing order from the firing positions and move the next firing order forward. Table E-57, on page E-82, provides the Table VI, Qualification, Stage 1, Day Fire throughput schedule. Table E-58, on page E-83, provides the throughput schedule for completing stage 1 and stage 2 events sequentially.

E-88. Three general movement schedules are available to assist firing order placements on the range, 2 minutes, 5 minutes, and 10 minutes. The more proficient a unit is at operating a small arms range facility, the greater the firer throughput on the facility. This schedule does not include time required for retraining, refires, or firers who have persistent problems using a reticle.

**Table E-57. Stage 1, Day Fire, throughput time schedule**

<b>Phase</b>	<b>Time to Execute</b>		<b>Remarks</b>		
Prone, Unsupported	1:07 minute		Includes a 5 second delay between the first and second engagement and 3 seconds between all other engagements with 10 seconds transition between phases.		
Prone, Supported	1:03 minute				
Kneeling, Supported	0:59 seconds		Includes 3 seconds between engagements.		
Standing, Supported	0:49 seconds				
Total Time Per Firing Order	<b>3:58 minutes</b>		Does not include administrative time to move firing order to or from their respective firing positions.		
<b>Total Number of Firing Orders</b>	<b>Table VI Execution with Administration Time Between Firing Orders</b>			<b>Total Firer Throughput based on Range Configuration</b>	
	<b>2 min</b>	<b>5 min</b>	<b>10 min</b>	<b>16 Lane</b>	<b>32 Lane</b>
2	12 min	18 min	28 min	<b>32</b>	<b>64</b>
3	18 min	27 min	42 min	<b>48</b>	<b>96</b>
4	24 min	36 min	56 min	<b>64</b>	<b>128</b>
5	30 min	45 min	1 hr 10 min	<b>80</b>	<b>160</b>
6	36 min	54 min	1 hr 24 min	<b>96</b>	<b>192</b>
7	42 min	1 hr 3 min	1 hr 38 min	<b>112</b>	<b>224</b>
8	48 min	1 hr 12 min	1 hr 52 min	<b>128</b>	<b>256</b>
9	54 min	1 hr 21 min	2 hrs 6 min	<b>144</b>	<b>288</b>
10	60 min	1 hr 30 min	2 hrs 20 min	<b>160</b>	<b>320</b>
11	1 hr 6 min	1 hr 39 min	2 hrs 34 min	<b>176</b>	<b>352</b>
12	1 hr 12 min	1 hr 48 min	2 hrs 48 min	<b>192</b>	<b>384</b>
13	1 hr 18 min	1 hr 57 min	3 hrs 2 min	<b>208</b>	<b>416</b>
14	1 hr 24 min	2 hrs 6 min	3 hrs 16 min	<b>224</b>	<b>448</b>
15	1 hr 30 min	2 hrs 15 min	3 hrs 30 min	<b>240</b>	<b>480</b>
16	1 hr 35 min	2 hrs 23 min	3 hrs 43 min	<b>256</b>	<b>512</b>
17	1 hr 41 min	2 hrs 32 min	3 hrs 57 min	<b>272</b>	<b>544</b>
18	1 hr 47 min	2 hrs 41 min	4 hrs 11 min	<b>288</b>	<b>576</b>
19	1 hr 53 min	2 hrs 50 min	4 hrs 25 min	<b>304</b>	<b>608</b>
20	1 hr 59 min	2 hrs 59 min	4 hrs 39 min	<b>320</b>	<b>640</b>

**Legend:** hr – hour; hrs – hours, min – minutes

**Table E-58. Stage 1, Day Fire, and Stage 2, Day Fire, Chemical, Biological, Radiological, and Nuclear throughput time schedule**

<b>Phase</b>		<b>Time to Execute</b>		<b>Remarks</b>	
<b>Total Number of Firing Orders</b>	<b>Table VI Execution with Administration Time Between Firing Orders</b>			<b>Total Firer Throughput based on Range Configuration</b>	
	<b>2 min</b>	<b>5 min</b>	<b>10 min</b>	<b>16 Lane</b>	<b>32 Lane</b>
2	16 min	22 min	32 min	32	64
3	25 min	34 min	49 min	48	96
4	33 min	45 min	1 hr 5 min	64	128
5	41 min	56 min	1 hr 21 min	80	160
6	49 min	1 hr 7 min	1 hr 37 min	96	192
7	57 min	1 hr 18 min	1 hr 53 min	112	224
8	1 hr 5 min	1 hr 29 min	2 hrs 9 min	128	256
9	1 hr 14 min	1 hr 41 min	2 hrs 26 min	144	288
10	1 hr 22 min	1 hr 52 min	2 hrs 42 min	160	320
11	1 hr 30 min	2 hrs 3 min	2 hrs 58 min	176	352
12	1 hr 38 min	2 hrs 14 min	3 hrs 14 min	192	384
13	1 hr 46 min	2 hrs 25 min	3 hrs 30 min	208	416
14	1 hr 54 min	2 hrs 36 min	3 hrs 46 min	224	448
15	2 hrs 3 min	2 hrs 48 min	4 hrs 3 min	240	480
16	2 hrs 11 min	2 hrs 59 min	4 hrs 19 min	256	512
17	2 hrs 19 min	3 hrs 10 min	4 hrs 35 min	272	544
18	2 hrs 27 min	3 hrs 21 min	4 hrs 51 min	288	576
19	2 hrs 35 min	3 hrs 32 min	5 hrs 7 min	304	608
20	2 hrs 43 min	3 hrs 43 min	5 hrs 23 min	320	640

**Legend:** CBRN – chemical, biological, radiological, and nuclear, hr – hour; hrs – hours, min – minutes

## CONDUCT OF THE RANGE

E-89. Leaders instruct Soldiers on the objectives of Table VI tasks and the importance of the functional elements of the shot process. Table VI contains 18 firing tasks with an administrative pause programmed at the end of each phase to facilitate emergency reloading and changing positions.

E-90. Soldiers enter the range and move to their firing points. Once at the firing point, firers assume a standing firing position with rifle and carbines in a green status. Soldiers fire Table VI tasks from the ready at varying firing positions throughout the duration of the course of fires in the following manner:

- Tasks 1 through 5 are fired from the prone, unsupported firing position.
- Tasks 6 through 10 are fired from the prone, supported firing position.
- Tasks 11 through 14 are fired from the kneeling, supported firing position.
- Tasks 15 through 18 are fired from the standing, supported firing position.

E-91. Firers must hit a minimum of 23 of the 40 targets presented (57.5 percent) to successfully pass the event. All firers must also complete Table VI, Qualification, CBRN and Table VI, Qualification, Night tasks either in simulation (primary) or during live-fire (when authorized simulator systems are unavailable) as part of their overall rifle or carbine qualification. Leaders annotate the official record on DA Form 7801.

E-92. Soldiers begin Table VI tasks by moving into the firing position following administrative commands from the tower operator. The tower operator uses administrative commands to control the flow of the range, movement of personnel, and other command and control purposes. Table E-59 illustrates the administrative commands for moving a new firing order into position.

**Table E-59. Table VI, new firing order, conduct of the range example**

<i>New Firing Order, Conduct of the Range</i>					
<b>PRACTICE</b>	<b>Task</b>	<b>Target</b>	<b>Target Type</b>		
	New Firing Order	N/A	N/A		
	Rounds per Target	DODIC	Time (Seconds)		
	N/A	AB57	NO LIMIT		
<b>TOWER</b>	<b>SOLDIER ACTION</b>				
<b>CONDUCT OF THE RANGE</b>	<b>SECURE YOUR AMMUNITION AND MOVE TO YOUR FIRING POINT</b>	<b>Soldiers secure their weapon in a GREEN status, their training ammunition in four magazines, and move to the designated firing point.</b>			
<b>Once all firers are complete, conduct of the range continues.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, N/A – not applicable					

E-93. If the unit cannot complete the zero confirmation task during Table IV training, the unit must provide one five-round magazine to each firer. The firing order conducts the confirm zero at distance task prior to beginning Table VI tasks. This may be done sequentially (recommended), or the unit may conduct all required zero confirmations prior to initiating Table VI.

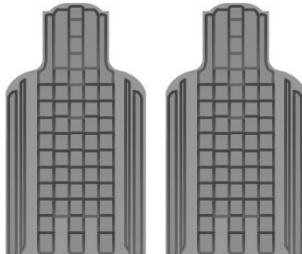
E-94. Units can use the following guide (table E-60) to complete the confirmation at distance task. Firers must have one five-round magazine to conduct the event. Firers are in a green status at their assigned firing point.

**Table E-60. Table IV, engagement 7, confirmation at distance, conduct of fire example**

<i>Table IV, Engagement 7 – Zero Confirmation at Distance</i>					
 <b>300 meter</b> (Unit may select different zero range based on their SOP, TTP, or mission requirements).	<b>Zero</b>	<b>Target</b>	<b>Target Type</b>		
	1	E-1 or D-1	Silhouette, kneeling (bob-mode)		
	<b>Rounds per Engagement</b>	<b>DODIC</b>	<b>Time (Seconds)</b>		
	5	AB57	NO LIMIT		
<b>TOWER</b>		<b>SOLDIER ACTION</b>			
<b>WEAPONS SAFETY STATUS RED</b>	<b>GO TO PRONE MAKE READY</b>	<b>Soldier moves to the PRONE supported position, establishes a good firing position and loads one five-round magazine.</b>			
<b>ALERT</b>	FIRERS				
<b>TARGET DESCRIPTION</b>	TROOP	Soldier acquires the zero confirmation target.			
<b>DIRECTION</b>	FRONT				
<b>RANGE</b>	THREE-HUNDRED				
<b>CONTROL</b>	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE	Soldier acquires the target and identifies the target's center of visible mass (known as CoVM).			
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	<b>Soldier begins slow firing a five-round shot group, ensuring the same point of aim for each round.</b>			
<b>ONCE ALL FIRERS ARE COMPLETE WITH THE FIVE-ROUND CONFIRMATION AT DISTANCE:</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.			
<b>WEAPONS SAFETY STATUS GREEN</b>	<b>GO GREEN SHOW CLEAR</b>	<b>Soldiers clear their weapons, show clear to the lane safety.</b>			
Firer's should achieve four of five hits at distance to successfully complete confirmation at distance. The tower should identify any firer that has not met the confirmation standard and move those Soldiers to retraining location.					
<b>Legend:</b> DODIC – Department of Defense identification code, SOP – standard operating procedure, TTP – tactics, techniques, and procedures					

E-95. Once all firers have completed stage 3, they remain in place and await further instructions from the tower operator. The tower operator instructs them to reload and prepare for stage 4. Table E-41 shows a conduct of fire example for Table IV, Stage 4 training. Table E-61 shows an example of the conduct of fire for Table IV, Stage 4.

**Table E-61. Table IV, engagement 8, application of hold-offs, conduct of fire example**

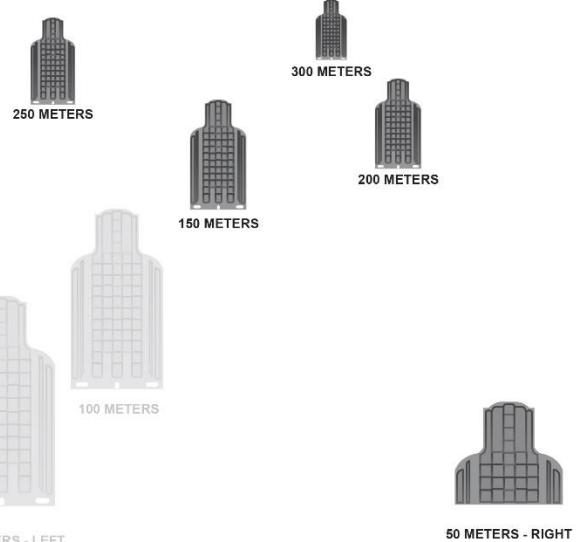
<i>Table IV, Engagement 8 – Application of Hold-Offs</i>					
 <b>100 and 200 meter</b>	<b>Stage</b>	<b>Target</b>	<b>Target Type</b>		
	4	E-1 or D-1	Silhouette, kneeling (bob-mode)		
	<b>Rounds per Engagement</b>	<b>DODIC</b>	<b>Time (Seconds)</b>		
	10	AB57	55		
<b>TOWER</b>		<b>SOLDIER ACTION</b>			
<b>WEAPONS SAFETY STATUS</b> <b>RED</b>	<b>MAKE READY</b>	Soldier remains in the PRONE supported position, establishes a good firing position, and loads one 10-round magazine.			
<b>ALERT</b>	FIRERS				
<b>TARGET DESCRIPTION</b>	TROOPS	Soldier acquires the 100 meter target.			
<b>DIRECTION</b>	FRONT				
<b>RANGE</b>	ONE-HUNDRED AND TWO HUNDRED	Soldier acquires the target and identifies the target's center of visible mass (known as CoVM).			
<b>CONTROL</b>	FIVE ROUNDS SLOW FIRE WEAPONS FREE WEAPONS FREE				
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	Soldier begins slow firing a five-round shot group, applying the appropriate hold-off at the 100 meter target and again at the 200 meter target.			
<b>ONCE ALL FIRERS ARE COMPLETE WITH THE 10-ROUND APPLICATION OF HOLD-OFFS</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	The firer's BOLT should be locked to the rear. Tower must assume all weapons are RED.			
<b>WEAPONS SAFETY STATUS</b> <b>GREEN</b>	<b>GO GREEN</b> <b>SHOW CLEAR</b>	Soldiers clear their weapons, show clear to the lane safety.			
<b>Firer's should achieve four of five hits at distance to successfully complete application of hold-offs. The tower should identify any firer that has not met the standard and move those Soldiers to retraining location.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, SOP – standard operating procedure, TTP – tactics, techniques, and procedures					

E-96. The following engagement sequence guide initiates the Table VI scenario. Tables E-62 through E-65, on pages E-87 through E-90, provide the engagement sequence with a generic conduct of fire process for the tower operator.

