

FMFM 0-9

Field Firing for the M16A2 Rifle

U.S. Marine Corps

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FMFM 0-9 FIELD FIRING FOR THE M16A2 RIFLE

Record of Changes

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Field Firing for the M16A2 Rifle

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FOREWORD

1. PURPOSE

Fleet Marine Force Manual (FMFM) 0-9, *Field Firing for the M16A2 Rifle*, sets forth the procedures and techniques to be employed in the conduct of field firing for individual marksmanship training.

2. SCOPE

FMFM 0-9 complements FMFM 0-8, *Basic Marksmanship*. FMFM 0-9 explains the fundamental techniques and procedures for Phase III Marksmanship Training (Field Firing). This manual's discussion of marksmanship skills assumes a strong foundation of individual proficiency in basic marksmanship. This manual is intended to be used by Marine Corps organizations and marksmanship training sites for the training of individual Marines and small units. Procedures in this manual are written for right-handed Marines. Left-handed Marines should reverse instructions as needed.

3. SUPERSESION

FMFM 1-3A, *Field Firing Techniques*, dated September 1981.

4. CHANGES

Recommendations for improving this manual are invited from commands as well as directly from individuals. Forward suggestions using the User Suggestion Form for- mat to—

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5. CERTIFICATION

Reviewed and approved this date.

BY DIRECTION OF THE COMMANDANT OF THE MARINE CORPS

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Part I

Marksmanship in the Marine Corps



Chapter 1

Introduction to Marksmanship Training

The Marine Corps' marksmanship program teaches and reinforces fundamental shooting skills with a systematic shift to the combat application of these skills. The application of these fundamentals is taught in three basic phases: preparatory marksmanship (phase I), known-distance firing (phase II), and field firing (phase III). These phases teach Marines the correct application of marksmanship fundamentals while functioning individually or as a member of a unit engaged in combat.

————— **Note** —————

The phases should be taught in sequence to achieve the best results.

FMFM 0-8, *Basic Marksmanship*, addresses training concepts for phase I preparatory training and phase II known-distance firing. This manual, FMFM 0-9, focuses on the third phase, or field firing portion, of marksmanship training. The training concepts outlined in this manual build upon the training addressed in FMFM 0-8. This manual assumes the following elements of combat target engagement:

- Most combat targets consist of several men irregularly deployed. These men use all available cover and concealment (e.g., natural terrain features, structures, tree lines, and vegetation).
- Most combat targets are detected by smoke, flash, dust, noise, or movement and are only visible momentarily.

- The range of battlefield targets will vary and a Marine must apply the fundamentals of marksmanship to engage targets out to the maximum effective range of his weapon.
- While engaging enemy targets, a Marine is under considerable stress caused by fear, fatigue, unnatural hardship, and the noise of battle.
- A Marine will engage combat targets of varying dimensions and appearance during daylight and under conditions of low light and darkness.
- In some situations, engagement is initiated and sustained without benefit of fire commands.
- The successful engagement of any target depends on the effective application of sound marksmanship fundamentals; i.e., well-aimed fire.

1001. Phase I: Preparatory Marksmanship Training

During phase I, Marines develop a sound foundation of marksmanship knowledge and performance skills. This phase provides the basis for all follow-on marksmanship training. Marines develop and master weapons handling skills at this level. Therefore, marksmanship fundamentals should be studied and practiced frequently. Upon completion of

phase I training, Marines should have the knowledge and skill required to complete phase II training.

Phase I preparatory marksmanship training for the M16A2 rifle trains and evaluates Marines based on the following individual training standards (ITSs):

- Performing weapons handling procedures with the M16A2 rifle.
- Performing preventive maintenance on the M16A2 rifle.
- Engaging a target with the M16A2 rifle at the sustained rate.
- Zeroing the M16A2 rifle.

FMFM 0-8 contains ITSs for the M16A2 rifle.

1002. Phase II: Known-Distance Firing

During phase II, Marines apply the knowledge and firing techniques learned in phase I on a known-distance (KD) range. Immediate feedback is critical to identify areas that need improvement. Through the application and conduct of live fire, Marines further develop their firing techniques. During this

techniques become instinctive and that Marines continue to refine their weapons handling skills.

Phase II known-distance firing trains and evaluates Marines based on the following M16A2 rifle ITS:

- Engaging stationary targets with the M16A2 rifle at known distances.

1003. Phase III: Field Firing

During phase III, Marines further develop the fundamental techniques taught during phases I and II and apply them in a field firing environment. Phase III training should be conducted immediately upon

completion of phases I and II. The techniques taught during phase III must be refined until they can be applied instinctively and simultaneously. Proper training in phase III helps develop confidence with the weapon. Performance feedback is critical to ensure quality training is maintained throughout the developmental training process. Phase III marksmanship training prepares Marines to engage targets during combat situations.

a. **Field Firing Objectives.** Field firing's objectives include—

- Applying marksmanship fundamentals under a variety of environmental conditions experienced during combat.
- Developing individual confidence so Marines can effectively place rounds on a target under combat conditions.
- Developing the skills and knowledge required to—
 - Act decisively when presented with a target.
 - Apply the fundamentals of marksmanship without hesitation.

b. **M16A2 Rifle.** Phase III field firing trains and evaluates Marines based on the following M16A2 rifle ITSs:

- Engaging targets of limited exposure (time) with the M16A2 rifle.
- Engaging targets during low light and darkness with the M16A2 rifle.
- Engaging targets with the M16A2 rifle while wearing a field protective mask.
- Engaging multiple targets with the M16A2 rifle.
- Engaging moving targets with the M16A2 rifle.
- Engaging targets at unknown distances with the M16A2 rifle.

c. **Conduct of Training.** Field firing training consists of classroom lectures, demonstrations, and practical application. Live fire exercises are used extensively to present realistic target arrays in a

variety of field firing scenarios. Live fire exercises allow instructors to train and evaluate a Marine's field firing skills.

Chapter 2

Combat Mindset

The key to survival in combat is preparation. A Marine's ability to act under fire depends on his level of training and his confidence with his weapon. Any hesitation, doubt, confusion, or uncertainty can be life threatening. Proper mental conditioning is a critical factor in a Marine's ability to engage combat targets effectively.

This manual uses the term combat mindset to refer to a Marine's mental conditioning as it relates to combat engagement. Development of a combat mindset requires a Marine to understand the mission, the environment, and how he must respond in that environment. The mental and physical preparation required to establish combat mindset instills confidence and teaches a Marine to react appropriately under enemy fire.

2001. Stress

Any situation or action that inflicts physical or psychological demands on the human mind or body can cause stress. A Marine that is unprepared or untrained in dealing with a stressful situation may panic, become confused, or make poor decisions when responding to a threat. A Marine's tolerance for stress determines how effectively he responds in a combat environment.

For example, if a Marine is under great stress, his muscles can tense until they freeze or they cannot actively respond to a threat. Specifically, a Marine can lose dexterity in his fingers and knees, which adversely affects his ability to move and to aim and fire a weapon. Stress can increase the pulse rate and directly affect the stability of a Marine's aim.

To reduce the effects of stress, a Marine must be prepared to react confidently in a combat environment. If a Marine is confident in his ability to perform during combat, he can continuously evaluate his surroundings and rapidly de-

termine the appropriate firing techniques required to place hits on target.

2002. Mental and Physical Preparation

A Marine must mentally and physically prepare himself to act effectively if confronted with a target. To prepare for engagement, a Marine must be constantly aware of his surroundings, particularly terrain features that may provide the enemy with cover and concealment. A Marine's mental awareness must increase if he is in a danger area or areas that provide the enemy with cover and concealment. If operating in a combat environment and contact with the enemy is possible, a Marine must be mentally prepared to select a firing position that provides maximum cover and concealment and allows him to engage the target effectively. To be physically prepared for target engagement, a Marine must always maintain proper balance and control of the weapon so he can quickly assume a firing position and engage the target. Proper mental and physical preparation allows a Marine to respond decisively to a target in a combat environment.

Proper mental and physical conditioning is a very personal issue. The training concepts outlined in this manual provide guidelines for a Marine to develop an effective combat mindset. Each Marine must apply combat mindset fundamentals while practicing the skills taught during phase III in order to be mentally and physically prepared to engage real targets effectively during combat. A Marine must believe in his ability to engage targets accurately in any combat situation. In addition, a Marine must carry his weapon in a way that facilitates timely and effective presentation to the target.

2003. Responding to a Threat

The following subparagraphs define the level of threat and outline the appropriate weapon carry. Chapter 4 provides examples of the appropriate weapon carry based on the perceived threat level. The possibility of enemy contact determines the stage of mental and physical preparation required for engagement. The possibility of enemy contact also determines the level of threat. The possibility of enemy contact is classified as no immediate threat present, contact likely (probable), or contact imminent.

a. No Immediate Threat Present . If no immediate threat is present, a Marine assumes the tactical carry (see fig. 2-1). This is the lowest level of awareness for a Marine in a combat environment. He should be constantly alert and aware of any activity in his surrounding area. To be prepared for target engagement at this level, a Marine must—

- Keep the weapon oriented in the general direction of observation (eyes, muzzle, target).
- Be aware of likely areas of enemy contact.
- Be aware of the condition of his weapon and have a plan for putting the weapon into action.
- Establish a plan or course of action to present the weapon to the target if a target appears.
- Mentally review appropriate actions such as reloads, immediate action, and remedial action.

b. Contact Likely (Probable). If contact is likely (probable), a Marine assumes the alert carry (see fig. 2-2). This is the intermediate level of awareness for a Marine in a combat environment. He should focus on the area of likely targets and constantly search the target area. To prepare for target engagement at this level, a Marine must—

- Keep the weapon oriented in the general direction of observation (eyes, muzzle, target).

Figure 2-1. Tactical Carry.

Figure 2-2. Alert Carry.

- Expect enemy contact and be constantly prepared to present the weapon.
- Plan a course of action for immediate response to a target. Modify the course of action as the situation dictates.
- Maintain proper balance. Avoid self-induced physical fatigue. For example, do not grip the weapon so tightly that fingers, hands, and arms tire from carrying the weapon.
- Search the entire area for indications of enemy targets and for terrain features that offer cover and concealment. Avoid restricting the search to a single location because this prevents an awareness of the assigned sector of the battlefield and of likely enemy contact.

c. **Contact Imminent.** If contact is imminent, a Marine assumes the ready carry (see fig. 2-3). In this carry, a Marine should be at his highest level of awareness and should be constantly searching for and expecting a target. To fire well-aimed shots once a target is detected, a Marine must be at the peak of his mental preparation. All distractions must be eliminated. A Marine's entire focus must be on firing an accurate shot. To prepare for target engagement at this level, a Marine must—

- Keep the weapon oriented in the general direction of observation (eyes, muzzle, target).
- Maintain a clear field of view above the weapon sights until the target is detected.
- Be mentally and physically prepared to engage the target. The Marine must be ready to—
 - Assume a firing position.
 - Apply the fundamentals of marksmanship.
- Move only as fast as possible and still deliver well-aimed shots on target. Ensure speed of engagement does not exceed physical capabilities.

Figure 2-3. Ready Carry.

- Not allow focus to become so restrictive or narrow that other targets are overlooked. Avoid tunnel vision.

After each target engagement, a Marine must immediately search and assess the target area.

2004. Advantages of Combat Mindset

Proper training and combat mindset can help a Marine overcome the paralysis caused by surprise. The stress of combat will always have a psychological and physical impact on a Marine's ability to fire. A Marine should always attempt to reduce stress. A Marine can reduce the negative effects of stress by developing a proper combat mindset.

Part II

M16A2 Rifle



Chapter 3

Field Maintenance

Rifle field maintenance must be practiced daily. A poorly maintained rifle will have frequent stoppages causing a Marine to perform immediate action repeatedly. A properly lubricated and well-maintained rifle will fire when needed. Therefore, a Marine must inspect his rifle daily for evidence of rust and overall serviceability.

3001. Limited Field Preventive Maintenance

Limited field preventive maintenance is performed when detailed disassembly and cleaning is not practical due to operational tempo or the level of threat. To perform limited field preventive maintenance, a Marine—

- Places the rifle in **condition 4**
- Breaks the rifle down "shotgun style" by removing the rear take down pin and rotating the upper receiver and barrel forward.
- Removes the bolt carrier group. (Do not disassemble the bolt carrier group further.)
- Cleans the bolt carrier group.

- Cleans the upper and lower receiver groups (without further disassembly).
- Lubricates the rifle in accordance with TM 05538C-10/1A.

3002. Cleaning the Bore

If time and the situation permit, a Marine uses the cleaning procedures outlined in the M16A2 operator's manual (TM 05538C-10/1A). A Marine uses the following cleaning procedures if time is limited or the level of threat does not permit detailed cleaning:

- Assemble the cleaning rod and attach the bore brush.
- Soak the bore brush with CLP.
- Push the bore brush completely through the muzzle from the chamber end.

WARNING

Ensure the bore brush passes completely through the bore and compensator before retracting the bore brush. Do not attempt to pull the brush back before it has cleared the muzzle. This can cause the bore brush to

- Pull the bore brush back through the bore until it clears the chamber. Repeat this step as necessary to loosen all carbon and fouling from the bore.
- Remove the bore brush from the cleaning rod and attach the patch holder.
- Push the patch from the chamber end all the way through the muzzle. Remove the patch from the patch holder.
- Pull the cleaning rod back through the bore. Run additional patches through the bore as necessary until the patch come out clean.
- Attaches the chamber brush to the handle section of the cleaning rod.
- Inserts the chamber brush into the chamber.
- Twists the chamber brush clockwise while pushing and pulling the brush in and out of the chamber.
- Removes residue from the chamber area with a patch on the cleaning rod.

3003. Cleaning the Chamber

To clean the chamber, a Marine—

3004. Preventing Corrosion Due to Salt Water

If the rifle comes in contact with salt water, a Marine should wash the rifle with fresh water and as soon as the situation permits, clean the rifle in accordance with TM 05538C-10/1A.

Chapter 4

Weapons Handling and Reloading Procedures

Weapons handling procedures provide a consistent and standardized way for a Marine to handle, operate, and employ the rifle safely. These procedures address safety rules; weapons conditions, commands, carries and transports; immediate and remedial action; and reloading procedures. Proper weapons handling procedures ensure the safety of Marines by reducing negligent discharges, reinforcing positive identification of targets before engagement, and laying the foundation for combat mindset. Weapons handling procedures apply at all levels of training and during combat.

4001. Safety

Combat environments increase the chances of a Marine using unsafe weapons handling procedures. Safe handling of the rifle is critical. If safe weapons handling procedures are not used, a Marine risks his safety and the safety of his fellow Marines. During combat, a Marine must react quickly, safely, and be mentally prepared to engage targets. To ensure that only the intended target is engaged, a Marine must apply the following safety rules at all times:

Rule 1—Treat every weapon as if it were loaded.

Rule 2—Never point a weapon at anything you do not intend to shoot.

Rule 3—Keep your finger straight and off the trigger until you are ready to fire.

Rule 4—Keep the weapon on *SAFE* until you intend to fire.

4002. Weapons Condition

A weapon's readiness/safety status is described by one of four conditions. The steps in the loading and unloading process take the rifle through four specific conditions of readiness for live fire.

Condition 1—Magazine inserted, round in chamber, bolt forward, safety on, ejection port cover closed.

Condition 2—Not applicable to the M16A2 rifle.

Condition 3—Magazine inserted, chamber empty, bolt forward, safety on, ejection port cover closed.

Condition 4—Magazine removed, chamber empty, bolt forward, safety on, ejection port cover closed.

4003. Weapons Commands

Weapons commands dictate the specific steps required to load and unload the rifle safely. Six commands are used in weapons handling:

Load the This command is used to take weapon from **condition 4** to **condition 3**.

Make ready the This command is used to take weapon from **condition 3** to **condition 1**.

Fire This command is used to specify when a Marine may engage targets.

Cease fire This command is used to specify when a Marine must stop target engagement.

Unload This command is used to take the the weapon from any condition to **condition 4**.

Unload, show clear This command is used when a second individual must check the weapon to verify that no ammunition is present before the rifle is placed in **condition 4**.

- Move the head and the eyes with the muzzle as it moves.

4004. Weapons Carries

Weapons carries provide a safe and effective way to handle the rifle while remaining alert to enemy engagement.

a. **Tactical Carry.** A Marine uses the tactical carry if no immediate threat is present. The tactical carry permits control of the rifle while a Marine is moving, yet it still allows quick engagement of the enemy. See figure 4-1. A Marine performs the following steps to assume the tactical carry:

- Place the left hand on the handguard, the right hand around the pistol grip, the trigger finger straight along the receiver, and the right thumb on top of the selector lever.

————— **Note** —————

A left-handed Marine places his left thumb on the top of the selector lever.

- Place the buttstock along the side of the body at approximately hip level.
- Angle the muzzle upward about 45 degrees in the general direction of the enemy.
- Position the muzzle in front of the eyes, slightly below eye level.

Figure 4-1. Tactical Carry.

b. **Alert Carry.** A Marine uses the alert carry if enemy contact is likely. A Marine can engage the enemy faster from the alert carry than from the tactical carry. However, the alert is more tiring than the tactical carry and its use can be physically demanding. See figure 4-2. A Marine performs the following steps to assume the alert carry:

- Place the left hand on the handguard, the right hand around the pistol grip, the trigger finger straight along the receiver, and the right thumb on top of the selector lever.

————— **Note** —————

A left-handed Marine places his left thumb on top of the selector lever.

- Place the buttstock in the shoulder.
- Angle the muzzle downward about 45 degrees and point it in the general direction of the enemy.

been identified.

Figure 4-2. The Alert Carry.

c. **Ready Carry.** A Marine uses the ready carry if contact with the enemy is imminent. The ready carry allows immediate target engagement, but it is very tiring to maintain over a long period of time. See figure 4-3. A Marine performs the following steps to assume the ready carry:

- Place the left hand on the handguard, the right hand around the pistol grip, the trigger finger straight along the receiver, and the right thumb on top of the selector lever.

————— **Note** —————

A left-handed Marine places his left thumb on top of the selector lever.

- Place the buttstock in the shoulder.
- Point the muzzle in the direction of the enemy.
- Lower the sights to just below eye level so that a clear field of view is maintained until a target has

4005. Weapons Transports

Weapons transports are used to carry the rifle over the back or shoulders. Weapons transports are used if no immediate threat is present. They are useful when moving for long periods, and they provide a more relaxed position for walking. They are also used whenever both hands are needed for other work.

a. **Strong Side Sling Arms (Muzzle Up) Transport** . To assume the strong side sling arms (muzzle up) transport from the tactical carry, a Marine performs the following steps:

- Release the hold on the pistol grip.
- Lower the buttstock and bring the rifle to a vertical position.
- Grasp the sling above the left forearm with the right hand.

Figure 4-3. The Ready Carry.

- Guide the rifle around the right shoulder with the left hand and extend the right arm through the sling.
- Place the sling on the right shoulder and apply downward pressure on the sling with the right hand. This stabilizes the rifle on the shoulder.

See figure 4-4.

- Release the hold on the pistol grip.
- Lower the buttstock and bring the rifle to a vertical position.
- Rotate the rifle outboard until the pistol grip is pointing toward the body.
- Reach over the left forearm and grasp the sling with the right hand.
- Rotate the muzzle down with the left hand while sliding the right hand up the sling.
- Place the sling on the left shoulder.

See figure 4-5.

Figure 4-4. Strong Side Sling Arms (Muzzle Up) Transport.

b. **Weak Side Sling Arms (Muzzle Down) Transport.** The weak side sling arms (muzzle down) transport can be used in inclement weather to keep moisture out of the rifle's bore. To assume this transport from the tactical carry, a Marine performs the following steps:

Figure 4-5. Weak Side Sling Arms (Muzzle Down) Transport.

c. **Cross Body Sling Arms Transport.** A Marine uses the cross body sling arms transport if he

requires **S**th hands for work. The rifle is slung across the back with the muzzle up or down. Normally, the **P**rifle is carried with the muzzle down to prevent pointing the muzzle in an unsafe direction. See figure 4-6.

O

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T
S

Figure 4-6. Cross Body Sling Arms Transport.

Note

Ensure the muzzle of the rifle is maintained in a safe direction when assuming this transport.

4006. Transferring the Rifle

Proper weapons handling is required every time a Marine passes a rifle to or receives a rifle from another Marine. Safety is paramount. A Marine handing off a rifle must—

- Ensure the rifle is on *SAFE*.
- Remove the magazine if it is present.
- Lock the bolt to the rear.
- Inspect the chamber visually to ensure there is no ammunition.
- Leave the bolt locked to the rear and hand off the rifle.

A Marine receiving a rifle must—

- Ensure the rifle is on *SAFE*.
- Inspect the chamber to ensure there is no ammunition.
- Release the bolt catch and observe the bolt going forward on an empty chamber.
- Close the ejection port cover.

4007. Immediate Action

WARNING

If a "pop" or reduced recoil is experienced during firing, immediately cease firing. Do not apply immediate action. Perform the following steps.

- **Place the rifle in condition 4.**
- **Remove the bolt carrier group.**
- **Inspect the bore for an obstruction from the chamber end.**
- **Insert a cleaning rod into the bore from the chamber end and clear any obstruction.**

Once the obstruction is removed, the rifle can be reloaded and fired.

Immediate action is performed if the rifle fails to fire when the trigger is pulled. Immediate action is the unhesitating response to clear a stoppage without investigating the cause. It is performed in the following sequence:

Tap—Slap the bottom of the magazine.

Rack—Pull the charging handle to the rear and release.

Bang—Sight and attempt to fire.

4008. Remedial Action

If the rifle fails to fire after performing immediate action, a Marine performs remedial action in two steps.

Caution

Riding the bolt home can cause the bolt not to fully chamber the first round.

step I Seek cover if the tactical situation permits.
 Pull up the charging handle all the way to the rear and attempt to lock the bolt to the rear.
 Observe if a round or brass was ejected.

————— **Note** —————
 If a round was ejected from the rifle, proceed with step II.

step II Release the bolt by depressing the bolt catch.
 Tap the forward assist.
 Sight and attempt to fire.

A Marine can use the term SPORTS to remember the steps of remedial action.

Upon the completion of step I, most stoppages have been cleared and the rifle can be brought back into service. If a round was not ejected, a Marine takes the appropriate action to clear the rifle and proceeds with step II of remedial action. Once the stoppage has been cleared, a Marine completes step II in order to place the rifle back into service.

4009. Combat Reload

Quick and efficient reloading is important if engaging the enemy during combat. The battlefield situation and how it affects a Marine's opportunity to reload must be considered. A Marine should take cover before reloading or reload before leaving cover to take advantage of the protection provided by the cover. Every effort should be made not to reload on the move.

The first priority of reloading is to get the rifle reloaded and back into action as quickly as possible. During reloading, a Marine should focus only on reloading.

The second priority of reloading is to retain control of the magazine. When a Marine moves, he should have his magazines (empty and filled) with him. If

the combat situation permits, a Marine should secure his magazines on his person (e.g., in the magazine pouch, flak jacket, cargo pocket). However, the combat situation may dictate that a Marine drop his empty magazines to the deck during reloading. This practice is acceptable if a Marine retrieves his empty magazines before moving to another location.

————— **Note** —————
 Dirty or damaged magazines can cause a stoppage. Therefore, a Marine should avoid dropping his empty magazines on the deck if at all possible.

To change a magazine, a Marine should draw the rifle in close to his body so the magazine well is directly in front of his face. See figure 4-7. This facilitates better control of the rifle and allows for a more effective reload. If reloading an empty rifle, the bolt is locked to the rear. Slamming the magazine into the rifle can cause a round to partially pop out of the magazine causing a double feed and a Marine must then perform remedial action to correct the double feed.

Do not wait until the magazine is completely empty to replace it. If there is a lull in the action, a Marine should place a filled magazine in the rifle. Refill empty magazines as soon as possible so they are available for future use. If reloading from a position other than the prone position, a Marine should use the magazine from the left magazine pouch. This leaves filled magazines in the right magazine pouch for reloading during the prone position.

a. **Condition 1 Reload.** A **condition 1** reload is performed by replacing the magazine before it runs out of ammunition. **Condition 1** reload is performed while the rifle is in **condition 1**. To perform a **condition 1** reload, a Marine performs the following steps:

- Remove the partially used magazine and secure it on your person.

Note

The partially used magazine should be stored in the magazine pouch with the rounds facing up and projectiles facing away from your body. This allows for immediate identification of filled or partially filled magazines.

- Withdraw a filled magazine from the magazine pouch.
- Fully insert the magazine into the magazine well and tug downward on the magazine to ensure it is seated.
- Fasten the magazine pouch.

Figure 4-7. Positioning the Rifle for Reloading.

b. **Dry Reload.** A dry reload is required once the magazine has been emptied and the bolt is locked to the rear. Since the bolt is locked to the rear, a Marine must be careful not to jam the magazine into the rifle so that a round protrudes from the magazine. This action can cause a double feed and will require remedial action. To perform a dry reload, a Marine performs the following steps:

- Press the magazine release button.
- Remove the empty magazine and secure it on your person.
- Insert a filled magazine into the rifle and tug downward on the magazine to ensure it is seated.
- Press the bolt catch to allow the bolt carrier to move forward or pull the charging handle fully to the rear and release.

Chapter 5

Effects of Weather

Weather conditions can cause a Marine to be ineffective while engaging targets. Temperature, precipitation, and wind can affect the trajectory of the bullet. Light may affect a Marine's perception of the target and impact shot placement. Therefore, a Marine must develop confidence in his ability to rapidly offset the effects of weather.

5001. Light Conditions

Light conditions do not affect a bullet's trajectory, but they can change the appearance of the target, range estimation, or the clarity of the target. Changes in light conditions (including glare on the front sight post) can cause a Marine to aim at what appears to be the correct aiming point or at what appears to be a target's center of mass. The true aiming point or center of mass may actually be higher or lower or to the left or right.

Therefore, a Marine must learn to compensate for changes in light conditions. Typically, a Marine that maintains a center of mass hold can reduce the effects of light and execute an effective shot. The rifle's true zero may need to be adjusted to compensate for changing light conditions. Blackening the rifle's front sight post can reduce glare.

5002. Temperature

Extreme changes in temperature will cause fluctuation in the rifle's chamber pressure. Extreme changes in temperature also can affect a Marine's ability to engage targets effectively in a field firing environment. Once the rifle is zeroed, a change in temperature of 20 degrees or more can cause the bullet to strike above or below the point of aim.

Therefore, if the temperature changes 20 degrees or more, a Marine should rezero the rifle.

a. Extreme Heat. In extreme heat, a Marine may experience rapid fatigue. This can cause muscle cramps, heat exhaustion, heat stroke, blurred vision, and reduced concentration levels that result in inaccurate shooting. Increased fluid intake, good physical condition, and periodic rest breaks can offset the effects of extreme heat. Extreme heat also can create ground mirages that cause a target to appear indistinct and to drift from side to side. Heat waves or mirages also may distort the target shape or the appearance of the front sight post. A mirage created by the heat of the barrel reduces a Marine's ability to see the sight clearly. To overcome the effects of heat and accurately engage a target, a Marine should maintain a center of mass hold.

In extreme heat, the rifle's chamber pressure increases causing the bullet to exit the muzzle at a higher velocity and impact the target above the point of aim. Hot air is less dense than cool air and provides less resistance to the bullet. This allows the bullet to travel faster and experience less deflection from the wind. Avoid changes in propellant temperature by protecting ammunition from direct exposure to the sun.

b. Extreme Cold. Extreme cold may affect a Marine's ability to concentrate. If a Marine's hands are numb, he will have difficulty holding a frigid rifle and executing effective trigger control. To protect the hands in a cold environment, a Marine should wear arctic mittens or gloves. To operate the rifle while wearing arctic mittens or gloves, a Marine depresses the trigger guard plunger to open the trigger guard. This allows easier access to the trigger. See figure 5-1.

Figure 5-1. Open Trigger Guard.

————— Note —————

If the trigger guard is open, a Marine must ensure that the safety is engaged. This prevents the rifle from firing inadvertently if foreign objects come into contact with the trigger.

If the rifle is exposed to below freezing temperatures, it should not be brought immediately into a warm location. Condensation may form on and in the rifle, and it may freeze if reexposed to the cold. Ice that forms inside the rifle may cause it to malfunction.

In extreme cold, the rifle's chamber pressure decreases causing the bullet to exit the muzzle at a lower velocity and to impact the target below the point of aim. Cold air is dense and provides the bullet with more resistance. This causes the bullet to travel slower and experience greater deflection from the wind.