**Table E-62. Table VI, engagement 1 through 5, conduct of fire example**

<i>Engagement 1 through 5 – Day, Prone, Unsupported</i>					
	Engagement	Target	Target Type		
	1 through 5	E-1 F-1	Point		
	Rounds	DODIC	Time (Seconds)		
	1 magazine 10 rounds	AB57	67		
TOWER	<b>SOLDIER ACTION</b>				
<b>WEAPONS SAFETY STATUS RED</b>	<b>MAKE READY</b>	Soldier assumes a STANDING UNSUPPORTED firing position and loads one 10-round magazine.			
ALERT	FIRERS				
<b>TARGET DESCRIPTION</b>	TROOPS				
DIRECTION	FRONT				
RANGE	MID-RANGE				
METHOD	NEAR TO FAR				
CONTROL	WEAPONS FREE WEAPONS FREE	Soldier moves the weapon from SAFE to FIRE, and begins the target acquisition process.			
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	Soldier engages the first target from the STANDING UNSUPPORTED firing position then goes to the PRONE UNSUPPORTED firing position. Soldier acquires, prioritizes, and engages targets with one round per target.			
<b>TOWER AWAITS COMPLETION OF ENGAGEMENT 5 THEN PROCEEDS IMMEDIATELY</b>					
<b>WEAPONS SAFETY STATUS REMAINS RED</b>					
<b>Note:</b> There is a 5-second delay between the first and second engagement to allow the Soldier to go to prone. There is a 3-second delay between all other engagements in this table. There is a 10-second delay at the end of the phase to support changing the magazine and changing the firing position.					
<b>Legend:</b> DODIC – Department of Defense identification code					

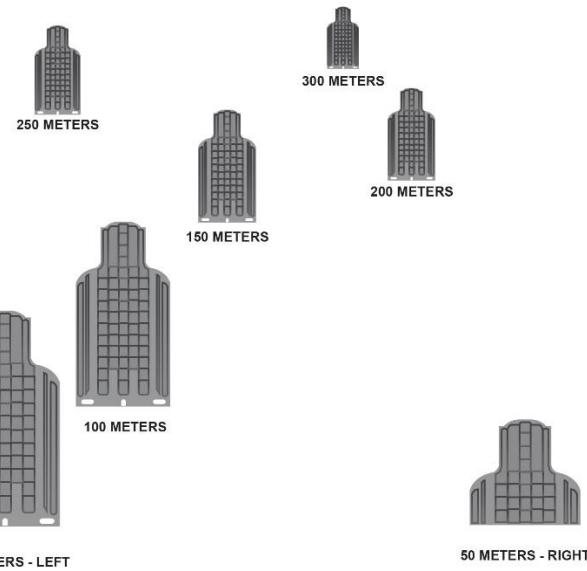
Table E-63. Table VI, engagement 6 through 10, conduct of fire example

<i>Engagement 6 through 10 – Day, Prone, Supported</i>			
	Engagement	Target	
	Rounds	DODIC	
	1 magazine, 10 rounds	AB57	63
TOWER		SOLDIER ACTION	
WEAPONS SAFETY STATUS RED	<i>Although the firer's bolt should be locked to the rear, the tower must treat all weapons as if in a RED status</i>	Soldier remains in the PRONE position, at the READY and may RELOAD or await instructions.	
CONTROL	GO TO PRONE SUPPORTED  RELOAD	The Soldier conducts an emergency RELOAD and establishes a PRONE, SUPPORTED position and prepares to engage.	
TOWER AWAITS THE END OF THE 10-SECOND TRANSITION THEN PROCEEDS			
WEAPONS SAFETY STATUS REMAINS RED			
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier acquires, prioritizes, and engages targets with one round per target.	
TOWER AWAITS COMPLETION OF ENGAGEMENT 10 THEN PROCEEDS IMMEDIATELY			
WEAPONS SAFETY STATUS REMAINS RED			
<p><b>Note:</b> There is a 3-second delay between all engagements. There is a 10-second delay at the end of the phase to support changing the magazine and changing the firing position.</p>			
<b>Legend:</b> DODIC – Department of Defense identification code			

**Table E-64. Table VI, engagement 11 through 14, conduct of fire example**

<i>Engagement 11 through 14 – Kneeling, Supported</i>		
	Engagement	Target
	11 through 14	E-1 F-1
	Rounds	DODIC
	1 magazine, 10 rounds	AB57
TOWER	<b>SOLDIER ACTION</b>	
WEAPONS SAFETY STATUS RED	<i>Although the firer's bolt should be locked to the rear, the tower must treat all weapons as if in a RED status.</i>	
CONTROL	RELOAD FIGHT UP	The Soldier conducts an emergency RELOAD and assumes the KNEELING, SUPPORTED position.
TOWER AWAITS THE END OF THE 10-SECOND TRANSITION THEN PROCEEDS		
WEAPONS SAFETY STATUS REMAINS RED		
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier acquires, prioritizes, and engages targets with one round per target.
TOWER AWAITS COMPLETION OF ENGAGEMENT 14 THEN PROCEEDS		
WEAPONS SAFETY STATUS REMAINS RED		
<b>Note:</b> There is a 3-second delay between all engagements. There is a 10-second delay at the end of the phase to support changing the magazine and changing the firing position.		
<b>Legend:</b> DODIC – Department of Defense identification code		

**Table E-65. Table VI, engagement 15 through 18, conduct of fire example**

<i>Engagement 15 through 18 – Standing, Supported</i>									
		Engagement	Target	Target Type					
		15 through 18	E-1 F-1	Point					
		Rounds	DODIC	Time (Seconds)					
		1 magazine, 10 rounds	AB57	49					
TOWER			SOLDIER ACTION						
WEAPONS SAFETY STATUS RED	<b>Although the firer's bolt should be locked to the rear, the tower must treat all weapons as if in a RED status.</b>		Soldier remains at the READY and may RELOAD or await instructions.						
CONTROL	RELOAD	The Soldier conducts an emergency RELOAD and assumes the STANDING, SUPPORTED position.							
FIGHT UP									
TOWER AWAITS THE END OF THE 10-SECOND TRANSITION THEN PROCEEDS									
WEAPONS SAFETY STATUS REMAINS RED									
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier acquires, prioritizes, and engages targets with one round per target.							
TOWER AWAITS COMPLETION OF ENGAGEMENT 18 THEN PROCEEDS									
WEAPONS SAFETY STATUS REMAINS RED									
<p><b>Note:</b> There is a 3-second delay between all engagements. This completes the day firing phase for Table VI. <i>There are no alibis authorized.</i> Any remaining ammunition is returned to the ammunition issue point for redistribution.</p>									
<p><b>Legend:</b> DODIC – Department of Defense identification code</p>									

E-97. A lane safety clears the firers upon their completion of Table VI tasks and collecting their dunnage. A lane safety verifies the clearing prior to the Soldiers moving from their firing point. Once the lane safety clears all Soldiers, the lane safety communicates the WSS to the tower operator and the tower operator issues an administrative command to move the completed Soldiers off the range. Table E-66 is an example of this command.

**Table E-66. Table VI, completed firing order, conduct of the range example**

<i>Firing Order Complete</i>					
<b>FIRING ORDER COMPLETE</b>	<b>Task</b>	<b>Target</b>	<b>Target Type</b>		
	Completed Firing Order	N/A	N/A		
	<b>Rounds per Target</b>	<b>DODIC</b>	<b>Time (Seconds)</b>		
		N/A	NO LIMIT		
<b>TOWER</b>		<b>SOLDIER ACTION</b>			
<b>TOWER MUST ASSUME ALL FIRERS' WEAPON SAFETY STATUS ARE RED</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	Soldiers stop firing and place weapons on SAFE.			
<b>WEAPONS SAFETY STATUS GREEN</b>	<b>GO GREEN</b> <b>GO GREEN</b>	Soldiers clear their weapon and wait to be inspected by a lane safety.			
	<b>ONCE VERIFIED BY THE RSO,</b>				
	<b>SECURE WEAPON</b>				
<b>CONDUCT OF THE RANGE</b>	FIRERS SECURE YOUR DUNNAGE  MOVE TO THE BASELINE.	Firers secure weapon and ammunition dunnage and move to the designated location.			
<b>Once all firers return to the baseline, tower directs the firing order off the range.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, N/A – not applicable, RSO – range safety officer					

E-98. As soon as the completed firing order is clear, a new firing order can be moved into position and the process is repeated until all firers have successfully completed Table VI, Qualification. Any identified firers who require retraining are moved to the appropriate concurrent training location.

## STAGE 2 – DAY FIRE, CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR

E-99. Stage 2, Day Fire, CBRN is a required event as part of rifle and carbine qualification. It is designed to train and evaluate the firer's ability to engage targets while operating with individual chemical protective equipment. At a minimum, Soldiers are required to fire this course of fire while wearing individual combat equipment and a protective mask with hood. All Soldiers assigned a rifle or carbine must complete this course of fire as part of their qualification based on their access to primary simulations systems (See table E-67, on page E-92.)

**Table E-67. Stage 2, Day Fire, Chemical, Biological, Radiological, and Nuclear, training environment requirement**

<i><b>Supported / Available System</b></i>	<i><b>Authorized As</b></i>	<i><b>Qualification Environment Required</b></i>	
		<i><b>Virtual</b></i>	<i><b>Live (Live-Fire)</b></i>
Soldier and squad virtual training system (S / SVT)	Primary	X	
Engagement skills trainer (EST)	Alternate	X	
None available	Live-Fire		X

E-100. All firers that have access to an authorized primary or alternate simulation system are not authorized training ammunition to conduct this event in a live environment under live-fire conditions. Units that have secured resources may use the live-fire CBRN qualification for record.

E-101. Stage 2 is only for units that do not have access to an authorized simulator system based on the system's basis of issue plan. Failure to coordinate for the appropriate system or failure to conduct the CBRN qualification in a designated and authorized system does not authorize the use of training ammunition for this event.

## **AMMUNITION**

E-102. To effectively plan and forecast for sufficient training ammunition, the unit will use the ammunition requirements listed in table E-68. Units need to identify the total number of firers and should plan for unscheduled firers and necessary retraining by increasing their forecasted training ammunition as appropriate. Firers place these magazines in their magazine pouches. Staging or pre-positioning magazines is not authorized for the conduct of Table VI, CBRN, Day tasks.

**Table E-68. Stage 2, Day Fire, Chemical, Biological, Radiological, and Nuclear, ammunition requirements**

<i><b>Stage 2</b></i>	<i><b>DODIC</b></i>	<i><b>Nomenclature</b></i>	<i><b>Quantity</b></i>	<i><b>Remarks</b></i>
Day Fire, CBRN	AB57	CTG, 5.56mm, ball, M855A1 EPR	10	One round is authorized for each target presented.

**Legend:** CBRN – chemical, biological, radiological, and nuclear, CTG – cartridge, DODIC – Department of Defense identification code, EPR – enhanced performance round, mm – millimeter

## SCENARIO ENGAGEMENTS

E-103. Targets are presented to the firer in single and multiple target arrays. Targets are presented such that 90-percent of the target is clearly visible to the firer from the expected or planned firing position. Targets are exposed to the firer based on the number of targets presented during the engagement as follows:

- Single target engagements are exposed for 5 seconds.
- Double target engagements are exposed for 8 seconds.

E-104. There is a 3-second delay during day fire between each engagement. Table E-69 shows the scenario engagement sequence for CBRN qualification. The leader annotates the official record of training on DA Form 7801.

**Table E-69. Stage 2, Day Fire, Chemical, Biological, Radiological, and Nuclear, target engagement sequence**

<i>Stage 2, Day Fire, CBRN, Standing, Unsupported</i>			
<i>Engagement</i>	<i>Target Type</i>	<i>Range</i>	<i>Exposure Time</i>
1	F-type	50 m RIGHT	5 sec
2	E-type	100 m	8 sec
	E-type	50 m LEFT	
3	F-type	50 m RIGHT	8 sec
	E-type	150 m	
4	E-type	200 m	5 sec
5	E-type	100 m	5 sec
6	E-type	150 m	5 sec
7	F-type	50 m RIGHT	8 sec
	E-type	50 m LEFT	
Standing, Unsupported, Time per Firing Order Total			62 sec
<b>Note:</b> There is a 3 second delay between all engagements.			
<b>Legend:</b> CBRN – chemical, biological, radiological, and nuclear; m – meters; sec – seconds			

E-105. Table E-70, on page E-94, provides the stage 2, day fire, CBRN throughput schedule. Table E-69 is a guide for units. The table portrays the overall efficiency of the range facility when conducting the training event. Table E-70 provides the overall throughput timetable based on the time the unit requires to remove one firing order from the firing positions and move the next firing order forward.