5003. Precipitation

Precipitation (rain, snow, hail, sleet) can affect target engagement, a Marine's comfort level, and a Marine's ability to concentrate. The amount and type of precipitation may obscure or completely hide the target and it may reduce a Marine's ability to establish an accurate sight picture. Freezing rain and other types of precipitation may make the rifle difficult to handle, foul the rifle and cause stoppages, or buildup in the barrel or compensator and cause erratic shots. Care should be taken to keep the barrel and muzzle free of water. If the rifle was submerged, a Marine must drain the bore before firing. To drain the bore, pull the charging handle slightly to the rear while the muzzle points down. This breaks the seal created by the round in the chamber. Once the barrel has been drained, turn the rifle muzzle up. This allows the water to drain out of the stock.

5004. Wind

Wind affects a bullet's trajectory. The effect of wind on the bullet as it travels down range is referred to as deflection. The wind deflects the bullet laterally in its flight to the target. The bullet's exposure time to the moving air determines the amount it is deflected from its original trajectory. Deflection increases as the distance to the target increases. There are four factors that affect the amount of deflection of the bullet: velocity of the wind, range to the target, velocity of the bullet, and bullet size and weight.

- The greater the velocity of the wind, the more the bullet will be deflected.
- As the distance to the target increases, the speed of the bullet slows allowing the wind to have a greater effect on shot placement.
- A bullet with a high muzzle velocity will not be affected by the wind as much as a bullet with a low muzzle velocity.
- The bullet's size and weight determine the adjustments required to compensate for the effects of wind. The heavier the bullet, the less it will be affected by wind.

Chapter 6

Field Expedient Battlesight Zero

Battlesight zero (BZO) is the elevation and windage setting established at 300 yards that enables a Marine to engage point targets from 0-300 yards under ideal weather conditions. If a 300-yard range is not available, a field expedient BZO can be established at a reduced range of 36 yards.

6001. Establishing a Field Expedient BZO at 36 Yards/30 Meters

If a rifle is zeroed for 300 yards, the bullet crosses the line of sight twice. It first crosses the line of sight on its upward path of trajectory at 36 yards, and again farther down range at 300 yards. Since a bullet crosses the line of sight at 36 yards and again at 300 yards when a rifle is zeroed, a rifle's zero may be established at a distance of 36 yards and the same zero will be effective at 300 yards. It is critical that a Marine fires tightly grouped shots directly on the point of aim when establishing a BZO at 36 yards because any error in shot placement at 36 yards will magnify as the bullet travels down range.

Note

If a zero at 300 meters is desirable, the distance to zero the rifle for a field expedient BZO is 30 meters.

To establish a field expedient BZO at 36 yards or 30 meters, a Marine performs steps 1-11. Appendix A provides reproducible copies of BZO targets (36 yards and 30 meters).

Step 1 Place a target 36 yards from the muzzle of the rifle.

Step 2 Set rear sight elevation at 8/3.

Once the rear sight elevation knob is set to 8/3, do not move the rear sight elevation knob. Changes in elevation for battlesight zeroing are made to the front sight post.

Step 3 Set the rear sight windage knob to the initial sight setting (index line centered).

Step 4 Set the front sight post to the initial sight setting (base of the front sight

post is flush with the front sight housing).

Step 5 Ensure the unmarked rear sight aperture (small aperture) is up.

Step 6 Fire a 3-shot group at the sustained rate of fire (12-15 rounds per minute).

Step 7 Make required elevation and windage adjustments to center the shot group on the point of aim (use the front sight post to make all elevation adjustments).

Step 8 Fire a second 3-shot group.

Step 9 Repeat step 7 to center the shot group in the target aiming black.

Step 10 Fire a 4-shot group to confirm the BZO.

Step 11 Make final windage and elevation adjustments as necessary.

Once the shot group is in the center of the aiming black, the rifle has a field expedient BZO. This is also the BZO for 300 yards/meters. The front and rear sight settings are recorded and stored in the buttstock of the rifle.

- The operational climate has changed (i.e., moving from an arid climate to a tropical climate).

————— **Note** —————

A Marine should confirm his BZO when his unit is disengaged from enemy contact. If a 300-yard/meter range is not available, zeroing can be accomplished using the 36-yard/30-meter field expedient method. If using this method to obtain a BZO, a Marine should fire from the prone position while using a hasty sling.

6002. Confirming a Field Expedient BZO

It is essential that a Marine maintain a BZO on his rifle. To confirm a BZO, a Marine may begin by using the previously established BZO sight settings rather than placing the sights at the initial sight setting. A Marine should reconfirm his BZOs if—

- Corrective maintenance has been performed on the rifle.
- There has been an extreme change in temperature (i.e., 20 degrees or more).

Figure 6-1. Trajectory and Point of Aim/Point of Impact.

- There has been a drastic change in ground elevation.
- The uniform has changed. For example, a BZO was obtained without a flak jacket and the prescribed fighting uniform is with a flak jacket.

6003. Effect of Trajectory on Point of Aim/Point of Impact

If the rifle is properly zeroed for 300 yards/meters, the trajectory (path of the bullet) will rise approximately 7 1/2 inches above the line of sight at a distance of approximately 175 yards/meters. At other distances, the strike of the bullet will be less than 7 1/2 inches above the point of aim. Only at 36 yards/30 meters and 300 yards/meters does the point of impact coincide with the point of aim. If only a portion of the target is visible (e.g., the head of an enemy soldier), the trajectory of the bullet may have to be taken into consideration when firing at a distance other than 300 yards/meters. If a Marine does not consider trajectory, he may shoot over the top of the target if the target is small and at a distance other than 300 yards/meters. See figure 6-1.

Chapter 7

Applied Fundamentals

Proper aiming, breathing, and trigger control techniques must be instinctive. In a combat environment, a Marine will not know when or where targets will appear or the duration of target exposure. A Marine must apply proper aiming, breathing, and trigger control techniques without hesitation.

During combat, the fundamentals of marksmanship must be applied in the shortest time possible while still achieving accurate target engagement. The time required to engage a target is unique to each individual. The goal of combat target engagement is to achieve sight alignment and sight picture simultaneously, and to fire the shot once sight alignment and sight picture are achieved.

Executing shots at a rapid but effective rate is achieved through practice and experience. A Marine must know his firing strengths and weaknesses and fire at a rate in which he can maintain accuracy.

7001. Aiming

Sight alignment is critical to the aiming process and must remain constant from shot to shot. There are three critical factors required to obtain and maintain sight alignment: stock weld, eye relief, and the relationship of the front and rear sight to the aiming eye. Sight picture is the placement of the tip of the front sight post in relation to the target while maintaining sight alignment. In field firing, a Marine applies the fundamentals of sight alignment and sight picture simultaneously in such a compressed time that sight alignment and sight picture are achieved as the shot is fired. Although a Marine must engage the target rapidly, sight alignment is still his first priority. See FMFM 0-8 for detailed information on sight alignment and sight picture.

a. **Achieving Sight Alignment/Sight Picture** . Once a Marine identifies the target, he quickly aims the rifle toward the target. The head should be as erect as possible to allow the aiming eye to see directly through the sights.

Proper presentation of the rifle aids in establishing sight alignment quickly. Practice during rifle presentation drills will help a Marine become proficient in achieving sight alignment and sight picture. Paragraph 11002 discusses rifle presentation.

Note

It is important to remember that changing the placement of the head from a normal stock-weld may affect a Marine's zero.

If the butt of the rifle is placed in the shoulder correctly and the stock weld is correct, a Marine looks through the rear sight as the rifle is presented. As the rifle becomes level with the aiming eye, a Marine visually locates the front sight through the rear sight aperture and establishes sight alignment. With practice, this becomes so automatic that it requires minimal effort to align the sights.

During combat, a Marine will look at the target as the rifle is presented. As the rifle settles, a Marine's focus shifts back to the sights to place the tip of the front sight post on the target and obtain sight picture. With practice, sight alignment and sight picture will come together simultaneously.

b. **Sight Picture and Natural Point of Aim** . Time may not allow a Marine to adjust his firing position to achieve his precise natural point of aim on a target center. Therefore, a Marine may have to physically place the aligned sights on the target to create an acceptable sight picture as the trigger is moved to the rear. Distant targets may require a Marine to

shift his position to establish an effective natural point of aim in order to hit the target.

c. **Sight Alignment/Sight Picture and Distance to the Target.** An acceptable sight alignment and sight picture is one that results in hits on the target. As the distance to the target increases, the front sight post covers more of the target making it difficult to establish a center of mass hold. There is a tendency to look at the target by lowering the tip of the front sight post. This causes shots to impact low or miss the target completely. A Marine must consciously aim at the center of mass and attempt to maintain a center mass sight picture.

d. **Sight Alignment During Low Light.** During low light conditions or periods of darkness, there is usually enough ambient light (from the moon and stars) for a Marine to perceive targets as far away as 50 meters. A Marine should use the large rear sight aperture during low light conditions. This aperture allows more light to enter the eye and increases a Marine's ability to acquire the target.

However, when the sights are placed on a dark object, a Marine's ability to acquire and align the sights may be reduced. A Marine may have to rely entirely on presentation and stance to place the sight on target. To check sight alignment or acquire the sights, a Marine points his rifle toward an area that provides contrast (e.g., the skyline), then brings the sights back on line with the target. As soon as the sight picture is correct, the Marine should engage the target.

Artificial illumination, particularly air illumination, may make the target appear to move. This can disrupt a Marine's ability to obtain proper sight picture. If attempting to obtain sight picture under artificial illumination, a Marine focuses his sights on the lower portion of the target. This area is least affected by the shadows created from artificial illumination and provides a more stable aiming point. Once a Marine establishes sight alignment, he raises the sights to center mass.

7002. Breath Control

Proper breath control is critical to the aiming process. Breathing causes the body to move. This movement transfers to the rifle making it impossible to maintain proper sight picture. In known-distance firing, a Marine is trained to interrupt his breathing at a point of natural respiratory pause before firing a shot. A Marine in a combat environment may not be able to fire a shot during the natural respiratory pause. His breathing and heart rate increase due to physical exertion or the stress of battle. Therefore, he must interrupt his breathing cycle to create a pause that is long enough to fire a shot. However, a Marine should not make a conscious effort to perform breath control. In a combat environment, a Marine can achieve breath control by taking a deep breath and exhaling just before he levels the sights on the target, holding his breath, and pulling the trigger to the rear. Another method of breath control requires a Marine to take a single deep breath that fills the lungs with oxygen before he fires the shot, this creates a pause in which to fire.

7003. Trigger Control

Trigger control is the skillful manipulation of the trigger that causes the rifle to fire without disturbing either sight alignment or sight picture. Once a target is identified, a Marine should move his trigger finger to the trigger as the rifle is presented and trigger control begins as soon as a sight picture is acquired. A Marine should strive to use uninterrupted trigger control in a combat environment. A Marine performs the following steps to obtain uninterrupted trigger control in a combat environment:

- Maintain a firm grip on the rifle to increase stability and counter the effects of recoil when firing multiple shots.

Note

The grip should not prevent the trigger finger from operating independently of the hand, prevent the trigger finger from moving the trigger straight to the rear, or disturb sight alignment.

- Disengage the safety and move the trigger finger toward the trigger as the rifle is presented to the target.
- Apply slight pressure to the trigger once the trigger finger contacts the trigger. There should be no rearward movement of the trigger.
- Move the trigger to the rear in one continuous movement while maintaining sight alignment. This step is performed as soon as sight picture is acquired.
- Release the pressure on the trigger slightly to reset the trigger after the first shot is delivered (indicated

by an audible click). This places the trigger in in position to fire the next shot without having to reestablish trigger finger placement.

7004. Follow-Through/Recovery

Follow-through is the ability to complete trigger control without disturbing sight alignment or sight picture. In field firing, follow-through is important to avoid altering the impact of the round by keeping the rifle as still as possible until the round exits the barrel.

Equally as important as follow-through is getting the rifle sights back on the target for another shot. This is known as recovery. Shot recovery starts immediately after the round leaves the barrel. Rather than allow the recoil of the rifle to take its normal course, a Marine must physically bring the sights back on the target. Applying recovery techniques ensures the sights are on target as quickly as possible to fire another shot.

Chapter 8

Field Firing Positions

In a combat environment, a Marine must be prepared to engage the enemy under any circumstance. It may not be possible to assume a textbook firing position due to terrain, available cover, dispersion of targets, and other limiting factors. Therefore, a Marine must strive to assume a position that offers stability for firing, maximum coverage and concealment from the enemy, and maximum observation of the target.

There are four basic field firing positions: prone, sitting, kneeling, and standing. These positions provide a stable foundation for effective shooting. A stable field firing position allows a Marine to hold the rifle steady and to control the trigger while keeping the sights aligned. These positions may be altered slightly to adjust to available cover. A Marine must learn and practice these positions during preparatory training. The essential elements of a good shooting position (bone support, muscular relaxation, natural point of aim) and the seven factors common to all shooting positions also should be practiced during field firing training and applied during combat. Slight modifications may have to be made to adjust to the combat environment. A Marine also may use a sling to stabilize the rifle while shooting.

8001. Hasty Sling

If properly adjusted, the hasty sling provides maximum stability for the rifle and reduces the effects of the rifle's recoil. To form the hasty sling, a Marine performs the following steps:

- Hold the rifle vertical with the barrel pointing upward.
- Unhook the J-hook from the lower sling swivel.

- Loosen the sling keeper.
- Adjust the sling until the J-hook hangs approximately 10 inches below the butt of the rifle. See figure 8-1.

Figure 8-1. J-Hook Location.

- Turn the sling a half turn outboard. (This allows the sling to lay flat against the back of the hand and arm.)

- Attach the J-hook to the lower sling swivel. The open end of the J-hook faces outboard, away from the rifle. See figure 8-2.

Figure 8-2. J-Hook Turned Outboard.

- Insert the left arm between the sling and the rifle to a point midway between the elbow and shoulder while holding the rifle with the right hand.
- Rotate the left hand outboard, placing the back of the hand flush against the sling. See figure 8-3.
- Place the left hand under the rifle so the handguard rests in the "V" formed by the thumb and forefinger.
- Move the left hand as required to level the rifle with the line of sight.
- Move the feed end of the sling in or out of the sling keeper to adjust the hasty sling.
- Locate the sling keeper near the feed end of the sling and secure.

Figure 8-3. Back of Hand Against the Sling.

8002. Selecting a Field Firing Position

The selection of a field firing position is based on terrain, available cover, dispersion of targets, and other limiting factors. A Marine must select a position that offers stability, mobility, and observation. The ideal field firing position contains the following elements:

- The position should lean forward slightly to aid in stability and control of the rifle.
- Muscular tension should increase in the upper body to provide faster recovery between shots.

- The left hand should move farther forward on the handguard to help reduce muzzle movement. The left hand also should grip the handguard and exert rearward pressure into the shoulder to control the rifle.
 - The feet are placed on previously cleared terrain.
- a. **Stability.** A firing position must provide a stable platform for accurate and consistent shooting. If the position is solid, the rifle should recover after recoil to the same position on the target. This allows for rapid re-engagement. The prone position provides the most stability for firing, while the standing position provides the least stability. Use of a hasty sling increases the stability of the firing position.
- b. **Mobility.** A firing position must provide a Marine with the mobility required to move to new cover or to another area. The standing position permits maximum mobility. It allows the most lateral movement for engagement of widely dispersed targets. The prone position allows the least mobility. It allows limited lateral movement.
- c. **Observation of the Enemy.** A firing position must limit a Marine's exposure to the enemy, yet allow observation of the enemy. Man-made structures and terrain features (e.g., vegetation, earth contours) often dictate the shooting position. The standing position normally provides the best field of view, but it usually allows the most exposure. The prone position normally allows the least exposure, but it usually provides a limited field of view.

8003. Prone Position

The prone position is easy to assume, provides maximum body contact with the ground, is an extremely stable position for firing, and presents a low silhouette for maximum concealment. However, the prone position is the least mobile of the shooting positions and may restrict a Marine's field of view for observation. To assume the prone position for field firing, a Marine performs the following steps:

- Drop to the ground and break the fall with the left hand (if using the hasty sling, it may be necessary to break the fall with the right hand).
- Kick both legs straight to the rear.
- Dig the toes into the ground and push slightly forward. (This increases tension on the sling and provides better control and quicker recovery between shots.)
- Place the legs closer together to present a smaller target.
- Ensure that the body is directly behind the rifle. (This allows body mass to absorb recoil.)

See figure 8-4.

8004. Kneeling Position

The kneeling position is quick to assume and provides good mobility for quick reaction. To

Figure 8-4. Prone Position.

assume

the kneeling position for field firing, a Marine performs the following steps:

See figure 8-5.

- Keep the left foot in place, step back with the right foot, and drop to the right knee.
- Position the left upper arm on the left knee to provide maximum bone support.
- Place the right side of the buttocks on the right heel, making solid contact. (Available cover and the need for mobility determine if the buttocks rests on the heel.)
- Increase tension on the sling to provide better control and quicker recovery between shots.
- Lean into the position to decrease recovery time dur-

Figure 8-6. Sitting Position.

ing recoil.

Figure 8-5. Kneeling Position.

8005. Sitting Position

The sitting position provides stability and a low silhouette. However, it limits mobility. To assume the sitting position for field firing, a Marine performs the following steps:

- Grasp the handguard of the rifle with the left hand.
- Bend at the knees and hips and drop straight back while breaking the fall with the right hand.
- Push backward with both feet to extend the legs and place the buttocks on the ground.

See figure 8-6.

8006. Standing Position

The standing position provides a clear field of view and is highly mobile. The standing position used in the field may differ from the basic position in that the stance may be wider to provide a broader base of support. A Marine's center of balance shifts forward slightly to decrease recovery time and increase the stability of the position. See figure 8-7.

Figure 8-8. Supported Prone.

8007. Supported Firing Positions

A Marine can use any available support (e.g., logs, rocks, sandbags, or walls) to stabilize his firing position. A supported firing position minimizes exposure to the enemy, provides protection from enemy fire, and maximizes rifle stability. A Marine can adjust the basic firing position to fit the support as long as the adjusted position maintains balance, control, and stability for firing. The surrounding combat environment dictates the type of support and position used.

A

B

Figure 8-9. Supported Kneeling.

vides the lowest silhouette. This position provides maximum protection from enemy fire. To assume the supported prone position, a Marine performs the following steps:

- Brace the forearm or back of the left hand against the support and rest the rifle in the "V" formed by the thumb and forefinger of the left hand.
- Keep the position as low as possible. (This reduces or eliminates exposure of any body part to the enemy.)
- Get directly behind the cover. If the cover is narrow, keep the legs together. The body should be in line with the rifle and directly behind the rifle. This presents a smaller target to the enemy and provides more body mass to absorb recoil.

See figure 8-8.

Figure 8-7. Standing Position.

a. **Supported Prone.** If possible, a Marine should use the supported prone position when firing from behind cover. It is the steadiest position and pro-

b. **Supported Kneeling.** If the prone position cannot be used, the supported kneeling position may be appropriate. To assume the supported kneeling position, a Marine performs the following steps:

- Assume the kneeling position and shift weight forward until the left shoulder or left arm and the left leg contacts the support.
- Rest the forearm or the back of the left hand on the support and rest the rifle in the "V" formed by the thumb and forefinger of the left hand. Do not touch or rest the barrel on the support.
- Alter the position to conform to the cover or support by adjusting to a high, medium, or low kneeling position.

See figure 8-9.

c. **Supported Standing.** If the supported prone or kneeling positions cannot be used to engage the target (e.g., when firing from behind a tree or over a wall), a Marine may use the supported standing

position. To increase the stability of this position, a Marine should lean slightly forward into the support. The barrel should not touch or rest on the support. The forearm or the back of the left hand rests on the support and the left hand supports the rifle. See figure 8-10.

Figure 8-10. Supported Standing.

Chapter 9

Cover and Concealment

Cover is anything that protects a Marine from enemy fire. Cover may be an existing hole, a hastily dug shelter, or a well-prepared fighting position with overhead protection. Concealment is anything that hides a Marine from enemy view, but it may not afford protection. Concealment can be obtained from buildings, trees, crops, and skillful use of ground contours.

In a combat environment, a Marine must be prepared to fire from any type of cover or concealment. A Marine can use any object or terrain feature that protects him from enemy fire, hides him from enemy view, allows him to observe the enemy, and provides support for a firing position. Proficiency in various field firing positions allows a Marine to adapt these positions to his surrounding cover.

9001. Considerations During Cover and Concealment

a. Adjusting the Shooting Position. The proper use of cover provides additional support for the position. A field firing position is adjusted to fit the situation and type of cover. A Marine's height in relation to the height of the cover aids in the selection of a field firing position. The position selected should minimize exposure to the enemy and allow observation of the area.

b. Clearing the Ejection Port. Ensure that the cover does not obstruct the ejection port. If the ejection port is blocked, the obstruction can interfere with the ejection of the spent cartridge case and cause a stoppage.

c. Keeping the Entire Body Behind Cover. A Marine must avoid exposure of any part of his body

to fire. Be especially aware of the top of the head, elbows, knees, or any other body part that may extend beyond the cover. To minimize exposure and maximize the cover's protection, a right-handed Marine should fire from the right side of cover and a left-handed Marine should fire from the left side if possible.

d. Maintaining Muzzle Awareness. A Marine must remain aware of the location of his muzzle. If the muzzle extends beyond the cover, it can give away a Marine's position because the enemy will see a muzzle flash and dust once the rifle fires. A Marine also must remember that the sights are higher than the barrel. Therefore, a Marine must maintain a position that ensures the muzzle is high enough to clear the cover (e.g., window sill, top of wall).

e. Moving to Another Location. A Marine must be constantly aware of his surroundings and the available cover. He should avoid obvious danger areas and move quickly through danger areas that cannot be avoided. When moving from cover to cover, a Marine should select his next cover location and plan his route before moving from his present position. Once a Marine begins to move, he should focus on moving until cover is achieved.

9002. Protection Material

A firing position should have frontal cover that provides protection from small arms fire and indirect fire fragments. Ideally, frontal cover should be thick enough to stop small arms fire (see table 9-1), high enough to provide protection from enemy fire, and wide enough to provide cover when firing to the left or right edge of a sector of fire. Ideally, cover offers—

- Overhead, flank, and rear protection from direct and indirect fire.
- Free use of personal weapons.
- Concealment from observation.
- A concealed route in and out.
- An unobstructed view of a wide and deep area of fire.

Any material that protects a Marine from small arms fire can be used for cover. Some common materials include sandbags, trees, logs, and cinder blocks.

Table 9-1. Minimum Thickness for Protection Against Small Arms.

Material	Minimum Thickness (in inches)
Concrete	7
Broken stone	20
Dry sand	24
Wet sand	35
Logs wired together (oak)	40
Earth (packed or tamped)	48
Undistributed compact earth	52
Earth (freshly turned)	56
Plastic clay	65

a. **Sandbags.** Cover can be improved and positions can be fortified by filling sandbags with dirt/sand and placing them around the position. Sandbags should be tightly packed because bullets can easily penetrate moist or loosely packed sandbags. Overlapping sandbags increase protection and decrease the bullet's ability to penetrate the sandbag. A minimum thickness of three sandbags is required to stop small arms fire.

b. **Trees/Logs.** Wood is a relatively dense material and offers good cover and protection. Bullets have a tendency to fragment when they penetrate wood. Live trees have a greater resistance to bullet penetration than dead trees. Wood that has been treated with creosote, such as telephone poles and railroad ties, offers better protection from projectiles than untreated wood, but it still does not ensure positive protection from small arms fire.

c. **Cinder Blocks.** Cinder blocks are not impenetrable cover. Although they are made of a dense material, the composition of a cinder block is so brittle that a bullet can shatter the block upon impact. This can cause injury to a Marine by secondary fragmentation.

9003. Types of Cover

Effective cover allows a Marine to engage enemy targets while protecting himself from enemy fire. Several types of cover provide support, protection, and concealment and do not interfere with target engagement. A Marine must adapt field firing positions to the type of cover available.

a. **Fighting Hole.** A Marine should use fighting holes if available. See figure 9-1. After a Marine enters the fighting hole, he adds or removes dirt, sandbags, or other supports to fit his height. To assume a firing position, a Marine performs the following steps:

- Place the right foot to the rear as a brace.
- Lean forward until the chest is against the forward wall of the fighting hole.
- Extend the left arm and elbow over the forward side of the fighting hole.
- Place the left forearm against the back of the parapet.
- Place the rifle butt into the pocket of the right shoulder and grasp the pistol grip with the right hand.

Figure 9-1. Fighting Hole Position.

- Place the right elbow on solid support using the elbow rest of the fighting hole or sandbags placed beside the fighting hole.
- b. Bunker.** If a Marine fires from a bunker, he uses the firing position used for a fighting hole.
- c. Rubble Pile.** If a Marine fires from behind a rubble pile, his position should provide the lowest silhouette possible and maximum support for the rifle. The rifle should be as close to the top of the rubble pile as possible without touching it. See figure 9-2.
- d. Log.** Ideally, a Marine should be in the prone position and fire from the end of the log. If a Marine must fire over the log, he should use the prone or kneeling position and rest the rifle on the forward hand that is supported by the log. This ensures maximum use of cover and provides optimum support for firing. See figure 9-3.
- e. Wall or Barricade.** A Marine should establish his position at the base of the wall or barricade, preferably firing from the prone position. This minimizes a Marine's exposure to enemy fire and presents a small silhouette. If observation of the

Figure 9-2. Rubble Pile Position.

Figure 9-3. Firing From Behind a Log.

enemy cannot be achieved from the prone position, a Marine should assume the kneeling position. If a Marine must fire over the top of a wall, he should present the lowest silhouette possible while still achieving sight picture. See figure 9-4.

f. Rooftop. If a Marine fires from a rooftop, he should expose as little of his body as possible. If possible, a Marine's entire body should be positioned behind the apex of the rooftop. If the body cannot be positioned behind the apex, place the left arm over the apex of the roof to hold the

weight of the body. Only expose as little of the head and shoulders as possible. See figure 9-5. The apex of the roof also can be used to support the rifle as long as the hand is placed between the rifle and the support. See figure 9-6.

g. Window. If a Marine fires from a window, he should position himself back from the opening of the window so that the muzzle does not protrude and interior shadows provide concealment so as not to provide a silhouette to the enemy. See figure 9-7.

Figure 9-4. Barricade Position.

Figure 9-5. Rooftop Position Supported by the Apex.

Figure 9-6. Rooftop Position Behind the Apex.

Figure 9-7. Window Position.

Chapter 10

Target Detection

Normally, daylight target detection is fairly easy. However, if targets are well camouflaged or in heavy vegetation, they may not be readily apparent. A Marine uses target indicators to locate targets under these conditions.

10001. Daylight Target Detection

a. Target Indicators. Target indicators are anything that reveal the enemy's position. Most combat targets are detected at close range by smoke, flash, dust, noise, or movement, which are grouped into three general categories: movement, sound, and improper camouflage.

(1) Movement. The human eye notices all forms of movement, especially sudden movement. The speed of movement determines the Marine's ability to locate a moving target. That is, a slow-moving target is harder to detect than one moving with quick, jerky movements.

(2) Sound. Sounds made by movement, rattling equipment, or talking can be used to detect the enemy's position. Sound alerts a Marine to the presence of a target, but it cannot pinpoint the exact location of the target. Exact location of the target must be made through other indicators.

(3) Improper Camouflage. Most targets detected on the battlefield are detected due to improper camouflage. Improper camouflage creates a shine, an outline, or a contrast to its surroundings.

Shine is created from reflective objects such as metal, glass, or wet gear/equipment. It may also come from the natural oils excreted by the skin.

The enemy will attempt to camouflage himself, his equipment, and his position. Typically, the outline of the camouflaged object (such as the body, head and shoulders, weapons, web gear) is recognizable—even from a distance.

Objects that are in contrast (color, surface, shape) to their surroundings provide excellent target indicators. For example, geometric shapes (e.g., helmets, rifle barrels) are easy to detect in a wooded area or fresh soil around a fighting hole contrasts with the otherwise unbroken ground surface.

b. Searching Methods. A Marine should seek out positions that offer maximum visibility of an area while affording him cover and concealment. If a position is obvious or stands out (e.g., a lone tree in a field or a pile of rocks on a hill), it should be avoided. Once a Marine establishes a protected position, he begins to search the area for target indicators. There are two techniques used to search an area: the hasty search and the detailed search. The combat environment determines the type of search technique used. Generally, the search includes a combination of both hasty and detailed searches. For example, immediately upon entering a new area, a Marine conducts a hasty search for obvious targets. Once a Marine has conducted a hasty search and he can relatively ensure his safety, a detailed search of the entire area is conducted.