E-106. Three general movement schedules are available to administer firing order placements on the range, 2 minutes, 5 minutes, and 10 minutes. The more proficient a unit is at operating a small arms range facility, the greater the firer throughput on the facility. This schedule does not include time required for retraining, refires, or firers who have persistent problems using a reticle.

**Table E-70. Stage 2, Day Fire, Chemical, Biological, Radiological, and Nuclear throughput time schedule**

<b>Stage</b>	<b>Time to Execute</b>	<b>Remarks</b>			
Stage 2, Day, CBRN, standing, unsupported	1:02 minute	Includes 3 seconds between engagements.			
Total Number of Firing Orders	<i>Table VI Execution With Administration Time Between Firing Orders</i>			<i>Total Firer Throughput Based on Range Configuration</i>	
	<b>2 min</b>	<b>5 min</b>	<b>10 min</b>	<b>16 Lane</b>	<b>32 Lane</b>
<b>2</b>	6 min	12 min	22 min	<b>32</b>	<b>64</b>
<b>3</b>	10 min	19 min	34 min	<b>48</b>	<b>96</b>
<b>4</b>	13 min	25 min	45 min	<b>64</b>	<b>128</b>
<b>5</b>	16 min	31 min	56 min	<b>80</b>	<b>160</b>
<b>6</b>	19 min	37 min	1 hr 7 min	<b>96</b>	<b>192</b>
<b>7</b>	22 min	43 min	1 hr 18 min	<b>112</b>	<b>224</b>
<b>8</b>	26 min	50 min	1 hr 30 min	<b>128</b>	<b>256</b>
<b>9</b>	29 min	56 min	1 hr 41 min	<b>144</b>	<b>288</b>
<b>10</b>	32 min	1 hr 2 min	1 hr 52 min	<b>160</b>	<b>320</b>
<b>11</b>	35 min	1 hr 8 min	2 hrs 3 min	<b>176</b>	<b>352</b>
<b>12</b>	38 min	1 hr 14 min	2 hrs 14 min	<b>192</b>	<b>384</b>
<b>13</b>	42 min	1 hr 21 min	2 hrs 26 min	<b>208</b>	<b>416</b>
<b>14</b>	45 min	1 hr 27 min	2 hrs 37 min	<b>224</b>	<b>448</b>
<b>15</b>	48 min	1 hr 33 min	2 hrs 48 min	<b>240</b>	<b>480</b>
<b>16</b>	51 min	1 hr 39 min	2 hrs 59 min	<b>256</b>	<b>512</b>
<b>17</b>	54 min	1 hr 45 min	3 hrs 10 min	<b>272</b>	<b>544</b>
<b>18</b>	58 min	1 hr 52 min	3 hrs 22 min	<b>288</b>	<b>576</b>
<b>19</b>	1 hr 1 min	1 hr 58 min	3 hrs 33 min	<b>304</b>	<b>608</b>
<b>20</b>	1 hr 4 min	2 hrs 4 min	3 hrs 44 min	<b>320</b>	<b>640</b>

**Legend:** CBRN – chemical, biological, radiological, and nuclear, hr – hour; hrs – hours, min – minutes

## CONDUCT OF THE RANGE

E-107. Leaders instruct Soldiers on the objectives of day fire, CBRN and the importance of the functional elements of the shot process. Units conduct the elements of Table VI, Qualification, Day Fire, CBRN in a single scenario, containing single and double threat presentations. Firers must hit a minimum of 7 of the 10 targets presented (70-percent) to successfully pass this table (receive a GO).

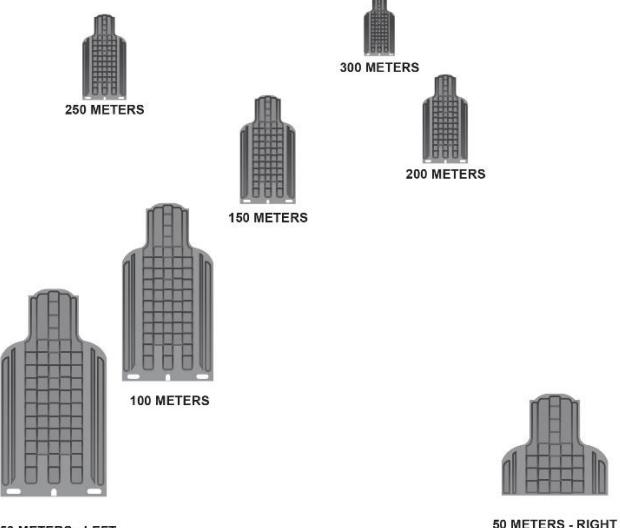
E-108. Soldiers begin day fire, CBRN by moving into the firing position following administrative commands from the tower operator. Soldiers enter the range and move to their firing points. Once at the firing point, firers assume a standing, unsupported firing position. Firers fire the tasks from the ready throughout the duration of the course of fire in Table VI, Qualification, Day Fire, CBRN. Table E-71 is an example of the administrative commands for moving a new firing order into position.

**Table E-71. Stage 2, Day Fire, Chemical, Biological, Radiological, and Nuclear, new firing order, conduct of the range example**

<i>New Firing Order, Conduct of the Range</i>						
 <b>CBRN</b>	<b>Engagement</b>	<b>Target</b>	<b>Target Type</b>			
	New Firing Order	N/A	N/A			
	Rounds per Target	DODIC	Time (Seconds)			
	N/A	AB57	NO LIMIT			
<b>TOWER</b>	<b>SOLDIER ACTION</b>					
<b>CONDUCT OF THE RANGE</b> FIRERS, SECURE YOUR WEAPON AND AMMUNITION ONCE COMPLETE, MOVE TO YOUR FIRING POINT	Soldiers secure their weapon, ammunition, and chemical protective mask and move to the designated firing point.					
<b>ONCE FIRERS ARE SET AT THEIR FIRING POINT, THE TOWER CONTINUES.</b>						
<b>CONDUCT OF THE RANGE</b> FIRERS, CHEMICAL AGENTS HAVE BEEN REPORTED IN YOUR AREA <b>GAS GAS GAS</b>	 Soldiers don their protective equipment.					
<b>ONCE ALL FIRERS HAVE COMPLETED DONNING PROTECTIVE GEAR, THE TOWER CONTINUES.</b>						
<b>Legend:</b> CBRN – chemical, biological, radiological, and nuclear, DODIC – Department of Defense identification code, N/A – not applicable						

E-109. Once the tower operator confirms all firers are at the appropriate firing point and in the proper MOPP level, the tower operator proceeds to the first engagement. Table VI, Qualification, CBRN, has ten engagements that use two, 10-round magazines. Table E-72 and Table E-73 on page E-97 provides the commands for tasks 1 through 7.

**Table E-72. Stage 2, Day Fire, Chemical, Biological, Radiological, and Nuclear, conduct of fire**

<i>Stage 2, Day Fire, CBRN, Standing, Unsupported</i>					
	Engagement	Target	Target Type		
	1 to 7	E-1 F-1	Point		
	Rounds per Target	DODIC	Time (Seconds)		
	1	AB57 (10)	62		
TOWER	SOLDIER ACTION				
WEAPONS SAFETY STATUS RED	FIRERS MAKE READY	Soldier assumes the STANDING UNSUPPORTED firing positon, loads one 10-round magazine, ensures the weapon is on SAFE, and remains at the READY.			
ALERT	CONTACT				
TARGET DESCRIPTION	MULTIPLE TROOPS				
DIRECTION	FRONT				
RANGE	MID-RANGE				
METHOD	NEAR TO FAR				
CONTROL	WEAPONS FREE WEAPONS FREE	Soldier moves the weapon from SAFE to FIRE, and begins the target acquisition process.			
EXECUTION	ENGAGE WHEN POSITIVELY IDENTIFIED	Soldier acquires targets, prioritizes targets, and engages targets with one round per target.			
ONCE ALL FIRERS ARE COMPLETE, TOWER CONTINUES.					
WEAPONS SAFETY STATUS REMAINS RED					
<b>Note:</b> There is a 3-second delay between all engagements.					
<b>Legend:</b> CBRN – chemical, biological, radiological, and nuclear, DODIC – Department of Defense identification code					

**Table E-73. Stage 2, Day Fire, Chemical, Biological, Radiological, and Nuclear, completed firing order, conduct of the range example**

Completed Firing Order, Conduct of the Range					
 <b>CBRN</b>	Engagement	Target	Target Type		
	Completed Firing Order	N/A	N/A		
	Rounds per Target	DODIC	Time (Seconds)		
<b>TOWER</b>	N/A	N/A	NO LIMIT		
	<b>SOLDIER ACTION</b>				
<b>TOWER MUST ASSUME ALL FIRERS WEAPONS SAFETY STATUS IS RED</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	Soldiers stop firing and place weapons on SAFE.			
<b>WEAPONS SAFETY STATUS GREEN</b>	GO GREEN GO GREEN	Soldiers clear their weapon and wait to be inspected by a lane safety.			
<b>ONCE TOWER CONFIRMS ALL WEAPONS ARE GREEN AND CLEAR, TOWER CONTINUES</b>					
<b>CONDUCT OF THE RANGE</b>	ALL CLEAR ALL CLEAR	Firers unmask, secure their weapon, ammunition, and dunnage.	Once complete, they move to the range's entry control point.		
	SECURE YOUR DUNNAGE  MOVE TO THE ENTRY CONTROL POINT				
<b>Tower waits for all Soldiers to reach the entry control point (ECP) prior to moving the next firing order into position.</b>					
<b>Legend:</b> CBRN – chemical, biological, radiological, and nuclear, DODIC – Department of Defense identification code, N/A – not applicable					

E-110. A lane safety clears the firers upon their completion of stage 2, day fire, CBRN and collecting their dunnage from the firing position. The RSO or lane safety verifies weapons cleared prior to the Soldier moving from their firing point. Once the lane safety clears all Soldiers, the lane safety communicates the green weapons safety status to the tower operator. The tower operator then issues an administrative command directing the completed Soldiers to move off the range.

### STAGE 3 – NIGHT FIRE

E-111. Stage 3, Rifle and Carbine, Table VI, Qualification, Night Fire trains the firer to engage targets during periods of limited visibility while wearing night vision goggles. At a minimum, Soldiers are required to fire this course of fire while wearing individual combat equipment and their assigned night vision device. Targets are placed in a tactical array at close quarter's distances.

E-112. All Soldier's assigned a rifle or carbine must complete this course of fire as part of their qualification based on their access to primary simulations systems. (See table E-74, on page E-98.)

**Table E-74. Rifle and Carbine, Table VI, Qualification, Night Fire, execution based on virtual system availability**

Supported / Available System	Authorized As	Environment Training Conducted	
		Virtual	Live (Live-Fire)
Soldier and squad virtual training system (S / SVT)	Primary	X	
Engagement skills trainer (EST)	Alternate	X	
None available	None		X

**AMMUNITION**

E-113. To effectively plan and forecast for sufficient training ammunition, the unit uses the ammunition requirements listed in tables E-75 and E-76. Units need to identify the total number of firers and should plan for unscheduled firers and necessary retraining by increasing their forecasted training ammunition as appropriate. Firers place these magazines in their magazine pouches. Staging or pre-positioning magazines is not authorized for the conduct of Table VI, Night Fire.

**Table E-75. Rifle and Carbine, Table VI, Night Fire ammunition requirements**

Training Event	DODIC	Nomenclature	Quantity	Remarks
Qualification, Night Fire	AB57	CTG, 5.56mm, ball, M855A1 EPR	10	One round is authorized for each target presented.
	AB74	CTG, 5.56mm, tracer, M856A1, EPR	10	

**Legend:** CTG – cartridge, DODIC – Department of Defense identification code, EPR – enhanced performance round, mm – millimeter

**Table E-76. Rifle and Carbine, Table VI, Qualification, Night Fire, ammunition breakdown**

Phase	Sequence / Magazine	AB57 5.56mm, Ball	AB74 5.56mm Tracer	Magazine Total Rounds
Kneeling, supported	1	5 each	5 each	10 rounds
Kneeling, supported	2	5 each	5 each	10 rounds
<b>Note:</b> Both magazines contain 5 each AB57 and 5-each AB74 tracer rounds.				
<b>Legend:</b> mm - millimeter				

## SCENARIO ENGAGEMENTS

E-114. Targets are presented to the firer in single and multiple target arrays. Targets are presented such that 90 percent of the target is clearly visible to the firer from the expected or planned firing position. Targets are exposed to the firer based on the number of targets presented during the engagement as follows:

- Single target engagements are exposed for 8 seconds.
- Double target engagements are exposed for 12 seconds.
- Triple target engagements are exposed for 16 seconds.