(1) Hasty Search. Immediately upon entering a new area, a Marine must search for enemy activity that poses immediate danger or threatens his safety. This search is known as a hasty search, and it is performed in 30 seconds. To perform a hasty search, a Marine quickly glances at obvious points throughout the area that could cover or conceal the enemy. The

eyes do not sweep across the terrain in one continuous movement—they must focus briefly on specific points. This allows a Marine to detect any movement that occurs in a wide area around the point. See figure 10-1.

To perform a hasty search—

- Search the area nearest the observer first since it poses the greatest potential for danger.
- Begin the search at one side of the area to be observed.
- Gradually move the eyes across the terrain to the opposite side of the area.
- After reaching the opposite side, begin the second pass back across the terrain, including 10 meters of the area examined during the first search.
- Continue the overlapping strip search method for as far as the eyes can see.

(2) **Detailed Search.** Once a Marine has conducted a hasty search and he can relatively ensure his safety, a detailed search is conducted. A detailed search is the systematic examination of a specific target indicator located during the hasty search. To perform a detailed search, search the area where the target indicator was found from top to bottom or side to side, observing the entire area in detail. If multiple indicators were observed during the hasty search, the detailed search begins with the indicator that appears to pose the greatest threat.

10002. Low-Light and Darkness Target Detection

a. **Night Vision.** A Marine can improve his ability to see during periods of darkness or low-light by obtaining and maintaining night vision. Since adapting to night vision is a slow and gradual process, steps should be taken to protect night vision once it is obtained.

Figure 10-1. Hasty Search.

(1) **Obtaining Night Vision.** There are two methods used to obtain night vision. The first method is to remain in an area of darkness (indoors or outdoors) for approximately 30 minutes. This method restricts a Marine from performing any other tasks while acquiring night vision. The second method is to remain in a darkened area under a low intensity red light for approximately 20 minutes, then in complete darkness for approximately 10 minutes. This method produces almost complete night vision adaptation while permitting a Marine to perform some tasks during the adjustment period.

(2) **Maintaining Night Vision.** Since the eyes take a long time to adjust to darkness, a Marine must protect night vision once it is obtained. Any form of light will eliminate night vision and a Marine will have to readjust his vision to low-light conditions or darkness. To maintain night vision—

- Avoid looking at any form of bright light.
- Shield the eyes from parachute flares, spotlights, or headlights.
- Cover flashlights with a red filter or place one hand over the glass to reduce the intensity of the light. Keeping one eye shut will also reduce the amount of night vision lost. Try to limit the time spent using a flashlight.

(3) **Factors Affecting Night Vision.** Some physical factors can reduce a Marine's ability to see in low light or during periods of darkness. These factors include—

- Fatigue.
- Lack of oxygen.
- Long exposure to sunlight.
- Heavy smoking.
- Drugs.
- Headaches.

- Illness.
- Consumption of alcohol within the past 48 hours.
- Improper diet.

b. **Searching Methods.** Once night vision has been acquired, a Marine is ready to locate targets. Some daylight observation techniques (e.g., searching for target indicators) also apply during periods of darkness or during low light. However, night observation techniques must allow for the limitations of night vision. For example, searching at night is slower and covers less terrain on each pass.

(1) **Off-Center Vision.** Off-center vision is the technique of focusing on an object without looking directly at the object. This technique allows a Marine to maximize the images seen with night vision and to detect peripheral movement.

To obtain off-center vision, never look directly at the object being observed (see fig. 10-2). Look slightly to the left, right, above, or below the object. A Marine must find his best off-center angle. Typically, the best off-center angle is 6 to 10 degrees away from the object. See figure 10-3.

————— **Note** —————

Stationary objects can appear to move if stared at for extended periods. To avoid this illusion, a Marine can visually align the object against something else (e.g., a finger held away from the body at arm's length.)

(2) **Scanning.** Scanning is the use of off-center vision to observe an area or object. It is more effective to scan from a prone position or at an angle below the object being observed. This creates a silhouetted view of the object.

A recommended method of scanning is to move the eyes in a figure eight pattern. See figure 10-4. The eyes move in short, abrupt, irregular movements over and around the area. A Marine must pause at regular intervals during the observation scan since the eyes cannot focus on a still object while they move. While scanning, there may be periodic blackouts of night

Figure 10-2. Direct Vision.

vision due to simple fatigue. A Marine must rest his eyes frequently during scanning (generally every 4 to 10 seconds). Night vision returns after the eyes are rested, moved, and blinked a few times.

While scanning, a Marine looks and listens for target indicators (movement, sound, and improper

Figure 10-3. Off-Center Vision.

camouflage). Objects in bright moonlight or starlight will cast shadows. Sounds may seem to be louder at night than during daylight. Once a target indicator is detected, attention is concentrated in the area of the target indicator, but the eyes still do not focus directly on the target.

Figure 10-4. Figure Eight Scan.

Chapter 11

Engagement Techniques

A Marine must maintain the ability to react instinctively in a combat environment—day or night. He must possess a combat mindset that eliminates any hesitation, fear, or uncertainty of action, allows him to engage the enemy rapidly, and allows him to focus on the actions required to fire well-aimed shots. This becomes critical during low-light conditions or periods of darkness because a Marine's field of vision is reduced and every noise, movement, and muzzle blast is intensified.

A Marine must remember that speed alone does not equate to effective target engagement. He should fire only as fast as he can fire accurately. He should never exceed his physical capability to engage a target effectively. To be effective in combat, a Marine must train to perfect the physical skills of target engagement (such as presenting the weapon and assuming a shooting position) until they become instinctive.

11001. Search and Assessment

After a Marine engages a target, he must immediately search and assess the area for any additional threats. To search and assess, a Marine performs the following steps:

- Lower the rifle to look over the sights.
- Place the trigger finger straight along the receiver.
- Search the area and assess the situation/threat by moving the head, eyes, and rifle left and right (approximately 10 degrees from center).

Note

The muzzle moves with the head and eyes in one fluid motion while searching. Keep both eyes open to increase the field of view.

Once a Marine determines that the area is clear of enemy threat, he may place the rifle on *SAFE*.

11002. Engaging Targets During Limited Exposure Time

In a combat environment, targets may present themselves with little or no warning. This reduces a Marine's reaction time and the ability to engage targets effectively. To maintain an advantage, a Marine should practice weapons presentation techniques until they become instinctive. How a Marine carries or transports the rifle, partially determines the weapons presentation technique used. Continued practice of various presentation techniques from each weapon carry/transport helps a Marine to refine his skill, shorten his reaction time, and engage targets effectively in a combat environment.

a. **Presenting the Rifle From the Tactical Carry.** To present the rifle from the tactical carry, a Marine performs the following steps once a target appears:

- Extend the rifle toward the target keeping the muzzle slightly up so the buttstock clears all personal equipment.
- Place the rifle in **condition 1**.

To place the rifle in **condition 1** if it is in **condition 3**—

- Grip the pistol grip firmly with the right hand.
- Pull the charging handle with the left hand to its rearmost position and release just prior to taking the rifle off *SAFE*.

An alternative method is to—

- Grip the handguards firmly with the left hand.
- Pull the charging handle with the right hand to its rearmost position and release.

- Level the rifle and pull it firmly into the pocket of the shoulder to obtain proper stock weld once the buttstock clears all personal equipment.
- Hold the head as erect as possible. This allows the aiming eye to see directly through the sights. Do not move the head down to meet the stock of the rifle. Changing the placement of the head from the normal stock weld position may affect the zero.
- Take the rifle off *SAFE*.
- Place the trigger finger on the trigger.
- Align the sights to center mass on the target.
- Engage the target.
- Search and assess the situation/threat (see para. 11001).

b. Presenting the Rifle From the Alert Carry. To present the rifle from the alert carry, a Marine performs the following steps once a target appears:

- Bring the rifle up to eye level and obtain proper stock weld.
- Hold the head as erect as possible. This allows the aiming eye to see directly through the sights.

- Take the rifle off *SAFE*.
- Place the trigger finger on the trigger.
- Align the sights to center mass on the target.
- Engage the target.
- Search and assess the situation/threat (see para. 11001).

c. Presenting the Rifle From the Ready Carry. To present the rifle from the ready carry, a Marine performs the following steps once a target appears:

- Bring the rifle up to eye level and obtain proper stock weld.
- Hold the head as erect as possible. This allows the aiming eye to see directly through the sights.
- Take the rifle off *SAFE*.
- Place the trigger finger on the trigger.
- Align the sights to center mass on the target.
- Engage the target.
- Search and assess the situation/threat (see para. 11001).

d. Presenting the Rifle From the Strong Side Sling Arms Transport (Strong Hand Technique). To present the rifle from the strong side sling arms transport using the strong hand technique, a Marine performs the following steps once a target appears:

- Take one step back with the right foot and lean forward slightly. This facilitates removal of the rifle from the shoulder.
- Reach under the right arm with the left hand between the sling and the body and grasp the handguards. At the same time, pull down on the sling and raise the right elbow out and parallel to the deck.

- Roll the right shoulder forward and release the sling from the right hand once the handguards have cleared the elbow. At the same time, pull the rifle forward off the shoulder with the left hand.
- Continue pulling the rifle forward with the left hand while rotating the rifle parallel to the deck until the right arm is free of the sling and the rifle clears all personal gear.
- Grasp the charging handle with the right hand and pull it to its rearmost position and release.
- Establish a firing grip with the right hand while keeping the trigger finger straight along the receiver.
- Level the rifle and pull it into the shoulder and obtain proper stock weld.
- Hold the head as erect as possible. This allows the aiming eye to see directly through the sights.
- Take the rifle off *SAFE*.
- Place the trigger finger on the trigger and align the sights to center mass on the target.
- Engage the target.
- Search and assess the situation/threat (see para. 11001).

e. **Presenting the Rifle From the Strong Side Sling Arms Transport (Weak Hand Technique).** The presentation of the rifle from strong side sling arms transport (weak hand technique) is the same as the strong hand technique explained in subparagraph 11002d with the following variation:

- Establish a firing grip with the right hand once the rifle is parallel to the deck and the right arm is free of the sling.
- Keep the trigger finger straight along the receiver.

- Grasp the charging handle with the left hand, continue the forward movement of the rifle to ensure it clears all personal gear, pull the charging handle to its rearmost position and release.

- Regrasp the handguards with the left hand.

f. **Presenting the Rifle From the Weak Side Sling Arms Transport (Strong Hand Technique).** To present the rifle from weak side sling arms (strong hand technique), a Marine performs the following steps once a target appears:

- Take one step back with the right foot and lean forward slightly. This facilitates removing the rifle from the shoulder.
- Grasp the sling with the right hand to prevent the rifle from falling off the shoulder.
- Grasp the handguards with the left hand (the index finger points toward the muzzle).
- Rotate the rifle counterclockwise (until the magazine rests on the left forearm) while extending the muzzle toward the target.
- Continue extending the rifle toward the target to ensure the rifle clears all personal gear.
- Grasp the charging handle with the right hand and pull it to its rearmost position and release.
- Establish a firing grip with the right hand while keeping the trigger finger straight along the receiver.
- Pull the rifle into the pocket of the shoulder and obtain proper stock weld.
- Hold the head as erect as possible. This allows the aiming eye to see directly through the sights.
- Take the rifle off *SAFE*.

- Place the trigger finger on the trigger and align the sights to center mass on the target.
- Engage the target.
- Search and assess the situation/threat (see para. 11001).

g. Presenting the Rifle From the Weak Side Sling Arms Transport (Weak Hand Technique). The presentation of the rifle from the weak side sling arms transport (weak hand technique) is the same as the strong hand technique discussed in para 11002f with the following variations:

- Establish a firing grip with the right hand.
- Keep the trigger finger straight along the receiver.
- Continue to extend the rifle toward the target to ensure that the buttstock of the rifle clears all personal gear.
- Grasp the charging handle with the left hand and as the rifle is extended, pull the charging handle to its rearmost position and release.

11003. Engaging Targets During Low Light and Darkness

Combat targets are frequently engaged during periods of darkness or under low-light conditions. Basic marksmanship fundamentals do not change for targets engaged under these conditions. However, the principles of night vision must be applied and target detection is applied differently. During periods of darkness or low light, a Marine's vision is extremely limited. A Marine must learn the techniques of night observation in order to detect potential targets, and he must develop skills that allow him to engage targets under these conditions.

There are two types of illumination that assist engagement during low light or darkness: ambient light and artificial illumination. Both ambient light and artificial illumination can affect target perception (distance and size) and night vision capabilities. Ambient light is the light produced by natural means (i.e., the sun, moon, and stars).

Considerable variations occur in ambient light due to the time of day, time of year, weather conditions, terrain, and vegetation. Artificial illumination is the light produced by a process other than natural means. Artificial light can be used to illuminate an area for target detection or to illuminate a specific target to pinpoint its position. There are two types of artificial illumination used in combat: air and ground.

The introduction of artificial light requires the eyes to make a sudden, drastic adjustment to the amount of light received. This can cause a temporary blinding because night vision was abruptly interrupted. Ambient light also can cause a blinding effect; e.g., a Marine may experience temporary blindness or reduced night vision if a bright moon suddenly appears from behind the clouds. Light behind or between a Marine and the target illuminates the front of the target and makes it appear closer than it is. Light beyond the target displays the target in silhouette and makes it appear farther away than it is. If the target is silhouetted, it is easier to see and easier to engage. If air illumination devices are used, they are in constant motion as they descend to the ground. This movement creates changing shadows on any illuminated target, causing a stationary target to appear as if it is moving.

In some combat situations, ambient light and artificial illumination may assist a Marine in locating targets. However, this light can affect perception of the target and disrupt night vision. Knowing the effects of illumination are critical to accurate target engagement during low-light conditions or during periods of darkness. A Marine's ability to engage the target should not diminish due to changes in light conditions.

11004. Engaging Targets While Wearing the Field Protective Mask

While engaging targets in a combat environment, a Marine is under considerable stress caused by fear, fatigue, and the noise of battle. His stress is further aggravated by the fear and uncertainty associated with a nuclear, biological, and chemical (NBC) threat. However, a Marine must be able to operate under any battlefield condition, including an NBC environment.

To overcome these anxieties, a Marine can wear mission-oriented protective posture (MOPP) gear, especially the field protective mask. If a Marine wears the field protective mask, its bulk and reduced visibility can affect his firing position and ability to engage the target and the rifle's zero. A Marine must make adjustments to his firing position and the application of marksmanship fundamentals to counter the additional gear worn in an NBC environment. Therefore, a Marine should practice wearing his field protective mask when he is not in a combat environment. This allows him to overcome any restrictions caused by the mask, develop confidence in his ability to execute well-aimed shots while wearing the mask, and develop a plan of action. This plan should address how the rifle is presented to the target, how long the mask is worn, and the likelihood of enemy contact. If a Marine expects to wear the mask for an extended period and enemy contact is likely, he should consider adjusting the rifle sights so that his first rounds are on target.

a. Marksmanship Fundamentals. Wearing the field protective mask requires a Marine to make modifications to his aiming and breath control techniques.

(1) **Aiming.** Wearing the field protective mask affects the aiming process and the ability to locate targets. The need to adjust stock weld, eye relief, head position, placement of the buttstock, or hold on the rifle can affect sight alignment. Glasses should be removed when donning the field protective mask. If glasses are worn with the field protective mask, the mask may not seal. If a Marine wears glasses, he is issued a set of optical inserts for the mask. He should install the inserts in the mask prior to assuming the firing position.

(2) **Breath Control.** Wearing the field protective mask may affect breath control, but training can teach a Marine to overcome this impairment. With the mask on, a Marine will hear his own breathing. He should not let this distract him from breath control or the application of any of the other fundamentals of marksmanship. Temporary fogging of the lens also may be experienced. If fogging occurs, a Marine should take a deep breath and fire while holding a full breath of air (inhaling clears the fog).

b. Field Firing Position. A good firing position provides balance, control, and stability during firing. The field

protective mask's added bulk and other restrictions may require a Marine to make changes to his field firing position. The adjustments are unique to each Marine and based on his body size and shape and his ability to adapt to the mask. Adjustments should be minor. However, all firing positions will be affected in the following areas:

(1) **Stock Weld.** Changing the placement of the cheek on the stock may affect the zero. Therefore, if an NBC attack is possible, a Marine should obtain a zero for the rifle in full MOPP gear.

Stock weld will not be as comfortable or feel as solid as it does without the field protective mask. The loss of sensitivity between the cheek and the stock, due to the mask, may cause the cheek to be pressed too firmly against the stock. Pressing the cheek too firmly against the stock can cause the seal of the field protective mask to break. If this occurs, quickly clear the mask and resume a firing position. If the lens of the field protective mask fogs up while in a firing position, this indicates that the mask's seal has been broken. Clear the mask and resume the firing position.

(2) **Eye Relief.** Eye relief is the distance between the rear sight aperture and the aiming eye. The added bulk of the field protective mask may increase eye relief because the head is farther back along the stock. If the eye is too far from the rear sight aperture it may be difficult to acquire the target and to maintain a precise aiming point.

(3) **Head Position.** The mask's shape and bulk can make sight alignment difficult to achieve. The restrictive vision caused by the mask may force a Marine to roll or tilt his head over the stock to achieve sight alignment. The Marine should keep his head as erect as possible while maintaining sight alignment.

(4) **Placement of the Buttstock in the Shoulder.** Placement of the buttstock in the shoulder pocket may have to be altered due to the mask's added bulk. If the rifle is canted, a Marine can place the buttstock of the rifle outside of the pocket to achieve sight alignment.

(5) **Canting the Rifle.** Holding the rifle straight is the preferred method of obtaining sight alignment. However, if sight alignment cannot be achieved in this

position, a Marine may alter the hold of the rifle to bring the aiming eye in line with the sights. This is usually done by canting the rifle inboard approximately 45 degrees. Canting the rifle drastically affects the rifle's zero. A Marine should cant the rifle only as much as is needed to obtain a good stock weld and proper sight alignment. If the rifle is canted, a slightly different grip on the handguard may be required.

c. **Offset Aiming.** In battle, a Marine may not have time to adjust his rifle sights to compensate for the differences in aim caused by wearing the field protective mask. A Marine may have to cant his rifle to establish sight picture. If the rifle is canted, the point of impact may not coincide with the point of aim. For example, when wearing the mask, a right-handed Marine's point of impact is usually high and to the left of center mass (for a left-handed Marine, high and to the right of center mass). Therefore a Marine has to offset aim an equal and opposite distance low and to the right. See paragraph 11008 for a discussion on offset aiming.

11005. Engaging Multiple Targets

When engaging multiple targets, the fundamentals of marksmanship still apply, but a Marine must prioritize targets and carefully plan his engagements to ensure successful target engagement. Mental preparedness and the ability to make split-second decisions are the key to successful engagement of multiple targets. The proper mindset allows a Marine to react instinctively and to control the pace of the battle rather than just reacting to the threat.

After the first target is engaged, a Marine must immediately engage the next target and continue to engage targets until they are eliminated. While engaging multiple targets, a Marine must be aware of his surroundings and not focus on just one target. He must rapidly prioritize the targets, establish an engagement sequence, and engage the targets. A Marine also must maintain constant awareness and continuously search the terrain for additional targets.

a. **Prioritizing Targets.** The target that poses the greatest threat should be engaged first. Prioritizing targets is an ongoing process. The combat situation usually dictates the order of target engagement. A target's priority is based on proximity, threat, and opportunity. Changes in threat

level, proximity, or the target itself may cause a Marine to revise his priorities. Therefore, a Marine must remain alert to changes in a target's threat level and proximity and other target opportunities as the battle progresses.

b. **Field Firing Position.** The selection and effective use of a field firing position is critical to the successful engagement of multiple targets. A Marine should make a quick observation of the terrain and select a firing position that provides good cover and concealment, as well as the flexibility to engage multiple targets. If enemy targets are widely dispersed, the selected position must provide the Marine with flexibility of movement. The more restrictive the firing position, the longer it will take a Marine to eliminate multiple targets.

(1) **Prone.** Engaging short-range targets from the prone position requires a major adjustment to the basic position with each shot fired. This adjustment occurs because the elbows are firmly placed on the ground and they restrict upper body movement. The prone position restricts and lengthens the recovery time of the rifle sights onto subsequent targets.

(2) **Sitting.** Like the prone position, the sitting position allows limited lateral movement. This makes engagement of widely-dispersed multiple targets difficult. To ease engagement, the forward arm can be moved by pivoting on the elbow, but this movement disturbs the stability of the position.

(3) **Kneeling.** The kneeling position provides a wider, lateral range of motion since only one elbow is used for support. A Marine moves from one target to another by moving the forward arm and the forward leg in the direction of the target.

(4) **Standing.** The standing position allows maximum lateral movement. Multiple targets are engaged by rotating the upper body to a position where the sights can be aligned on the desired target. If severe or radical adjustments are required to engage widely dispersed targets, a Marine moves his feet to establish a new position rather than give up maximum stability of the rifle. This avoids poorly placed shots that can result from an unstable position.

c. **Marksmanship Fundamentals.** The application of the fundamentals of marksmanship are applied under a slightly different technique. Once the first target is engaged, the techniques required to engage additional targets are as follows:

(1) **Follow-through.** The Marine is committed to follow-on shots and can use the rifle's recoil to direct the recovery of the rifle onto the next target. As the rifle is coming down in its recovery, a Marine physically moves the sights to the next target.

(2) **Trigger Control.** Pressure is maintained on the trigger throughout recovery and is applied at a rate consistent with the Marine's ability to establish sight picture on the desired target.

(3) **Sight Picture.** A Marine should not hesitate between the time sight picture is established and the time the shot breaks.

(4) **Bone Support.** If possible, a Marine selects a field firing position and engages targets in a way that maximizes bone support and control of the rifle. To maximize bone support, a right-handed Marine engages targets right to left and a left-handed Marine engages targets left to right. This allows a Marine to engage targets while moving the rifle into the support and keeps the forward elbow under the rifle for maximum bone support.

11006. Engaging Moving Targets

In combat, it is unlikely that a target will remain stationary. The enemy will move quickly from cover to cover, exposing himself for the shortest possible time. Therefore, a Marine must quickly engage a moving target before it disappears.

There are two types of moving targets: moving targets and stop and go targets. Moving targets move in a consistent manner and remain in a Marine's field of vision. A walking or running man is an example of a moving target. A stop and go target appears and disappears during its movement. A stop and go target will present itself for only a short time before it reestablishes cover. An enemy moving from cover to cover is an example of a stop and go

target. This target is most vulnerable to fire at the beginning and end of its movement to new cover because the target must gain momentum to exit its existing cover and then slow to avoid overrunning the new cover position.

a. **Marksmanship Fundamentals.** Engaging moving targets requires concentration and adherence to the fundamentals of marksmanship. With practice, a Marine can engage a moving target with the same speed and accuracy used to engage a stationary target. The skill required to engage moving targets is a perishable skill, therefore it must be practiced frequently. The following modifications to the fundamentals of marksmanship are critical to the engagement of moving targets.

(1) **Sight Picture.** Typically, sight picture is the target's center of mass. If a Marine engages a moving target, he bases his sight picture on the target's range, speed, and angle of movement.

(2) **Trigger Control.** As with any target engagement, trigger control is critical to the execution of shots that do not disturb sight alignment or sight picture. A Marine can apply pressure on the trigger prior to establishing sight picture, but there should be no rearward movement of the trigger until sight picture is established. Interrupted trigger control is not recommended because the lead will be lost or have to be adjusted to reassume proper sight picture. If a Marine is using the tracking method, he tends to stop tracking as trigger control is applied. This causes the shot to impact behind the moving target.

(3) **Follow-through.** If a Marine uses the tracking method to engage moving targets, he continues to track the target during follow-through so the desired lead is maintained as the bullet exits the muzzle. Continuous tracking also enables a second shot to be fired on target if necessary.

(4) **Stable Position.** To engage moving targets using the tracking method, the rifle must be moved smoothly and steadily as the target moves. A stable position steadies the rifle sights while tracking. Additional rearward pressure may be applied to the pistol grip to help steady the rifle during tracking and trigger control. The elbows may be moved from the support so the target can be tracked smoothly.

b. **Engagement Methods.** Moving targets are the most difficult targets to engage. However, they can be engaged successfully by using the tracking or the ambush method.

(1) **The Tracking Method.** The tracking method is used for a target that is moving at a steady pace over a well determined route. If a Marine uses the tracking method, he follows the target with the front sight post while maintaining sight alignment and a point of aim on or ahead of (leading) the target until the shot is fired. If a Marine establishes a lead on a moving target engagement, his sights will not be centered on the target. See figure 11-1. To execute the tracking method, a Marine performs the following steps:

- Present the rifle to the target.
- Swing the muzzle of the rifle through the target (from the rear of the target to the front) to the desired lead (point of aim). The point of aim may be on the target or some point in front of the target depending upon the target's range, speed, and angle of movement.
- Track and maintain focus on the front sight post while acquiring the desired sight picture. It may be necessary to shift the focus between the front sight post and the target while acquiring sight picture, but the focus must be on the tip of the front sight post when the shot is fired.
- Engage the target once sight picture is acquired while maintaining the proper lead.
- Follow-through so the lead is maintained as the bullet exits the muzzle.
- Continue to track in case a second shot needs to be fired on the target.

Figure 11-1. Tracking Method.

(2) **The Ambush Method.** The ambush method is used when it is difficult to track the target with the rifle, as in the prone or sitting position. The lead required to effectively engage the target determines the engagement point. With the sights settled, the target moves into the predetermined engagement point and creates the desired sight picture. See figure 11-2. The trigger is pulled simultaneously with the establishment of sight picture. To execute the ambush method, a Marine performs the following steps:

- Select an aiming point ahead of the target.
- Obtain sight alignment on the aiming point.
- Hold sight alignment until the target moves into vision and the desired sight picture is established.
- Engage the target once sight picture is acquired.
- Follow-through so the rifle sights are not disturbed as the bullet exits the muzzle.

A variation of the ambush method can be used when engaging a stop and go target. A Marine should look for a pattern of exposure; e.g., every 15 seconds. Once a pattern is determined, a Marine establishes a lead by aiming at a point in front of the area in which the target is expected to appear, then he fires the shot at the moment the target appears.

Figure 11-2. Ambush Method.

c. **Leads.** When a shot is fired at a moving target, the target continues to move during the time the bullet is in flight. Therefore, a Marine must aim in front of the target, otherwise, the shot will fall behind the target. This is called taking a lead. Lead is the distance in advance of the target that the rifle sights are placed to accurately engage the target when it is moving. Determining the amount of lead required to engage a moving target must be as precise as possible if a Marine is to achieve success. To provide a greater field of view for engaging moving targets at close range, a Marine may use the 0-2 aperture (see fig. 11-3).

(1) **Amount of Lead Required.** Factors that affect the amount of lead are the target's range, speed, and angle of movement.

(a) **Range.** Lead is determined by the rifle's distance to the target. When a shot is fired at a moving target, the target continues to move during the time the bullet is in flight. This time of flight could allow a target to move out of the bullet's path if the round was fired directly at the target. Time of flight increases as range to the target increases.

(b) **Speed.** If a man is running, a greater lead is required because the man will move a greater distance while the bullet is in flight.

Figure 11-3. 0-2 Aperture.

(c) **Angle of Movement.** The angle of movement across the line of sight relative to the flight of the bullet determines the type (amount) of lead.

(2) **Types of Leads.** There are three types of leads.

(a) **Full Lead.** The target is moving straight across a Marine's line of sight with only one arm and half the body visible. This target requires a full lead because it will move the greatest distance across a Marine's line of sight during the flight of the bullet.

(b) **Half Lead.** The target is moving obliquely across a Marine's line of sight (at a 45 degree angle). One arm and over half the back or chest are visible. This target requires half of a full lead because it will move half as far as a target moving directly across a Marine's line of sight during the flight of the bullet.

(c) **No Lead.** The target is moving directly toward or away from a Marine and presents a full view of both arms and the entire back or chest. No lead is required. A Marine engages this target as if it was a stationary target because it is not moving across his line of sight.

(3) **Point of Aim Technique.** See paragraph 11008a for a detailed discussion on point of aim technique. The following guidelines apply if a Marine uses the

point of aim technique to establish a lead for a moving target at various ranges and speeds. These guidelines do not consider wind or other effects of weather. Body width in these examples is considered to be 12 inches (side view of the target).

For a slow walking target (approximately 2-2.5 mph) moving directly across the line of sight (full lead)—

- At a range of 200 yards/meters or less, no lead is required.
- At a range of 300 yards/meters, hold two points of aim in the direction the target is moving.

For a fast walking target (approximately 4 mph) moving directly across the line of sight (full lead)—

- At a range of 200 yards/meters or less, hold one point of aim in the direction the target is moving.
- At a range of 300 yards/meters, hold four points of aim in the direction the target is moving.