E-115. There is a 5-second delay between each engagement. After the initial phase, there is a 15-second transition delay providing the firer with the time to conduct an emergency reload and make ready. Table E-77 shows the scenario engagement sequence for night fire qualification.

**Table E-77. Stage 3, Night Fire, target engagement sequence**

<i>Rifle and Carbine, Table VI, Qualification, Stage 3, Night Fire, Kneeling, Supported</i>			
<i>Engagement</i>	<i>Target Type</i>	<i>Range</i>	<i>Exposure Time</i>
1	F-type	50 m RIGHT	8 sec
2	E-type	50 m LEFT	8 sec
3	F-type	50 m RIGHT	8 sec
4	E-type	50 m LEFT	12 sec
	E-type	100 m	
5	E-type	50 m LEFT	12 sec
	E-type	100 m	
6	F-type	50 m RIGHT	16 sec
	E-type	50 m LEFT	
	E-type	100 m	
Prone, Unsupported, Time per Firing Order Total			104 seconds
<b>Note:</b> There is a 5-second delay between all engagements. A 15 second delay time is incorporated at the end of engagement 6 to facilitate magazine changes.			
<b>Legend:</b> m – meters; sec – seconds			

**Table E-77. Stage 3, Night Fire, target engagement sequence (continued)**

<i>Rifle and Carbine, Table VI, Qualification, Stage 3, Night Fire, Kneeling, Supported, continued</i>			
<b>Engagement</b>	<b>Target Type</b>	<b>Range</b>	<b>Exposure Time</b>
7	F-type	50 m RIGHT	12 sec
	E-type	50 m LEFT	
8	E-type	50 m LEFT	12 sec
	E-type	100 m	
9	F-type	50 m RIGHT	16 sec
	E-type	50 m LEFT	
	E-type	100 m	
10	F-type	50 m RIGHT	16 sec
	E-type	50 m LEFT	
	E-type	100 m	
Prone, Unsupported, Time per Firing Order Total			71 seconds
<b>Note:</b> There is a 5-second delay between all engagements.			
<b>Legend:</b> m – meters; sec – seconds			

E-116. Table E-78 is the Table VI, Qualification, Night Fire throughput schedule. Table E-78 is a guide for units. The table portrays the overall efficiency of the range facility when conducting the training event. Table E-78 provides the overall throughput timetable based on the time the unit requires to remove one firing order from the firing positions and move the next firing order forward.

E-117. Three general movement schedules are available to administer firing order placements on the range, 2 minutes, 5 minutes, and 10 minutes. The more proficient a unit is at operating a small arms range facility, the greater the firer throughput on the facility. The schedule does not include time required for retraining, refires, or firers who have persistent problems using a reticle.

**Table E-78. Stage 3, Night Fire and Stage 4, Night Fire, Chemical, Biological, Radiological, and Nuclear throughput time schedule**

<b>Phase</b>	<b>Time to Execute</b>	<b>Remarks</b>			
Stage 3, Night Fire, kneeling, supported	1:44 minute	Includes 5 seconds between engagements and 15 seconds transition to next phase.			
Stage 3, Night Fire, kneeling, supported	1:11 minute				
Stage 4, Night Fire, CBRN, standing, unsupported	2:08 minute	Includes 1 minute transition to CBRN.			
Total Time Per Firing Order	<b>5:03 minutes</b>	Does not include administrative time to move firing order to or from their respective firing positions.			
Total Number of Firing Orders	<i>Night Fire Execution With Administration Time Between Firing Orders</i>			<i>Total Firer Throughput Based on Range Configuration</i>	
	<b>2 min</b>	<b>5 min</b>	<b>10 min</b>	<b>16 Lane</b>	<b>32 Lane</b>
<b>2</b>	14 min	20 min	30 min	<b>32</b>	<b>64</b>
<b>3</b>	21 min	30 min	45 min	<b>48</b>	<b>96</b>
<b>4</b>	28 min	40 min	1 hr 0 min	<b>64</b>	<b>128</b>
<b>5</b>	35 min	50 min	1 hr 15 min	<b>80</b>	<b>160</b>
<b>6</b>	42 min	1 hr 0 min	1 hr 30 min	<b>96</b>	<b>192</b>
<b>7</b>	49 min	1 hr 10 min	1 hr 45 min	<b>112</b>	<b>224</b>
<b>8</b>	56 min	1 hr 20 min	2 hrs 0 min	<b>128</b>	<b>256</b>
<b>9</b>	1 hr 3 min	1 hr 30 min	2 hrs 15 min	<b>144</b>	<b>288</b>
<b>10</b>	1 hr 11 min	1 hr 41 min	2 hrs 31 min	<b>160</b>	<b>320</b>
<b>11</b>	1 hr 18 min	1 hr 51 min	2 hrs 46 min	<b>176</b>	<b>352</b>
<b>12</b>	1 hr 25 min	2 hrs 1 min	3 hrs 1 min	<b>192</b>	<b>384</b>
<b>13</b>	1 hr 32 min	2 hrs 11 min	3 hrs 16 min	<b>208</b>	<b>416</b>
<b>14</b>	1 hr 39 min	2 hrs 21 min	3 hrs 31 min	<b>224</b>	<b>448</b>
<b>15</b>	1 hr 46 min	2 hrs 31 min	3 hrs 46 min	<b>240</b>	<b>480</b>
<b>16</b>	1 hr 53 min	2 hrs 41 min	4 hrs 1 min	<b>256</b>	<b>512</b>
<b>17</b>	1 hr 60 min	2 hrs 51 min	4 hrs 16 min	<b>272</b>	<b>544</b>
<b>18</b>	2 hrs 7 min	3 hrs 1 min	4 hrs 31 min	<b>288</b>	<b>576</b>
<b>19</b>	2 hrs 14 min	3 hrs 11 min	4 hrs 46 min	<b>304</b>	<b>608</b>
<b>20</b>	2 hrs 21 min	3 hrs 21 min	5 hrs 1 min	<b>320</b>	<b>640</b>
<b>Note:</b> This throughput schedule includes Stage 4, Night Fire, CBRN, for planning purposes to capture the full night fire requirement.					
<b>Legend:</b> CBRN – chemical, biological, radiological and nuclear; hr – hour; hrs – hours, min – minutes					

## CONDUCT OF THE RANGE

E-118. Leaders instruct Soldiers instructed on the objectives of stage 3, night fire and the importance of the functional elements of the shot process. Units conduct Table VI, Qualification, Stage 3, Night Fire tasks in two administrative and 10 firing tasks. Firers must hit a minimum of 14 of the 20 targets presented (70 percent) to successfully pass.

E-119. Soldiers begin Table VI, Night by moving into the firing position following administrative commands from the tower operator. Soldiers enter the range and move to their firing points. Once the Soldiers are at the firing point, they assume a standing firing position with rifles or carbines in a green status. Soldiers fire from the ready throughout the duration of the course of fire according to Table VI, Qualification, Night Fire tasks.

E-120. The tower operator uses administrative commands to control the flow of the range, movement of personnel, and other command and control purposes. Table E-79 provides an example of the administrative commands for moving a new firing order into position.

**Table E-79. Stage 3, Night Fire, new firing order, conduct of the range example**

<i>New Firing Order, Conduct of the Range</i>					
NIGHT FIRE	Engagement	Target	Target Type		
	New Firing Order	N/A	N/A		
	Rounds per Target	DODIC	Time (Seconds)		
TOWER	SOLDIER ACTION				
FIRERS					
CONDUCT OF THE RANGE	SECURE YOUR WEAPON AND AMMUNITION  ONCE COMPLETE MOVE TO YOUR FIRING POINT	Soldiers secure their weapon, ammunition, and night vision equipment and move to the designated firing point.			
<b>ONCE ALL FIRERS ARE AT THEIR FIRING POSITIONS, THE TOWER CONTINUES.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, N/A – not applicable					

E-121. As soon as the tower confirms all firers are at the appropriate firing point, the tower operator proceeds to the next engagement. Table VI, Qualification, Stage 3, Night Fire, has ten firing tasks. Table E-80 lists the commands for tasks 1 through 10. The amount of ammunition that is required to fire engagement 1 through 10 of Table VI, Qualification, Night Fire tasks is two, 10-round magazines.

**Table E-80. Stage 3, Night Fire engagement 1 through 6**

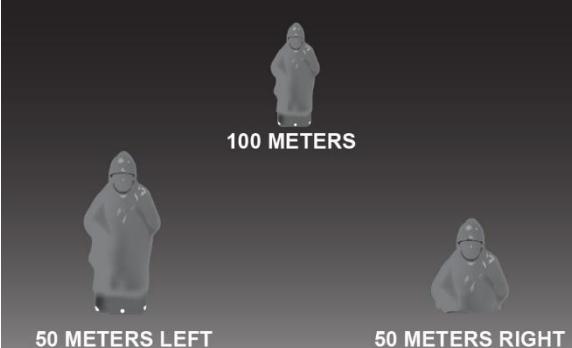
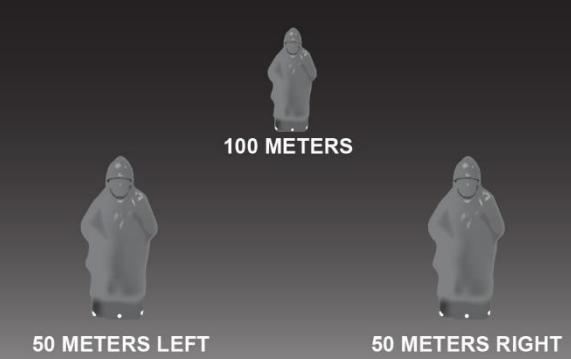
<i>Stage 3, Night Fire, Kneeling, Supported</i>					
 <p>100 METERS 50 METERS LEFT      50 METERS RIGHT</p>	Engagement	Target	Target Type		
	1 to 6	E-1 F-1	Point		
	Rounds per Target	DODIC	Time (Minutes)		
	1	AB57 (5) AB74 (5)	1:44		
TOWER		SOLDIER ACTION			
<b>FIRERS,</b> WEAPONS SAFETY STATUS RED		SECURE ONE TEN-ROUND MAGAZINE  <b>MAKE READY</b>			
ALERT	CONTACT				
TARGET DESCRIPTION	MULTIPLE TROOPS				
DIRECTION	FRONT				
RANGE	MID-RANGE				
METHOD	NEAR TO FAR				
CONTROL	WEAPONS FREE WEAPONS FREE	Soldier moves the weapon from SAFE to FIRE, and begins the target acquisition process.			
EXECUTION	ENGAGE WHEN POSITIVELY IDENTIFIED	Soldier acquires, prioritizes, and engages targets with one round per target.			
ONCE ALL FIRERS ARE COMPLETE, TOWER CONTINUES.					
<b>Note:</b> There is a 5-second delay between all engagements. There is a 15-second delay at the end of the phase to support changing the magazine.					
<b>Legend:</b> DODIC – Department of Defense identification					

Table E-80. Stage 3, Night Fire, conduct of fire (continued)

<i>Stage 3, Night Fire, Kneeling, Supported</i>									
		Engagement	Target	Target Type					
		8 to 10	E-1 F-1	Point					
	Rounds per Target	DODIC	Time (Minutes)						
		1	AB57 (5) AB74 (5)	1:11					
TOWER		SOLDIER ACTION							
WEAPONS SAFETY STATUS RED	<i>Although the firer's bolt should be locked to the rear, the tower must treat all weapons as if in a RED status</i>		Soldier remains in the KNEELING, SUPPORTED position at the READY and may RELOAD or await instruction.						
CONTROL	RELOAD	The Soldier conducts an emergency RELOAD and prepares to engage.							
TOWER AWAITS THE END OF THE 15-SECOND TRANSITION THEN PROCEEDS									
WEAPONS SAFETY STATUS REMAINS RED									
EXECUTION	ENGAGE WHEN POSITIVELY IDENTIFIED	Soldier acquires targets, prioritizes targets, and engages targets with one round per target.							
ONCE ALL FIRERS ARE COMPLETE, TOWER CONTINUES.									
WEAPONS SAFETY STATUS REMAINS RED									
<b>Note:</b> There is a 5-second delay between all engagements.									
<b>Legend:</b> DODIC – Department of Defense identification code									

E-122. Upon completion of Table VI, Qualification, Stage 3, Night Fire tasks and collecting their dunnage, a lane safety verifies that firers are cleared prior to moving from the firing point. Once all Soldiers have cleared, the lane safety communicates the WSS to the tower operator and the tower operator issues an administrative command moving the Soldiers off the range. Table E-81 is an example of this command.

**Table E-81. Stage 3, Night Fire, completed firing order, conduct of the range example**

<i>Completed Firing Order, Conduct of the Range</i>					
<b>NIGHT FIRE</b>	<b>Engagement</b>	<b>Target</b>	<b>Target Type</b>		
	Completed Firing Order	N/A	N/A		
	Rounds per Target	DODIC	Time (Seconds)		
	N/A	N/A	NO LIMIT		
<b>TOWER</b>	<b>SOLDIER ACTION</b>				
<b>ALL FIRERS WEAPONS SAFETY STATUS IS RED</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	Soldiers stop firing and place weapons on SAFE.			
<b>WEAPONS SAFETY STATUS GREEN</b>	GO GREEN GO GREEN ONCE VERIFIED	Soldiers clear their weapon and wait to be inspected by a lane safety.			
<b>SECURE WEAPON</b>					
<b>ONCE ALL FIRERS ARE VERIFIED GREEN, TOWER CONTINUES.</b>					
<b>CONDUCT OF THE RANGE</b>	FIRERS  SECURE YOUR DUNNAGE  ONCE COMPLETE, PREPARE FOR CONTINUING OPERATIONS	Firers secure weapon, ammunition dunnage, and then prepare for continuing operations.			
<b>TOWER WAITS FOR ALL SOLDIERS TO REACH THE ENTRY CONTROL POINT PRIOR TO ADVANCING THE NEXT FIRING ORDER TO THE BASELINE.</b>					
<b>Legend:</b> DODIC – Department of Defense identification code, N/A – not applicable					

## STAGE 4 – NIGHT FIRE, CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR

E-123. Stage 4, Night Fire, CBRN is a required event as part of rifle and carbine qualification. The purpose of the stage 4 event is to train and evaluate the firer's ability to engage targets while operating with individual chemical protective equipment. At a minimum, Soldiers are required to fire this course of fire while wearing individual combat equipment and a protective mask with hood. All Soldiers assigned a rifle or carbine must complete this course of fire as part of their qualification based on their access to primary simulations systems (see table E-82).

**Table E-82. Stage 4, Day Fire, Chemical, Biological, Radiological, and Nuclear, training environment requirement**

<b>Supported / Available System</b>	<b>Authorized As</b>	<b>Qualification Environment Required</b>	
		<b>Virtual</b>	<b>Live (Live-Fire)</b>
Soldier and squad virtual training system (S / SVT)	Primary	X	
Engagement skills trainer (EST)	Alternate	X	
None Available	Live-Fire		X

E-124. All firers who have access to an authorized primary or alternate simulation system are not authorized training ammunition to conduct this event in a live environment under live-fire conditions. Units that have secured resources may use the live-fire CBRN qualification for record.

E-125. Stage 4 is only for units that do not have access to an authorized simulator system based on the system's basis of issue plan. Failure to coordinate for the appropriate system or failure to conduct the CBRN qualification using a designated and authorized system does not authorize the use of training ammunition for this event.

## AMMUNITION

E-126. To effectively plan and forecast for sufficient training ammunition, the unit uses the ammunition requirements listed in table E-83 and table E-84. Units need to identify the total number of firers. Units should plan for unscheduled firers and necessary retraining by increasing their forecasted training ammunition, as appropriate. Firers place these magazines in their magazine pouches. Staging or pre-positioning magazines is not authorized for the conduct of Table VI, CBRN, Night tasks.

**Table E-83. Stage 4, Rifle and Carbine, Table VI, Night Fire, Chemical, Biological, Radiological, and Nuclear ammunition requirements**

<b>Stage 4</b>	<b>DODIC</b>	<b>Nomenclature</b>	<b>Quantity</b>	<b>Remarks</b>
Night Fire, CBRN	AB57	CTG, 5.56mm, ball, M855A1 EPR	5	One round is authorized for each target presented.
	AB74	CTG, 5.56mm, tracer, M855A1 EPR	5	One round is authorized for each target presented.

**Legend:** CBRN – chemical, biological, radiological, and nuclear; CTG – cartridge, DODIC – Department of Defense identification code, EPR – enhanced performance round, mm - millimeter

**Table E-84. Stage 4, Night Fire, Chemical, Biological, Radiological, and Nuclear ammunition breakdown**

<i>Phase</i>	<i>Sequence / Magazine</i>	<i>AB57 5.56mm, Ball</i>	<i>AB74 5.56mm, Tracer</i>	<i>Magazine Total Rounds</i>
Standing, unsupported	1	5 each	5 each	10 rounds

**Legend:** mm – millimeter

## SCENARIO ENGAGEMENTS

E-127. Targets are presented to the firer in single and multiple target arrays. Targets are presented so that 90-percent of the target is clearly visible to the firer from the expected or planned firing position. Targets are exposed to the firer based on the number of targets presented during the engagement as follows:

- Single target engagements are exposed for 8 seconds.
- Double target engagements are exposed for 12 seconds.
- Triple target engagements are exposed for 16 seconds.

E-128. There is a 5-second delay at night between each engagement. Table E-85, on page E-108, shows the scenario engagement sequence for CBRN qualification. The leader annotates the official record of training on DA Form 7801.

**Table E-85. Stage 4, Night Fire, Chemical, Biological, Radiological, and Nuclear target engagement sequence**

<i><b>Stage 4, Night Fire, CBRN, Standing, Unsupported</b></i>			
<i><b>Engagement</b></i>	<i><b>Target Type</b></i>	<i><b>Range</b></i>	<i><b>Exposure Time</b></i>
CBRN Night 1	F-type	50 m RIGHT	8 sec
CBRN Night 2	E-type	50 m LEFT	8 sec
CBRN Night 3	E-type	100 m	8 sec
CBRN Night 4	F-type	50 m RIGHT	12 sec
	E-type	50 m LEFT	
CBRN Night 5	E-type	50 m LEFT	12 sec
	E-type	100 m	
CBRN Night 6	F-type	50 m RIGHT	16 sec
	E-type	50 m LEFT	
	E-type	100 m	
Standing, Unsupported, Time per Firing Order Total			89 sec
<b>Note:</b> There is a 5-second delay between all engagements. These engagements are done <b>after</b> Stage 3, Table VI, Qualification, Night Fire engagements.			
<b>Legend:</b> CBRN – chemical, biological, radiological, and nuclear, m – meters; sec – seconds			

E-129. Table E-86 provides the Table VI, Qualification, CBRN throughput schedule. Units use Table VI, Qualification as a guide. The table portrays the overall efficiency of the range facility when conducting the training event. The table provides the overall throughput timetable, based on the time the unit requires to remove one firing order from the firing positions and move the next firing order forward.

E-130. Three general movement schedules are available to assist firing order placements on the range, 2 minutes, 5 minutes, and 10 minutes. The more proficient a unit is at operating a small-arms range facility, the greater the firer throughput on the facility. This schedule does not include time required for retraining, refires, or firers who have persistent problems using a reticle.

**Table E-86. Stage 4, Night Fire, Chemical, Biological, Radiological, and Nuclear throughput time schedule**

<i>Phase</i>		<i>Time to Execute</i>	<i>Remarks</i>		
Stage 4, Night Fire, CBRN, standing, unsupported		2:29 minute	Includes 1 minute transition to CBRN.		
Total Time Per Firing Order		5:24 minutes	Does not include administrative time to move firing order to or from their respective firing positions.		
<i>Total Number of Firing Orders</i>	<i>Night Fire Execution With Administration Time Between Firing Orders</i>			<i>Total Firer Throughput Based on Range Configuration</i>	
	<i>2 min</i>	<i>5 min</i>	<i>10 min</i>	<i>16 Lane</i>	<i>32 Lane</i>
<b>2</b>	14 min	20 min	30 min	<b>32</b>	<b>64</b>
<b>3</b>	21 min	30 min	45 min	<b>48</b>	<b>96</b>
<b>4</b>	28 min	40 min	1 hr 0 min	<b>64</b>	<b>128</b>
<b>5</b>	35 min	50 min	1 hr 15 min	<b>80</b>	<b>160</b>
<b>6</b>	42 min	1 hr 0 min	1 hr 30 min	<b>96</b>	<b>192</b>
<b>7</b>	49 min	1 hr 10 min	1 hr 45 min	<b>112</b>	<b>224</b>
<b>8</b>	56 min	1 hr 20 min	2 hrs 0 min	<b>128</b>	<b>256</b>
<b>9</b>	1 hr 3 min	1 hr 30 min	2 hrs 15 min	<b>144</b>	<b>288</b>
<b>10</b>	1 hr 11 min	1 hr 41 min	2 hrs 31 min	<b>160</b>	<b>320</b>
<b>11</b>	1 hr 18 min	1 hr 51 min	2 hrs 46 min	<b>176</b>	<b>352</b>
<b>12</b>	1 hr 25 min	2 hrs 1 min	3 hrs 1 min	<b>192</b>	<b>384</b>
<b>13</b>	1 hr 32 min	2 hrs 11 min	3 hrs 16 min	<b>208</b>	<b>416</b>
<b>14</b>	1 hr 39 min	2 hrs 21 min	3 hrs 31 min	<b>224</b>	<b>448</b>
<b>15</b>	1 hr 46 min	2 hrs 31 min	3 hrs 46 min	<b>240</b>	<b>480</b>
<b>16</b>	1 hr 53 min	2 hrs 41 min	4 hrs 1 min	<b>256</b>	<b>512</b>
<b>17</b>	1 hr 60 min	2 hrs 51 min	4 hrs 16 min	<b>272</b>	<b>544</b>
<b>18</b>	2 hrs 7 min	3 hrs 1 min	4 hrs 31 min	<b>288</b>	<b>576</b>
<b>19</b>	2 hrs 14 min	3 hrs 11 min	4 hrs 46 min	<b>304</b>	<b>608</b>
<b>20</b>	2 hrs 21 min	3 hrs 21 min	5 hrs 1 min	<b>320</b>	<b>640</b>
<b>Note:</b> This throughput schedule includes stage 4, night fire, CBRN, for planning purposes to capture the full night fire requirement.					
<b>Legend:</b> CBRN – chemical, biological, radiological and nuclear; hr – hour; hrs – hours, min – minutes					

## CONDUCT OF THE RANGE

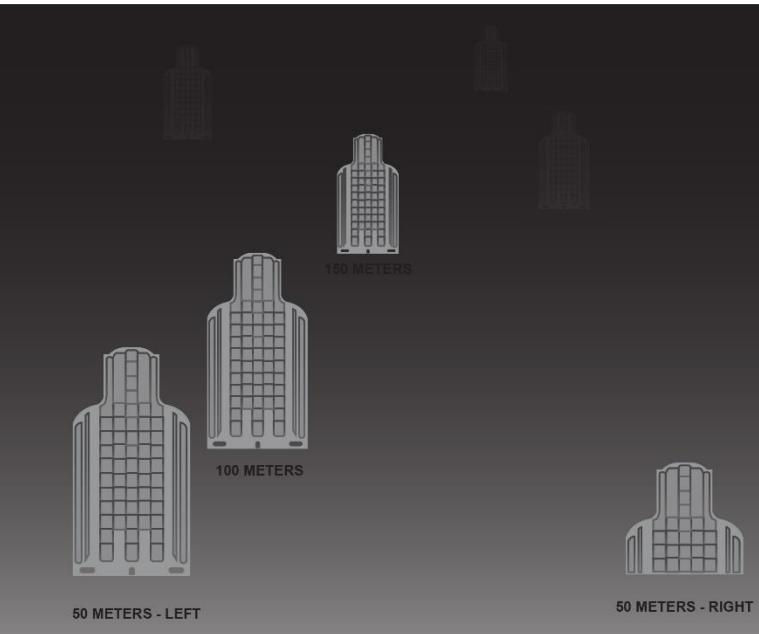
E-131. Leaders instruct Soldiers on the objectives of Table VI, Qualification, CBRN and the importance of the functional elements of the shot process. Leaders conduct Table VI, Qualification, CBRN in two scenarios containing single, double, triple, and quadruple threat presentations. Firers must hit a minimum of 7 of the 10 targets presented (70 percent) to successfully pass.

E-132. Soldiers begin Table VI, Qualification, CBRN by moving into the firing position following administrative commands from the tower operator. Soldiers enter the range and move to their firing points. Once at the firing point, firers assume a standing, unsupported firing position. Firers fire the tasks in Table VI, Qualification, CBRN from the ready throughout the duration of the course of fire. Table E-87 provides an example of the administrative commands for moving a new firing order into position.