For a target running (approximately 6 mph) directly across the line of sight (full lead) —

- At a range of 100 yards/meters or less, hold one point of aim in the direction the target is moving.
- At a range of 200 yards/meters, hold four points of aim in the direction the target is moving.

For a target moving at a 45 degree angle (an oblique target) across the line of sight, the lead is one half that required for a target moving directly across the line of sight.

11007. Engaging Targets at Unknown Distances

To engage targets at unknown distances, a Marine must determine the distance from his location to a known point. This is known as range estimation. The ability to determine range is a skill that must be developed if a Marine is to engage targets at unknown distances successfully. Precise range estimation enhances accuracy, enhances the chance of survival, and determines if a target can be effectively engaged using the rifle's existing BZO or if a new sight setting is required.

a. Range Estimation Methods

(1) **Unit of Measure Method.** To use this method, a Marine visualizes a distance of 100 yards/meters on the ground, then he estimates how many of these units will fit between him and the target. This determines the total distance to the target.

The greatest limitation of this method is that its accuracy is related to the amount of visible terrain. For example, if a target appears at a range of 500 yards/meters or more and only a portion of the ground between a Marine and the target can be seen, it becomes difficult to use the unit of measure method to estimate range accurately.

A Marine must practice this method frequently to be proficient. Whenever possible, a Marine should select an object, estimate the range, and then verify the actual range by either pacing or using another accurate measurement.

(2) **Appearance Method.** To use this method, a Marine must be familiar with the size and various details of personnel and equipment at known distances. Visibility limits (such as weather, smoke, or darkness) the effectiveness of this method.

(3) **Front Sight Post Method.** The area of the target covered by the front sight post can be used to estimate range to a target. A Marine notes the appearance of the front sight post on a known-distance target. A Marine then uses this as a guide to determine range over an unknown distance. Because the apparent size of the target changes as the distance to the target changes, the amount of the target covered by the front sight post varies based on the range. In addition, a Marine's eye relief and perception of the front sight post affect the amount of the target that is visible. To use this method, a Marine must apply the following guidelines:

The front sight post covers the width of a man's chest or body at approximately 300 yards/meters.

- If the target is less than the width of the front sight post, the target is in excess of 300 yards/meters. Therefore, the BZO cannot be used effectively.
- If the target is wider than the front sight post, the target is less than 300 yards/meters and can be engaged point of aim/point of impact using the BZO.

See figure 11-4.

(4) **Visible Detail Method.** The amount of detail seen at various ranges can provide a Marine with an estimate of the target's distance. A Marine should observe a man while he is standing, kneeling, and in the prone position at known ranges of 100 to 500 yards/meters. He should note the man's size,

characteristics/size of his uniform and equipment, and any other pertinent details. The Marine then uses this as a guide to determine range over an unknown distance. A Marine also should study the appearance of other familiar objects such as rifles and vehicles. To use this method, a Marine applies the following general guidelines:

- At 100 yards/meters, the target can be clearly observed in detail and facial features can be distinguished
- At 200 yards/meters, the target can be clearly observed. There is a loss of facial detail. The color of the skin and equipment are still identifiable.
- At 300 yards/meters, the target has a clear body outline, face color usually remains accurate, but remaining details are blurred.
- At 400 yards/meters, the body outline is clear but remaining detail is blurred.
- At 500 yards/meters, the body shape begins to taper at the ends. The head becomes indistinct from the shoulders.
- At 600 yards/meters, the body is wedge-shaped with no head.

(5) **Bracketing Method.** This method of range estimation estimates the shortest possible distance and the

Figure 11-4. Front Sight Post Method.

greatest possible distance to the target. For example, a Marine estimates that a target may be as close as 300 yards/meters but it could be as far away as 500 yards/meters. The estimated distances are averaged to determine the estimated range to the target. For example, the average of 300 yards/meters and 500 yards/meters is 400 yards/meters.

(6) **Halving Method.** This method of range estimation judges ranges out to 800 yards/meters. To use this method, a Marine estimates the distance halfway between him and the target, then doubles that distance to get the total distance to the target. A Marine must take care when judging the distance to the halfway point, any error made in judging the halfway distance is doubled when estimating the total distance.

(7) **Combination Method.** The methods previously discussed require optimal conditions with regard to the target, terrain, and visibility in order to obtain an accurate range estimation. A Marine should estimate the range using two of the methods discussed above and then compare the estimates, or two Marines can compare their estimates. The average of the two estimates should be close to the actual range to the target.

b. **Factors Affecting Range Estimation.** There are specific factors that will affect the accuracy of estimation. A Marine must be aware of these factors and attempt to compensate for their effects.

Nature of the Target

- An object with a regular outline such as a steel helmet, rifle, or vehicle on a clear day will appear to be closer than one with an irregular outline such as a camouflaged object.
- A target that contrasts with its background will appear to be closer than one that blends in with its background.
- A partially exposed object will appear to be farther away than it is.
- A target will appear to be farther away if the target is smaller than the objects surrounding it.

Nature of Terrain

- Upward sloping terrain gives the illusion of shorter distance.
- Downward sloping terrain gives the illusion of greater distance.
- Terrain with dead space makes the target appear to be closer.
- Smooth terrain such as sand, water, or snow gives the illusion of greater distance.

Light Conditions

- The more clearly a target can be seen, the closer it appears to be.
- A target in full sunlight appears to be closer than one observed at dawn or dusk.
- Smoke, fog, rain, or anything else that obscures vision will give the illusion of greater distance.
- The position of the sun affects estimation by the eye. If the sun is behind the viewer, it lights the target better so the target appears closer. If the sun is directly beyond the target, the glare makes the target appear farther away.

c. **Hasty Sight Setting.** While a BZO is considered to be a true zero for 300 yards/meters, a Marine must be capable of engaging targets beyond this distance. The rifle's sighting system allows sight settings for distances out to 800 yards/meters in 100-yard/meter increments. If a Marine must establish a BZO for extended ranges, it is referred to a hasty sight setting. To achieve a hasty sight setting, a Marine dials the appropriate range numeral on the rear sight elevation knob that corresponds to the range to the target. For example, if the rear sight elevation knob is set at 8/3 and a target appears at 500 yards/meters, rotate the knob to the 5 setting (see fig. 11-5).

d. **Point of Aim Technique.** If the distance to the target is beyond the BZO capability of the rifle and time does not permit adjustment of the sights, a Marine can use offset

aiming techniques to engage the enemy. See paragraph 11008a.

11008. Offset Aiming

To engage a target during combat, a Marine may be required to aim his rifle at a point on the target other than center mass. This is known as offset aiming. Offset aiming is used to compensate for weather, distance and size of the target, and speed and angle of a moving target. There are three techniques for offset aiming: point of aim technique, known strike of the round, and miss drills.

a. **Point of Aim Technique.** The point of aim technique is the shifting of the sight picture to a predetermined location on or off the target to compensate for a known condition (i.e., wind, distance, movement). Each predetermined location is known as a point of aim (see fig. 11-6). The point of aim technique is used when wind affects the strike of the round and there is not time to adjust the rifle's sights, when the distance to the target is beyond the BZO capability of the rifle, or when a lead is required to engage a moving target. To use the point of aim technique to engage a target at an unknown distance, a Marine must apply the following guidelines:

- When range to the target is estimated to be beyond 300 yards/meters out to 400 meters, hold one point of aim.

- When the range to the target is estimated to be beyond 400 yards/meters out to 500 meters, hold two points of aim.

(1) **Wind.** If wind affects the strike of the round and there is no time to adjust the rifle's sights, a Marine can use the point of aim technique to compensate for the wind's effects. Table 11-1 provides points of aim for full value winds. Also see figure 11-6.

————— **Note** —————

A hold of more than four points of aim may be difficult to acquire and maintain because the front sight housing can mask the target.

(2) **Distance.** If a target appears beyond the BZO capability of the rifle and time does not permit sight adjustment, a Marine uses predetermined points of aim to compensate for changes in elevation. See figure 11-6.

(3) **Moving Targets.** To engage a moving target effectively, a Marine must understand points of aim and leads. The predetermined points of aim are used to establish a lead on a moving target. See figure 11-7.

————— **Note** —————

A hold of more than four points of aim may be difficult to acquire and maintain because the front sight housing can mask the target.

Figure 11-5. Hasty Sight Setting.

Figure 11-6. Points of Aim.

Table 11-1. Windage Points of Aim.

Wind	Distance	Points of Aim
Light (0-5 mph)	0-300 yards/meters	0
Medium/Strong (6-25 mph)	0-200 yards/meters	1
Medium (6-15 mph)	200-300 yards/meters	2
Strong (16-25 mph)	200-300 yards/meters	4

b. Known Strike of the Round. This offset aiming technique shifts the point of aim (sight picture) to compensate for rounds that strike off target center. The known strike of the round method is used if the strike of the round is known. It is useful when firing with the field protective mask donned. To engage a target using this method, a Marine aims an equal distance from center mass opposite the known strike of the round. For example, if the round strikes high and left, a Marine aims an equal and opposite distance low and right.

c. Miss Drills. This offset aiming technique shifts the point of aim (sight picture) to compensate for rounds that strike off target center. Miss drills are used if there is no indication that the round impacted the target. To perform a miss drill, a Marine fires at the base of the target, observes the impact of the round, and adjusts the aiming

point on the target. Due to terrain, foliage, concentration on maintaining sight alignment, and other variables, it is often difficult to observe the bullet's impact. If a Marine cannot observe the bullet's impact, he should shoot a string of fire toward the target's center mass until he hits the target or observes the round strike the target. The miss drill is the least preferred offset aiming technique.

Figure 11-7. Moving Target Points of Aim.

Chapter 12

Entry Level Courses of Fire

Section I. Rifle Presentation Exercise

This exercise helps Marines make the transition from known-distance firing to field firing. Marines must practice weapons presentation and the application of marksmanship fundamentals in a field firing environment. Marines perform immediate/remedial action as necessary.

12101. Range Preparation

a. **Range Requirement.** The range should have a 25- and 50-yard firing capability. If a 25-yard line is not available, all drills may be fired from the 50-yard line.

b. **Supply List.** See table 12-1.

c. **Ammunition Requirement.** The rifle presentation exercise requires 32 rounds of ammunition per Marine.

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals between instructors and assistants must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements must comply with MCO P3570.2_ and local standing operating procedures (SOPs).

Table 12-1. Rifle Presentation Exercise Supply List.

Description	Quantity per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
Hearing Protection	1 set	not applicable
Black Pastors	1 roll	6920-00-165-6354
1 Whistle w/lanyard	N/A	8465-00-254-8803

12102. Course of Fire

Drill #1 (Dry Fire/Simulation)

Distance	Target	Time	# of	Manner Fired
		Limit	Dry Fires	
25 yds	"E"	N/A	2	Alert: Standing
25 yds	"E"	N/A	2	Alert: Standing to Kneeling
25 yds	"E"	N/A	2	Alert: Standing to Sitting
25 yds	"E"	N/A	2	Tactical: Standing to Prone
25 yds	"E"	N/A	2	Alert: Standing to Prone
25 yds	"E"	N/A	2	Ready: Standing to Prone
25 yds	"E"	N/A	2	Strong Side: Standing
25 yds	"E"	N/A	2	Strong Side: Standing
25 yds	"E"	N/A	2	Weak Side: Standing
25 yds	"E"	N/A	2	Weak Side: Standing

Drill #2 (Live Fire Evaluation)

Distance	Target	Time	# of	Manner Fired
		Limit	Dry Fires	
Stage 1				
25 yds	"E"	N/A	2	Alert Standing
25 yds	"E"	N/A	2	Alert: Standing to Kneeling
25 yds	"E"	N/A	2	Alert: Standing to Prone
25 yds	"E"	N/A	2	Tactical: Standing to Prone
25 yds	"E"	N/A	2	Alert: Standing to Prone
25 yds	"E"	N/A	2	Ready: Standing to Prone
25 yds	"E"	N/A	2	Strong Side: Standing
25 yds	"E"	N/A	2	Weak Side: Standing
Stage 2				
50 yds	"E"	N/A	2	Alert: Standing
50 yds	"E"	N/A	2	Alert: Standing to Kneeling
50 yds	"E"	N/A	2	Alert: Standing to Prone
50 yds	"E"	N/A	2	Tactical: Standing to Prone
50 yds	"E"	N/A	2	Alert: Standing to Prone
50 yds	"E"	N/A	2	Ready: Standing to Prone
50 yds	"E"	N/A	2	Strong Side: Standing

50 yds "E" N/A 2 Weak Side: Standing

12103. Range Commands

Drill #1 (Dry Fire/Simulation)

COMMAND: *"Relay__ move to the 25-yard ready line and prepare a hasty sling."*

COMMAND: *"Relay__ move to the 25-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Make ready." (Remind Marines to automatically assume the alert on the command, "make ready.")*

COMMAND: *"At the sound of the whistle, dry fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, dry fire two shots kneeling."*

COMMAND: *"Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, dry fire two shots sitting."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the tactical carry. At the sound of the whistle, dry fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, dry fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the ready. At the sound of the whistle, dry fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Unload. Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Assume strong side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Dry fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload. Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Assume strong side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Dry fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload. Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Assume weak side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Dry fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload. (Pause) Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Assume weak side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Dry fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Place the weapon in **condition 4***

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 25-yard ready line and prepare a hasty sling. (Pause) Fill 2 magazines with 16 rounds each."*

COMMAND: *"Relay ___ move to the 25-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of 16 rounds, load. (Pause) Make ready." (Remind Marines to automatically assume the alert on the command, "make ready.")*

COMMAND: *"At the sound of the whistle, fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots kneeling."*

COMMAND: *"Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the tactical carry. At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the ready. At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Unload. Place the weapon in **condition 4**. Assume the tactical carry."*

COMMAND: *"With a magazine of four rounds, load. (Pause) Assume strong side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload. (Pause) Recover the ejected round and reinsert it into the magazine."*

COMMAND: *"Load. (Pause) Assume weak side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert. (Pause) Unload. Place the weapon in **condition 4**."*

Note

When all weapons are in **condition 4**, have the Marines move back to the 50-yard ready line.