**Table E-87. Stage 4, Night Fire, Chemical, Biological, Radiological, and Nuclear, new firing order, conduct of the range example**

<i>New Firing Order, Conduct of the Range</i>			
 <b>CBRN</b>	<b>Engagement</b>	<b>Target</b>	<b>Target Type</b>
	New Firing Order	N/A	N/A
	Rounds per Target	DODIC	Time (Seconds)
<b>TOWER</b>		<b>SOLDIER ACTION</b>	
<b>ONCE FIRERS COMPLETE THE NIGHT FIRE ENGAGEMENTS, THE TOWER CONTINUES.</b>			
<b>CONDUCT OF THE RANGE</b>	<b>FIRERS, CHEMICAL AGENTS HAVE BEEN REPORTED IN YOUR AREA</b>		<b>Soldiers don their protective equipment.</b>
<b>GAS GAS GAS</b>			
<b>ONCE ALL FIRERS HAVE COMPLETED DONNING PROTECTIVE GEAR, THE TOWER CONTINUES.</b>			
<b>Legend:</b> CBRN – chemical, biological, radiological and nuclear; DODIC – Department of Defense identification code, N/A – not applicable			

**Table E-87. Stage 4, Night Fire, Chemical, Biological, Radiological, and Nuclear, conduct of fire, (continued)**

<i>Stage 4, Night Fire, CBRN, Standing, Unsupported</i>						
	Engagement	Target	Target Type			
	8 to 10	E-1 F-1	Point			
	Rounds per Target	DODIC	Time (Seconds)			
	1	AB57 (5) AB74 (5)	68			
TOWER	SOLDIER ACTION					
WEAPONS SAFETY STATUS RED	<i>Although the firer's bolt should be locked to the rear, the tower must treat all weapons as if in a RED status</i>					
CONTROL	Soldier remains in the STANDING, UNSUPPORTED position at the READY and may RELOAD or await instruction.					
						
RELOAD	The Soldier conducts an emergency RELOAD and returns to the READY, STANDING, UNSUPPORTED position and prepares to engage.					
WEAPONS SAFETY STATUS REMAINS RED						
EXECUTION	<b>ENGAGE WHEN POSITIVELY IDENTIFIED</b>					
<b>ONCE ALL FIRERS ARE COMPLETE, TOWER CONTINUES.</b>						
WEAPONS SAFETY STATUS REMAINS RED						
<b>Note:</b> There is a 5-second delay between all engagements.						
<b>Legend:</b> CBRN – chemical, biological, radiological, and nuclear, DODIC – Department of Defense identification code						

E-133. Upon the Soldiers' completion of stage 4, night fire, CBRN and collecting their dunnage, DDI, and magazines, a lane safety verifies the clearing prior to the firers moving from their firing point. Once the lane safety clears all Soldiers, the lane safety communicates the WSS to the tower operator and the tower operator issues an administrative command to move the Soldiers off the range. Table E-88 is an example of this command.

**Table E-88. Stage 4, Night Fire, Chemical, Biological, Radiological, and Nuclear, completed firing order, conduct of the range example**

<i>Completed Firing Order, Conduct of the Range</i>					
 <b>CBRN</b>	<b>Engagement</b>	<b>Target</b>	<b>Target Type</b>		
	Completed Firing Order	N/A	N/A		
	Rounds per Target	DODIC	Time (Seconds)		
	N/A	N/A	NO LIMIT		
<b>TOWER</b>	<b>SOLDIER ACTION</b>				
<b>TOWER MUST ASSUME ALL FIRERS WEAPONS SAFETY STATUS IS RED</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	Soldiers stop firing and place weapons on SAFE.			
<b>WEAPONS SAFETY STATUS GREEN</b>	GO GREEN GO GREEN	Soldiers clear their weapon and wait to be inspected by a lane safety.			
<b>ONCE TOWER CONFIRMS ALL WEAPONS ARE GREEN AND CLEAR, TOWER CONTINUES</b>					
<b>CONDUCT OF THE RANGE</b>	ALL CLEAR SECURE YOUR DUNNAGE  MOVE TO THE ENTRY CONTROL POINT	Firers unmask, secure their weapon, ammunition, and dunnage.  Once complete, they move to the range's entry control point.			
<b>Tower waits for all Soldiers to reach the entry control point (ECP) prior to moving the next firing order into position.</b>					
<b>Legend:</b> CBRN – chemical, biological, radiological, and nuclear, DODIC – Department of Defense identification code, N/A – not applicable					

## RIFLE AND CARBINE, VALIDATION

E-134. Validation is a commander's option to confirm a rudimentary level of proficiency sufficient to accept reasonable risk by extending an existing QD by six months. The validation event is used in extreme circumstances where the commander confirms a qualification or certification. These circumstances may arise in garrison and operational environments. See chapter 1, on page 1-21, for detailed information on the use of alternate courses of fire for individual weapons.

## TASK, CONDITIONS, AND STANDARDS

E-135. Targets are placed in a tactical array at close quarter's distances. The ALT-C challenges firers with single stationary targets from the standing, kneeling, and prone firing positions within the effective range of the weapon. Table E-89 outlines the tasks, conditions, and standards for the conduct of rifle and carbine validation.

**Table E-89. Rifle and Carbine Validation, task, conditions, and standard**

<b>Task:</b>	Validate Soldier's safe use of the M16 rifle or M4 carbine by demonstrating rudimentary engagement skills.
<b>Conditions:</b>	Given the following: <ul style="list-style-type: none"> <li>• Fully mission capable weapon, as assigned on the master authorization list for the unit.</li> <li>• Full combat uniform, issued equipment, and protective mask.</li> <li>• Authorized range facility and approved targetry.</li> <li>• Authorized ammunition.</li> </ul>
<b>Standard:</b>	For firers to receive a GO validating their existing qualification, they must: <ul style="list-style-type: none"> <li>• Place 75-percent (three of four) rounds in the six minutes of angle circle on each individual silhouette during the basic slow fire phase in the time allotted.</li> <li>• Place 75-percent (three of four) rounds in each individual silhouette during the intermediate, rapid fire phase in the time allotted.</li> </ul> Failure to achieve either standard during the basic or intermediate phase condemns the firer's existing qualification.

E-136. Table E-90, on page E-114, shows the training event design template for rifle and carbine validation. See TC 25-8 for additional information about authorized range facilities.

**Table E-90. Training event design template for Rifle and Carbine Validation**

<i>Rifle and Carbine Validation Alternate Course of Fire (ALT-C)</i>					
EVENT NAME:	VALIDATION	ENVIRONMENT:		LIVE	1.0
WEAPON:	M4 / M16	CONDITIONS:		LIVE FIRE	
CATEGORY:	FOUNDATION	PRIMARY FACILITY:		Zero	DAYS REQUIRED
PUBLICATION:	TC 3-22.9	ALTERNATE FACILITY:		N/A	
REQUIRED:	GO APPROVAL	COMPONENT:	AC	RC	120 SOLDIERS
EXTERNAL EVAL:	PLATOON	FREQUENCY:			
VALID FOR:	QD + 6	ANNUAL DAYS TOTAL:			THROUGHPUT
<b>TABLE</b>					
	I	II	III	IV	V
	PMI&E	PLFS	DRILLS	BASIC	PRACTICE
	PRQ	PRQ	PRQ		QUAL
					VALIDATION
WHEN EXECUTED:					T-X
CONDEMNATION CRITERIA (CC)	RULE 1	RULE 2	RULE 3	RULE 4	RULE 5
	TIME	KEY LEADER TURNOVER	COMMANDER ASSESSMENT	SUBORDINATE ELEMENT PROFICIENCY	SPECIALTY PROFICIENCY
<b>Remarks:</b> Units must have the appropriate approval by their first General Officer (GO) in their chain of command to use any alternate course of fire (ALT-C) for any weapon system.					
<b>Legend:</b> AC – active component (known as active duty), EVAL – evaluation, GO – General Officer, N/A – not applicable, PLFS – preliminary live-fire simulation, PMI&E – preliminary marksmanship instruction and evaluation, PRQ – prerequisite, QUAL – qualification, QD – qualification duration, RC – Reserve Component (known as Reserves), TC – training circular, T-X – training event exercise, TNG DAYS TO QUAL – number of training days remaining on the critical path to weapon's qualification, Zero – basic 10 meter / 25 meter firing range (zero)					

## AMMUNITION

E-137. ALT-C is a static, timed event of all tasks listed in Rifle and Carbine, Table V and VI. Soldiers complete all tasks sequentially as described later in this section. (See table E-91.)

**Table E-91. Rifle and Carbine, Table V, Practice ammunition requirements**

<b>Phase</b>	<b>DODIC</b>	<b>Nomenclature</b>	<b>Quantity</b>	<b>Remarks</b>
Basic	AB57	CTG, 5.56mm, ball, M855A1 EPR	40	One round per silhouette, per firing position.
	AB46	CTG, 5.56mm, single round, DDI, M199A1	1	Used to reinforce clearing malfunctions and to identify recoil anticipation.
Intermediate	AB57	CTG, 5.56mm, ball, M855A1 EPR	40	One round per silhouette, per firing position.
	AB46	CTG, 5.56mm, single round, DDI, M199A1	1	Used to reinforce clearing malfunctions and to identify recoil anticipation.
<b>Legend:</b> CTG – cartridge, DDI – dummy, drilled, inert, DODIC – Department of Defense identification code, EPR – enhanced performance round, mm – millimeter				

E-138. Validation is a timed event of two progressive, live-fire phases that requires the firers to use their primary optic. Firers progress through the basic phase at the four firing positions, followed by execution of the intermediate phase using the four firing positions. Leaders issue every firer ammunition as shown in table E-92 to conduct the event to standard. Firers place these magazines in their magazine pouches. Staging or pre-positioning magazines is not authorized for the conduct of the validation table training.

**Table E-92. Rifle and Carbine, Validation ammunition breakdown**

<b>Phase</b>	<b>Position</b>	<b>Sequence / Magazine</b>	<b>AB57 5.56mm Ball</b>	<b>AB46 5.56mm DDI</b>	<b>Magazine Total Rounds</b>
Basic	Prone, Unsupported	1	10 each		10 rounds
	Prone, Supported	2	10 each	1 each	11 rounds
	Kneeling, Supported	3	10 each		10 rounds
	Standing, Supported	4	10 each		10 rounds
Intermediate	Prone, Unsupported	5	10 each		10 rounds
	Prone, Supported	6	10 each	1 each	11 rounds
	Kneeling, Supported	7	10 each		10 rounds
	Standing, Supported	8	10 each		10 rounds
<b>Note:</b> The 11-round magazines includes 10 each AB57 and one each AB46 randomly placed DDI. The DDI rounds <i>may not be the first or last rounds loaded</i> into the magazine.					
<b>Legend:</b> DDI – dummy, drilled, inert; mm – millimeter					

## RANGE FACILITIES

E-139. Table E-93 shows the Army-standard range facilities specifically designed to support rifle and carbine validation. Units must refer to their installation's range operations SOPs or local training regulation to identify the weapon specific range facilities. Units use their RFMSS system for all scheduling.

**Table E-93. Rifle and Carbine Validation authorized range facilities**

<b>Event</b>	<b>Target</b>	<b>Range Facility</b>
		<b>Zero</b>
Validation	C-4, C-type, target, silhouette  (NSN: 6920-01-167-1398)	P

**Legend:** NSN – national stock number, P – primary, Zero – basic 10 meter / 25 meter firing range

E-140. All Soldiers assigned an M16 rifle or M4 carbine on the unit's MAL may execute rifle and carbine validation when approved by the first general officer in their chain of command. This is NOT a qualification course of fire. The commander uses this event solely to verify basic marksmanship skills of the firer as a risk mitigation tool in extreme cases. This event does not replace the Army-standard rifle and carbine qualification.

## TARGETRY

E-141. ALT-C requires the C4 target, silhouette: paper, 25 meter, alternate course "C," record fire, M16-series. This is the only target authorized for the conduct of rifle and carbine validation (ALT-C). During the preparation phase, leaders should be familiar with the targetry used, and the sequence of the firing events. Figure E-23 shows the C4 target used during ALT-C.

<b>C-4 Target, Silhouette: Paper, C-Type, Rifle and Carbine, 25 meter</b>	
<b>Target Type:</b>	C-type (ALT-C)
<b>Model:</b>	C-4
<b>Construction:</b>	Paper
<b>NSN:</b>	6920-01-167-1398
<b>Primary Use:</b>	Rifle and carbine, validation
<b>TARGET FRAME PLACEMENT</b>	
<p style="text-align: center;">TARGET FRAME WITH 2 EACH C4 TARGETS AFFIXED.</p>	
<b>Legend:</b> ALT-C – alternate course of fire, m – meter, NSN – national stock number	

**Figure E-23. Rifle and carbine, validation target information and placement**

## SCENARIO ENGAGEMENTS

E-142. Targets are static to the firer. Each scenario begins with an audible cue from the tower operator, typically using a shot-timer. Firers must execute the engagements as directed by the tower operator in a specific, timed sequence. This is to ensure the firers demonstrate the appropriate skills with their weapon using their primary optic and have the requisite firing techniques by firing position. The engagement sequence follows the following guidelines:

- Validation, basic engagement—
  - Eight seconds are provided to make ready.
  - Prone, unsupported, slow fire – engage each silhouette on the left C-4 target with one round within one minute (six seconds per target).
  - Ten seconds are provided to RELOAD and change position.
  - Prone, supported, slow fire – engage each silhouette on the left C-4 target with one round within one minute (six seconds per target).
  - Ten seconds are provided to RELOAD and change position.
  - Kneeling, supported, slow fire – engage each silhouette on the left C-4 target with one round within one minute (six seconds per target).
  - Ten seconds are provided to RELOAD and change position.
  - Standing, supported, slow fire – engage each silhouette on the left C-4 target with one round within one minute (six seconds per target).
  - Ten seconds are provided to RELOAD and change position.
- Validation, intermediate engagements—
  - Prone, unsupported, rapid fire – engage each silhouette on the right C-4 target with one round within 30 seconds (three seconds per target).
  - Six seconds are provided to RELOAD and change position.
  - Prone, supported, rapid fire – engage each silhouette on the right C-4 target with one round within 30 seconds (three seconds per target).
  - Six seconds are provided to RELOAD and change position.
  - Kneeling, supported, rapid fire – engage each silhouette on the right C-4 target with one round within 30 seconds (three seconds per target).
  - Six seconds are provided to RELOAD and change position.
  - Standing, supported, rapid fire – engage each silhouette on the right C-4 target with one round within 30 seconds (three seconds per target).

E-143. After each phase (prone unsupported, prone supported, kneeling supported, and standing supported), there is a 6 to 10-second transition delay giving the firer time to conduct an emergency reload and assume the next specified position. Table E-94 shows the scenario engagement sequence.

**Table E-94. Rifle and Carbine Validation engagement sequence**

<i>Rifle and Carbine Validation Engagement Sequence</i>					
<i>Sequence</i>	<i>Engagement</i>	<i>Magazine</i>	<i>Time Per Target</i>	<i>Time Per Sequence</i>	<i>Transition Time</i>
	BASIC PHASE MAKE READY				10 sec
1	Prone, Unsupported	10-round	6 sec	1 minute	10 sec
2	Prone, Supported	11-round	6 sec	1 minute	10 sec
3	Kneeling, Supported	10-round	6 sec	1 minute	10 sec
4	Standing, Supported	10-round	6 sec	1 minute	10 sec
	INTERMEDIATE PHASE MAKE READY				10 sec
5	Prone, Unsupported	10-round	3 sec	30 sec	6 sec
6	Prone, Supported	11-round	3 sec	30 sec	6 sec
7	Kneeling, supported	10-round	3 sec	30 sec	6 sec
8	Standing, Supported	10-round	3 sec	30 sec	6 sec
	Time per Firing Order Total				7:24 minutes

**Legend:** sec – seconds

E-144. Table E-95, on page E-120, is the rifle and carbine validation throughput schedule. Units use the schedule as a guide of the overall efficiency of the range facility when conducting the training event. The schedule provides the overall throughput timetable, based on the time the unit requires to remove one firing order from the firing positions and move the next firing order forward.

E-145. Three general movement schedules are available to administer firing order placements on the range, 2 minutes, 5 minutes, and 10 minutes. The more proficient a unit is at operating a small arms range facility, the greater the firer throughput on the facility. This schedule does not include time required for retraining, refires, or firers who have persistent problems using a reticle.

**Table E-95. Rifle and Carbine, Table V, Practice throughput time schedule**

<b>Phase</b>		<b>Time to Execute</b>		<b>Remarks</b>	
Slow Fire		4:50 minutes		Static firing does not have a timing sequence between engagements.	
Rapid Fire		2:34 minutes			
Total Time Per Firing Order		<b>7:24 minutes</b>		Does not include administrative time to move firing order to or from their respective firing positions.	
<b>Total Number of Firing Orders</b>	<i><b>Table V Execution With Administration Time Between Firing Orders</b></i>			<i><b>Total Firer Throughput Based on Range Configuration</b></i>	
	<b>2 min</b>	<b>5 min</b>	<b>10 min</b>	<b>16 Lane</b>	<b>32 Lane</b>
2	19 min	25 min	35 min	<b>32</b>	<b>64</b>
3	28 min	37 min	52 min	<b>48</b>	<b>96</b>
4	38 min	50 min	1 hr 10 min	<b>64</b>	<b>128</b>
5	47 min	1 hr 2 min	1 hr 27 min	<b>80</b>	<b>160</b>
6	56 min	1 hr 14 min	1 hr 44 min	<b>96</b>	<b>192</b>
7	1 hr 6 min	1 hr 27 min	2 hrs 2 min	<b>112</b>	<b>224</b>
8	1 hr 15 min	1 hr 39 min	2 hrs 19 min	<b>128</b>	<b>256</b>
9	1 hr 25 min	1 hr 52 min	2 hrs 37 min	<b>144</b>	<b>288</b>
10	1 hr 34 min	2 hrs 4 min	2 hrs 54 min	<b>160</b>	<b>320</b>
11	1 hr 43 min	2 hrs 16 min	3 hrs 11 min	<b>176</b>	<b>352</b>
12	1 hr 53 min	2 hrs 29 min	3 hrs 29 min	<b>192</b>	<b>384</b>
13	2 hrs 2 min	2 hrs 41 min	3 hrs 46 min	<b>208</b>	<b>416</b>
14	2 hrs 12 min	2 hrs 54 min	4 hrs 4 min	<b>224</b>	<b>448</b>
15	2 hrs 21 min	3 hrs 6 min	4 hrs 21 min	<b>240</b>	<b>480</b>
16	2 hrs 30 min	3 hrs 18 min	4 hrs 38 min	<b>256</b>	<b>512</b>
17	2 hrs 40 min	3 hrs 31 min	4 hrs 56 min	<b>272</b>	<b>544</b>
18	2 hrs 49 min	3 hrs 43 min	5 hrs 13 min	<b>288</b>	<b>576</b>
19	2 hrs 59 min	3 hrs 56 min	5 hrs 31 min	<b>304</b>	<b>608</b>
20	3 hrs 8 min	4 hrs 8 min	5 hrs 48 min	<b>320</b>	<b>640</b>

**Legend:** hr – hour; hrs – hours, min – minutes

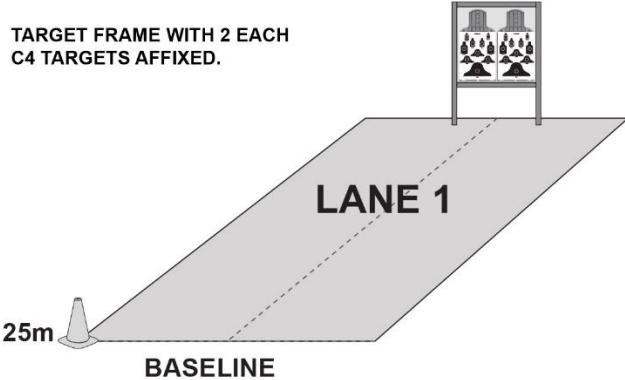
## CONDUCT OF THE RANGE

E-146. Leaders instruct Soldiers on the objectives of rifle and carbine validation, and the importance of the functional elements of the shot process. Validation is conducted in two phases—basic slow fire and intermediate rapid fire. Within those phases, firers engage 10 silhouettes from four different firing positions—prone unsupported, prone supported, kneeling supported, and standing supported.

E-147. Firers must achieve 75 percent (3 of 4) hits within the 4-centimeter circle on each silhouette during the slow fire phase, and 75 percent (3 of 4) on each silhouette during the rapid fire phase to earn a GO. The GO indicates the firer validated their existing qualification successfully, and extends their existing QD by six months.

E-148. Soldiers begin ALT-C by moving into the firing position following administrative commands from the tower operator. Administrative commands control the flow of the range, movement of personnel, and other command and control purposes. Table E-96 provides an example of the tower commands for moving a new firing order into position.

**Table E-96. Alternate Course of Fire, new firing order, conduct of the range example**

<i>New Firing Order, Conduct of the Range</i>					
 <b>TARGET FRAME WITH 2 EACH C4 TARGETS AFFIXED.</b> <b>LANE 1</b> <b>BASELINE</b> <b>25m</b>	<b>Engagement</b>	<b>Target</b>	<b>Target Type</b>		
	<b>New Firing Order</b>	N/A	N/A		
	<b>Rounds per Target</b>	<b>DODIC</b>	<b>Time (Seconds)</b>		
	N/A	AB57 / AB46	NO LIMIT		
<b>TOWER</b>	<b>SOLDIER ACTION</b>				
<b>CONDUCT OF THE RANGE</b>	<b>SECURE YOUR AMMUNITION AND MOVE TO YOUR FIRING POINT</b>	<b>Soldiers secure their weapon in a GREEN status, their training ammunition in four magazines, and move to the designated firing point.</b>			
<b>TOWER WAITS FOR ALL SOLDIERS TO REACH FIRING POINT PRIOR TO CONTINUING.</b>					
<b>Legend:</b> ALT-C – alternate course of fire, DODIC – Department of Defense identification code, m – meter, N/A – not applicable					

E-149. As soon as the tower confirms all firers are at the appropriate firing point, the tower operator proceeds to the next step. Rifle and carbine validation (ALT-C) has eight firing engagements. Table E-97, on page E-122, lists the commands for engagement 1; table E-98, on page E-123, lists the commands for engagement 2. Table E-99, on page E-124, lists the commands for engagement 3; table E-100, on page E-125, lists the commands for engagement 4; table E-101, on page E-126, lists the commands for 5; table E-102, on page E-127, lists the commands for engagement 6; table E-103, page E-128, lists the commands for engagement 7; table E-104, on page E-129, lists the commands for engagement 8. Firers use one magazine containing 10 rounds for each engagement.

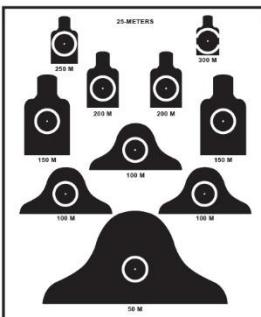
**Table E-97. Rifle and Carbine Validation, engagement 1, conduct of fire example**

<i>Rifle and Carbine Validation, Engagement 1, Slow Fire Prone Unsupported</i>		
Engagement	Target	Target Type
Rounds per Silhouette	DODIC	Time (Minutes)
1	C-4	Static Silhouettes
CHARLIE FOUR LEFT	CHARLIE FOUR RIGHT	AB57 (10) 1:18
TOWER	<b>SOLDIER ACTION</b>	
<b>WEAPONS SAFETY STATUS RED</b>	<b>GO TO PRONE MAKE READY</b>	<b>Soldier moves to the PRONE UNSUPPORTED position, establishes a good firing position, and loads one 10-round magazine.</b>
ALERT	FIRERS	
TARGET DESCRIPTION	CHARLIE FOUR LEFT	
DIRECTION	FRONT	
RANGE	SHORT RANGE	
METHOD	<b>SLOW FIRE</b>	
CONTROL	ONE ROUND PER SILHOUETTE WEAPONS FREE WEAPONS FREE	
EXECUTION	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	<b>Soldier begins slow firing one 10-round magazine, ensuring the same point of aim for each round.</b>
<b>TOWER PROVIDES FIRERS 60 SECONDS TO COMPLETE TASK, THEN PROCEEDS</b>		
CONTROL	WEAPONS HOLD WEAPONS HOLD RELOAD GO TO PRONE SUPPORTED	<b>Note:</b> WEAPONS HOLD is used to ensure firers do not continue to engage the static C-4 target until they reload and assume the next firing position. Firers conduct an emergency or tactical reload and move to the PRONE SUPPORTED position.
<b>TOWER PROVIDES 10 SECONDS TO RELOAD AND CHANGE POSITION, THEN PROCEEDS</b>		
<b>WEAPONS SAFETY STATUS REMAINS RED</b>		
<b>Legend:</b> DODIC – Department of Defense identification code, m – meter		

**Table E-98. Rifle and Carbine Validation, engagement 2, conduct of fire example**

<i>Rifle and Carbine Validation, Engagement 2, Slow Fire Prone, Supported</i>		
<b>Engagement</b>	<b>Target</b>	<b>Target Type</b>
<b>Rounds per Silhouette</b>	<b>DODIC</b>	<b>Time (Minutes)</b>
2	C-4	Static Silhouettes
1	AB57 (10) AB46 (1)	1:10
<b>TOWER</b>		<b>SOLDIER ACTION</b>
<b>WEAPONS SAFETY STATUS RED</b>		
<b>ALERT</b>	<b>FIRERS</b>	
<b>TARGET DESCRIPTION</b>	CHARLIE FOUR LEFT	
<b>DIRECTION</b>	FRONT	
<b>RANGE</b>	SHORT RANGE	
<b>METHOD</b>	<b>SLOW FIRE</b>	
ONE ROUND PER SILHOUETTE		
<b>CONTROL</b>	WEAPONS FREE WEAPONS FREE	
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	Soldier begins slow firing one 10-round magazine, ensuring the same point of aim for each round.
<b>TOWER PROVIDES FIRERS 60 SECONDS TO COMPLETE TASK, THEN PROCEEDS</b>		
<b>CONTROL</b>	WEAPONS HOLD WEAPONS HOLD RELOAD FIGHT UP	<b>Note:</b> WEAPONS HOLD is used to ensure firers do not continue to engage the static C-4 target until they reload and assume the next firing position. Firers conduct an emergency or tactical reload and move to the KNEELING SUPPORTED position.
<b>TOWER PROVIDES 10 SECONDS TO RELOAD AND CHANGE POSITION, THEN PROCEEDS</b>		
<b>WEAPONS SAFETY STATUS REMAINS RED</b>		
<b>Legend:</b> DODIC – Department of Defense identification code, m – meter		

**Table E-99. Rifle and Carbine Validation, engagement 3, conduct of fire example**

<i>Rifle and Carbine Validation, Engagement 3, Slow Fire Kneeling, Supported</i>			
 <b>CHARLIE FOUR LEFT</b>	Engagement	Target	
	3	C-4	Static Silhouettes
	Rounds per Silhouette	DODIC	Time (Minutes)
	1	AB57 (10)	1:10
TOWER	<b>SOLDIER ACTION</b>		
<b>WEAPONS SAFETY STATUS RED</b>			
ALERT	FIRERS		
TARGET DESCRIPTION	CHARLIE FOUR LEFT		
DIRECTION	FRONT		
RANGE	SHORT RANGE		
METHOD	<b>SLOW FIRE</b>		
CONTROL	ONE ROUND PER SILHOUETTE		
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier begins slow firing one 10-round magazine, ensuring the same point of aim for each round.	
<b>TOWER PROVIDES FIRERS 60 SECONDS TO COMPLETE TASK, THEN PROCEEDS</b>			
CONTROL	WEAPONS HOLD WEAPONS HOLD RELOAD FIGHT UP	<b>Note:</b> WEAPONS HOLD is used to ensure firers do not continue to engage the static C-4 target until they reload and assume the next firing position. Firers conduct an emergency or tactical reload and move to the STANDING SUPPORTED position.	
<b>TOWER PROVIDES 10 SECONDS TO RELOAD AND CHANGE POSITION, THEN PROCEEDS</b>			
<b>WEAPONS SAFETY STATUS REMAINS RED</b>			
<b>Legend:</b> DODIC – Department of Defense identification code, m – meter			

**Table E-100. Rifle and Carbine Validation, engagement 4, conduct of fire example**

<i>Rifle and Carbine Validation, Engagement 4, Slow Fire Standing, Supported</i>			
Engagement	Target	Target Type	
4	C-4	Static Silhouettes	
Rounds per Silhouette	DODIC	Time (Minutes)	
1	AB57 (10)	1:10	
<b>TOWER</b>		<b>SOLDIER ACTION</b>	
<b>WEAPONS SAFETY STATUS RED</b>			
<b>ALERT</b>	<b>FIRERS</b>		
<b>TARGET DESCRIPTION</b>	<b>CHARLIE FOUR LEFT</b>		
<b>DIRECTION</b>	<b>FRONT</b>		
<b>RANGE</b>	<b>SHORT RANGE</b>		
<b>METHOD</b>	<b>SLOW FIRE</b>		
ONE ROUND PER SILHOUETTE			
<b>CONTROL</b>	<b>WEAPONS FREE</b> <b>WEAPONS FREE</b>		
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	<b>Soldier begins slow firing one 10-round magazine, ensuring the same point of aim for each round.</b>	
<b>TOWER PROVIDES FIRERS 60 SECONDS TO COMPLETE TASK, THEN PROCEEDS</b>			
<b>CONTROL</b>	<b>WEAPONS HOLD</b> <b>WEAPONS HOLD</b>	<b>Note:</b> WEAPONS HOLD is used to ensure firers do not continue to engage the static C-4 target until they reload and assume the next firing position. Firers conduct an emergency or tactical reload and move to the PRONE UNSUPPORTED position.	
	<b>RELOAD</b> <b>GO TO PRONE</b> <b>UNSUPPORTED</b>		
<b>TOWER PROVIDES 10 SECONDS TO RELOAD AND CHANGE POSITION, THEN PROCEEDS</b>			
<b>WEAPONS SAFETY STATUS REMAINS RED</b>			
<b>Legend:</b> DODIC – Department of Defense identification code, m – meter			

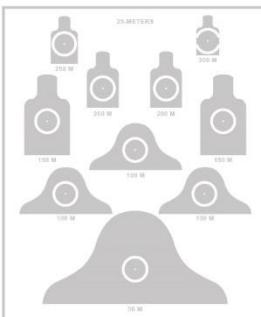
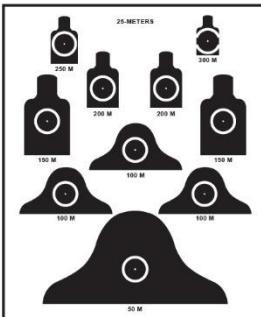
**Table E-101. Rifle and Carbine Validation, engagement 5, conduct of fire example**

<i>Rifle and Carbine Validation, Engagement 5, Rapid Fire, Prone, Unsupported</i>		
Engagement	Target	Target Type
5	C-4	Static Silhouettes
Rounds per Silhouette	DODIC	Time (Minutes)
1	AB57 (10)	0:36
<b>TOWER</b>		<b>SOLDIER ACTION</b>
<b>WEAPONS SAFETY STATUS RED</b>		
<b>ALERT</b>	FIRERS	
<b>TARGET DESCRIPTION</b>	CHARLIE FOUR RIGHT	
<b>DIRECTION</b>	FRONT	
<b>RANGE</b>	SHORT RANGE	
<b>METHOD</b>	RAPID FIRE	
ONE ROUND PER SILHOUETTE		
<b>CONTROL</b>	WEAPONS FREE WEAPONS FREE	
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	Soldier begins slow firing one 10-round magazine, ensuring the same point of aim for each round.
<b>TOWER PROVIDES FIRERS 30 SECONDS TO COMPLETE TASK, THEN PROCEEDS</b>		
<b>CONTROL</b>	WEAPONS HOLD WEAPONS HOLD RELOAD GO TO PRONE SUPPORTED	<b>Note:</b> WEAPONS HOLD is used to ensure firers do not continue to engage the static C-4 target until they reload and assume the next firing position. Firers conduct an emergency or tactical reload and move to the PRONE SUPPORTED position.
<b>TOWER PROVIDES SIX SECONDS TO RELOAD AND CHANGE POSITION, THEN PROCEEDS</b>		
<b>WEAPONS SAFETY STATUS REMAINS RED</b>		
<b>Legend:</b> DODIC – Department of Defense identification code, m – meter		

**Table E-102. Rifle and Carbine Validation, engagement 6, conduct of fire example**

<i>Rifle and Carbine Validation, Engagement 6, Rapid Fire, Prone, Supported</i>		
Engagement	Target	Target Type
Rounds per Silhouette	DODIC	Time (Minutes)
6	C-4	Static Silhouettes
1	AB57 (10) AB46 (1)	0:36
<b>TOWER</b>		<b>SOLDIER ACTION</b>
<b>WEAPONS SAFETY STATUS RED</b>		
ALERT	FIRERS	
TARGET DESCRIPTION	CHARLIE FOUR RIGHT	
DIRECTION	FRONT	
RANGE	SHORT RANGE	
METHOD	RAPID FIRE	
ONE ROUND PER SILHOUETTE		
CONTROL	WEAPONS FREE WEAPONS FREE	
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier begins slow firing one 10-round magazine, ensuring the same point of aim for each round.
<b>TOWER PROVIDES FIRERS 30 SECONDS TO COMPLETE TASK, THEN PROCEEDS</b>		
CONTROL	WEAPONS HOLD WEAPONS HOLD RELOAD FIGHT UP	<b>Note:</b> WEAPONS HOLD is used to ensure firers do not continue to engage the static C-4 target until they reload and assume the next firing position. Firers conduct an emergency or tactical reload and move to the KNEELING SUPPORTED position.
<b>TOWER PROVIDES SIX SECONDS TO RELOAD AND CHANGE POSITION, THEN PROCEEDS</b>		
<b>WEAPONS SAFETY STATUS REMAINS RED</b>		
<b>Legend:</b> DODIC – Department of Defense identification code, m – meter		

**Table E-103. Rifle and Carbine Validation, engagement 7, conduct of fire example**

<i>Rifle and Carbine Validation, Engagement 7, Rapid Fire, Kneeling, Supported</i>		
 <b>CHARLIE FOUR LEFT</b>	Engagement	Target
	7	C-4
	Rounds per Silhouette	DODIC
 <b>CHARLIE FOUR RIGHT</b>	1	AB57 (10)
<b>TOWER</b>	<b>SOLDIER ACTION</b>	
<b>WEAPONS SAFETY STATUS RED</b>		
<b>ALERT</b>	<b>FIRERS</b>	
<b>TARGET DESCRIPTION</b>	<b>CHARLIE FOUR RIGHT</b>	
<b>DIRECTION</b>	<b>FRONT</b>	
<b>RANGE</b>	<b>SHORT RANGE</b>	
<b>METHOD</b>	<b>RAPID FIRE</b>	
ONE ROUND PER SILHOUETTE		
<b>CONTROL</b>	<b>WEAPONS FREE</b>	
<b>WEAPONS FREE</b>		
<b>EXECUTION</b>	<b>ENGAGE UPON POSITIVE IDENTIFICATION</b>	<b>Soldier begins slow firing one 10-round magazine, ensuring the same point of aim for each round.</b>
<b>TOWER PROVIDES FIRERS 30 SECONDS TO COMPLETE TASK, THEN PROCEEDS</b>		
<b>CONTROL</b>	WEAPONS HOLD WEAPONS HOLD  RELOAD  FIGHT UP	<b>Note:</b> WEAPONS HOLD is used to ensure firers do not continue to engage the static C-4 target until they reload and assume the next firing position. Firers conduct an emergency or tactical reload and move to the STANDING SUPPORTED position.
<b>TOWER PROVIDES SIX SECONDS TO RELOAD AND CHANGE POSITION, THEN PROCEEDS</b>		
<b>WEAPONS SAFETY STATUS REMAINS RED</b>		
<b>Legend:</b> DODIC – Department of Defense identification code, m – meter		

**Table E-104. Rifle and Carbine Validation, engagement 8, conduct of fire example**

<i>Rifle and Carbine Validation, Engagement 8, Rapid Fire, Standing, Supported</i>				
Engagement	Target	Target Type		
8	C-4	Static Silhouettes		
Rounds per Silhouette	DODIC	Time (Minutes)		
1	AB57 (10)	0:30		
<b>TOWER</b>		<b>SOLDIER ACTION</b>		
<b>WEAPONS SAFETY STATUS RED</b>				
ALERT	FIRERS			
TARGET DESCRIPTION	CHARLIE FOUR RIGHT			
DIRECTION	FRONT			
RANGE	SHORT RANGE			
METHOD	RAPID FIRE			
ONE ROUND PER SILHOUETTE				
CONTROL	WEAPONS FREE WEAPONS FREE			
EXECUTION	ENGAGE UPON POSITIVE IDENTIFICATION	Soldier begins slow firing one 10-round magazine, ensuring the same point of aim for each round.		
<b>TOWER PROVIDES FIRERS 30 SECONDS TO COMPLETE TASK, THEN PROCEEDS</b>				
CONTROL	WEAPONS HOLD WEAPONS HOLD			
<b>WEAPONS SAFETY STATUS REMAINS RED</b>				
Legend: DODIC – Department of Defense identification code, m – meter				

E-150. Once the firing order is complete, the tower operator directs the firers to a green weapons safety status. They also direct Soldiers to police their firing positions for brass and ammunition. Table E-105 lists an example of this command.

**Table E-105. Alternate course of fire, completed firing order, conduct of the range example**

<i>Completed Firing Order, Conduct of the Range</i>					
<b>FIRING ORDER COMPLETE</b>	<b>Engagement</b>	<b>Target</b>	<b>Target Type</b>		
	Completed Firing Order	N/A	N/A		
	Rounds per Target	DODIC	Time (Seconds)		
	N/A	N/A	NO LIMIT		
<b>TOWER</b>	<b>SOLDIER ACTION</b>				
<b>WEAPONS SAFETY STATUS IS CURRENTLY RED</b>					
<b>TERMINATION</b>	CEASE FIRE CEASE FIRE	Soldier stops firing and places the weapon on SAFE.			
<b>WEAPONS SAFETY STATUS GREEN</b>	<b>GO GREEN GO GREEN</b>  <b>ONCE VERIFIED BY THE RSO,</b>	<b>Soldiers clear their weapon and wait to be inspected by a lane safety.</b>			
<b>SECURE WEAPON</b>					
<b>CONDUCT OF THE RANGE</b>	FIRERS SECURE YOUR TARGET AND DUNNAGE  ONCE COMPLETE MOVE TO THE ENTRY CONTROL POINT AT THE BASE OF THE TOWER.	Firers secure their targets, ammunition dunnage, and DDI, then move to the designated location.			
<b>ONCE FIRING ORDER EXITS TO THE ENTRY CONTROL POINT, TOWER MOVES THE NEXT FIRING ORDER TO THE FIRING BASELINE.</b>					
<b>Legend:</b> DDI – dummy, drilled, inert; DODIC – Department of Defense identification code, N/A – not applicable, RSO – range safety officer					

E-151. A lane safety clears the firers upon their completion of ALT-C and collecting their dunnage. A lane safety verifies the clearing prior to the Soldiers moving from their firing point. Once the lane safety clears all Soldiers, the lane safety communicates the WSS to the tower operator and the tower operator issues an administrative command moving the Soldiers off the range.