COMMAND: *"Relay ___ move to the 50-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of 16 rounds, load. (Pause) Make ready." (Remind Marines to automatically assume the alert on the command, "make ready.")*

COMMAND: *"At the sound of the whistle, fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots kneeling."*

COMMAND: *"Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the tactical carry. (Pause) At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the ready. At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Unload. Place the weapon in **condition 4**. Assume the tactical carry."*

COMMAND: *"With a magazine of four rounds, load. (Pause) Assume strong side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload. (Pause) Recover the ejected round and reinsert it into the magazine."*

COMMAND: *"Load. (Pause) Assume weak side sling arms"*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert. (Pause) Place the weapon in **condition 4**."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move down range. Analyze and paste your targets."*

Section II. Limited Exposure Time Exercise

This exercise teaches Marines to apply the fundamentals of marksmanship to engage targets of limited exposure time with accurate fire. Marines perform immediate/remedial action as necessary.

20 rounds for the practice drill and 20 rounds for evaluation.

12201. Range Preparation

- a. **Range Requirement.** The range must have a 100-, 200-, and 300-yard firing capability.
- b. **Supply List.** See table 12-2.
- c. **Ammunition Requirement.** The limited exposure time exercise requires 40 rounds of ammunition per Marine:

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2. Communications gear or hand and arm signals between instructors and assistants must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements must comply with MCO P3570.2 and local SOPs.

f. **Evaluation Requirement.** Marines must achieve a minimum score of 12 hits out of 20 rounds.

Table 12-2. Limited Exposure Time Exercise Supply List.

Description	Quantity per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
Rifle Target "F"	1	6920-00-610-9086
Repair Center	as needed	6920-00-555-9847
Hearing Protection	1 set	not applicable
Black Pastes	1 roll	6920-00-165-6354
White Pastes	1 roll	6920-00-172-3572
5" Spotters	4	6920-00-713-8254
Spindle, Spotter	4	6920-00-713-8257

12202. Course of Fire

Drill #1 (Live Fire)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
100 yds	"F"	10 secs	2	Standing
100 yds	"F"	10 secs	2	Standing to Kneeling
100 yds	"F"	10 secs	2	Standing to Sitting
100 yds	"F"	10 secs	2	Standing to Prone
Stage 2				
200 yds	"E"	10 secs	2	Standing to Kneeling
200 yds	"E"	10 secs	2	Standing to Sitting
200 yds	"E"	15 secs	4	2 Standing to Kneeling 2 Prone
Stage 3				
300 yds	"E"	10 secs	2	Standing to Prone
300 yds	"E"	10 secs	2	Standing to Prone

Drill #2 (Live Fire Evaluation)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
300 yds	"E"	10 secs	2	Standing to Prone
300 yds	"E"	10 secs	2	Standing to Prone
Stage 2				
200 yds	"E"	10 secs	2	Standing to Kneeling
200 yds	"E"	10 secs	2	Standing to Sitting
200 yds	"E"	15 secs	4	2 Standing to Kneeling 2 Prone
Stage 3				
100 yds	"F"	10 secs	2	Standing
100 yds	"F"	10 secs	2	Standing to Kneeling
100 yds	"F"	10 secs	2	Standing to Sitting
100 yds	"F"	10 secs	2	Standing to Prone

12203. Range Commands

Drill #1 (Live Fire)

COMMAND: *"Relay ___ move to the 100-yard ready line and prepare a hasty sling. (Pause) Fill two magazines with eight rounds each and one magazine with four rounds."*

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone or sitting to the kneeling, then to the standing position, then assume the alert. Coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of eight rounds, load. (Pause) Make ready."*

COMMAND: *"When your 'F' target appears, fire two shots standing in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots kneeling in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots sitting in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots prone in a time limit of 10 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Sling arms."*

Note

When all weapons are in **condition 4**, Marines move back to the 200-yard ready line.

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of eight rounds, load. (Pause) Make ready."*

COMMAND: *"When your 'E' target appears, fire two shots kneeling in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, fire two shots sitting in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, fire two shots kneeling and then two shots prone in a time limit of 15 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Sling arms."*

Note

When all weapons are in **condition 4**, Marines move back to the 300-yard ready line.

COMMAND: *"Relay ___ move to the 300-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of four rounds, load. (Pause) Make ready."*

COMMAND: *"When your 'E' target appears, fire two shots prone in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, fire two shots prone in a time limit of 10 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 300-yard ready line and prepare a hasty sling. (Pause) Fill two magazines with eight rounds each and one magazine with four rounds."*

COMMAND: *"Relay ___ move to the 300-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone or sitting to the kneeling, then to the standing position, then assume the alert. Coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of four rounds, load. (Pause) Make ready."*

COMMAND: *"When your 'E' target appears, fire two shots prone in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, fire two shots prone in a time limit of 10 seconds. Then reload with a magazine of eight rounds."*

COMMAND: *"Assume the tactical carry."*

————— **Note** —————

When all weapons are reloaded to **condition 1**, have Marines, while staying on line, advance to the 200-yard ready line.

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target."*

COMMAND: *"Assume the alert. (Pause) When your 'E' target appears, fire two shots kneeling in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, fire two shots sitting in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, fire two shots kneeling and then two shots prone in a time limit of 15 seconds. Then reload with a magazine of eight rounds."*

COMMAND: *"Assume the tactical carry."*

————— **Note** —————

When all weapons are reloaded to **condition 1**, have Marines, while staying on line, advance to the 100-yard ready line.

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target."*

COMMAND: *"Assume the alert. (Pause) When your 'F' target appears, fire two shots standing in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots kneeling in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots sitting in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots prone in a time limit of 10 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Section III. Low-Light/Darkness Firing Exercise

This exercise evaluates a Marine's ability to engage targets accurately in low light (without illumination) and in darkness (with illumination). It also evaluates a Marine's ability to maintain night vision and detect targets using low-light and darkness observation skills. Marines perform immediate/remedial action as necessary.

per Marine: 30 rounds for the practice drill and 30 rounds for evaluation. For ground illumination, 10 L495 surface flares per Marine are required. For air illumination, .14 B535 40mm parachute flares per Marine are required.

12301. Range Preparation

- a. **Range Requirement.** The range must have a 50- and 100-yard firing capability.
- b. **Supply List.** See table 12-3.
- c. **Ammunition Requirement.** The low-light/darkness firing exercise requires 60 rounds of ammunition

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals between instructors and assistants must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements must comply with MCO P3570.2_ and local SOPs.

f. **Evaluation Requirement.** Marines must achieve a minimum score of 18 hits out of 30 rounds.

Table 12-3. Low-Light/Darkness Firing Exercise Supply List.

Description	Quantity per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
Hearing Protection	1 set	not applicable
Black Pastors	1 roll	6920-00-165-6354
3" Spotters	10	6920-00-713-8255
Spindle, Spotter	10	6920-00-713-8257

12302. Course of Fire

Drill #1 (Live Fire)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
50 yds	"E"	N/A	2	Standing
50 yds	"E"	N/A	2	Standing to Kneeling
50 yds	"E"	N/A	2	Standing to Prone
50 yds	"E"	N/A	4	2 Standing 2 Prone
Stage 2				
100 yds	"E"	N/A	10	Standing to Prone Ground Illumination
Stage 3				
100 yds	"E"	N/A	10	Standing to Prone (Air Illumination)

Drill #2 (Live Fire Evaluation)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
100 yds	"E"	N/A	10	Standing to Prone (Air Illumination)
Stage 2				
100 yds	"E"	N/A	10	Standing to Prone (Ground Illumination)
Stage 3				
50 yds	"E"	N/A	2	Standing
50 yds	"E"	N/A	2	Standing to Kneeling
50 yds	"E"	N/A	2	Standing to Prone
50 yds	"E"	N/A	4	2 Standing 2 Prone

12303. Range Commands

Drill #1 (Live Fire)

COMMAND: "Relay ___ move to the 50-yard ready line and prepare a hasty sling. (Pause) Fill 3 magazines with 10 rounds each."

COMMAND: "Relay ___ move to the 50-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. Coaches remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of 10 rounds, load. (Pause) Make ready."*

COMMAND: *"When your target appears, fire two shots standing."*

Note

Allow Marines to complete firing.

COMMAND: *"When your target appears, fire two shots kneeling."*

Note

Allow Marines to complete firing.

COMMAND: *"When your target appears, fire two shots prone."*

Note

Allow Marines to complete firing.

COMMAND: *"When your target appears, fire two shots standing and then two shots prone. Then place your weapon in **condition 4**"*

Note

Allow Marines to complete firing.

COMMAND: *"Sling arms."*

Note

When all weapons are in **condition 4**, have the Marines move back to the 100-yard ready line.

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of 10 rounds, load. (Pause) Make ready."*

COMMAND: *"When your target is illuminated, fire 10 shots prone. Then reload with a magazine of 10 rounds."*

Note

Allow Marines to complete firing.

COMMAND: *"When your target is illuminated, fire 10 shots prone. Then place your weapon in **condition 4**"*

Note

Allow Marines to complete firing.

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 100-yard ready line and prepare a hasty sling. (Pause) Fill 3 magazines with 10 rounds each."*

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. Coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of 10 rounds, load. (Pause) Make ready."*

COMMAND: *"When your target is illuminated, fire 10 shots prone. Then reload with a magazine of 10 rounds."*

Note

Allow Marines to complete firing.

COMMAND: *"When your target is illuminated, fire 10 shots prone. Then reload with a magazine of 10 rounds."*

Note

Allow Marines to complete firing.

COMMAND: *"Assume the tactical carry."*

Note

When all weapons are reloaded to **condition 1**, have Marines, while staying on line, advance to the 50-yard ready line.

COMMAND: *"Relay ___ move to the 50-yard firing line and cover down on your assigned target. (Pause) Assume the alert."*

COMMAND: *"When your target appears, fire two shots standing."*

Note

Allow Marines to complete firing.

COMMAND: *"When your target appears, fire two shots kneeling."*

Note

Allow Marines to complete firing.

COMMAND: *"When your target appears, fire two shots prone."*

Note

Allow Marines to complete firing.

COMMAND: *"When your target appears, fire two shots standing and then two shots prone. Then place your weapon in **condition 4**."*

Note

Allow Marines to complete firing.

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Section IV. Field Protective Mask Firing Exercise

This exercise evaluates a Marine's ability to engage stationary targets accurately using offset aiming techniques while wearing a field protective mask. Marines apply immediate/remedial action as necessary.

12401. Range Preparation

- a. **Range Requirement.** The range must have a 100- and 200-yard firing capability.
- b. **Supply List.** See table 12-4.
- c. **Ammunition Requirement.** The field protective mask firing exercise requires 24 rounds of ammunition

per Marine: 12 rounds for the practice drill and 12 rounds for the evaluation.

- d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals between instructors and assistants must be planned and used throughout the exercise.

- e. **Safety Requirements.** Safety requirements must comply with MCO P3570.2_ and local SOPs.

- f. **Evaluation Requirement.** Marines must achieve a minimum score of 6 hits out of 12 rounds.

Table 12-4. Field Protective Mask Firing Exercise Supply List.

Description	Quantity Per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
Hearing Protection	1 set	not applicable
Black Plasters	1 roll	6920-00-165-6354
White Plasters	1 roll	6920-00-172-3572
5" Spotters	4	6920-00-713-8254
Spindle, Spotter	4	6920-00-713-8257

12402. Course of Fire

Drill #1 (Live Fire)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
100 yds	"E"	20 secs	2	Standing
100 yds	"E"	20 secs	2	Standing to Kneeling
100 yds	"E"	20 secs	2	Standing to Prone
Stage 2				
200 yds	"E"	20 secs	2	Standing to Kneeling
200 yds	"E"	30 secs	4	2 Standing to Kneeling 2 Prone

Drill #2 (Live Fire Evaluation)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
200 yds	"E"	20 secs	2	Standing to Kneeling
200 yds	"E"	30 secs	4	2 Standing to Kneeling 2 Prone
Stage 2				
100 yds	"E"	20 secs	2	Standing
100 yds	"E"	20 secs	2	Standing to Kneeling
100 yds	"E"	20 secs	2	Standing to Prone

12403. Range Commands

Drill #1 (Live Fire)

COMMAND: *"Relay ___ move to the 100-yard ready line and prepare a hasty sling. (Pause) Fill two magazines with six rounds each. (Pause) Don and clear your field protective mask."*

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. Coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of six rounds, load. (Pause) Make ready."*

COMMAND: *"When your target appears, fire two shots standing in a time limit of 20 seconds."*

COMMAND: *"When your target appears, fire two shots kneeling in a time limit of 20 seconds."*

COMMAND: *"When your target appears, fire two shots prone in a time limit of 20 seconds. Then place your weapon in **condition 4**."*

Note

When all weapons are in **condition 4**, have the Marines move back to the 200-yard ready line.

COMMAND: *"Sling arms."*

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of six rounds, load. (Pause) Make ready."*

COMMAND: *"When your target appears, fire two shots kneeling in a time limit of 20 seconds."*

COMMAND: *"When your target appears, fire two shots kneeling and then two shots prone in a time limit of 30 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 200-yard ready line and prepare a hasty sling. (Pause) Fill two magazines with six rounds. (Pause) Don and clear your field protective mask."*

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the alert."*

————— **Note** —————

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. Coaches remind Marines of this procedure if they do not perform it.

COMMAND: *"When your target appears, fire two shots kneeling in a time limit of 20 seconds."*

COMMAND: *"When your target appears, fire two shots kneeling and then two shots prone in a time limit of 30 seconds. Then reload your weapon with a magazine of six rounds."*

COMMAND: *"Assume the tactical carry."*

————— **Note** —————

When all weapons are reloaded to **condition 1**, have Marines, while staying on line, advance to the 100-yard ready line.

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the alert."*

COMMAND: *"When your target appears, fire two shots standing in a time limit of 20 seconds."*

COMMAND: *"When your target appears, fire two shots kneeling in a time limit of 20 seconds."*

COMMAND: *"When your target appears, fire two shots prone in a time limit of 20 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Section V. Multiple Target Engagement Exercise

This exercise helps Marines practice and evaluate supported and unsupported firing positions in a multiple target engagement exercise. Marines perform immediate/remedial action as necessary.

12501. Range Preparation

- a. **Range Requirement.** The range must have a 50-, 100-, and 200-yard firing capability.
- b. **Supply List.** See table 12-5.
- c. **Ammunition Requirement.** The multiple target engagement exercise requires 64 rounds of ammunition

per Marine: 32 rounds for the practice drill and 32 rounds for evaluation.

- d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals between instructors and assistants must be planned and used throughout the exercise.

- e. **Safety Requirements.** Ensure safety requirements comply with MCO P3570.2_ and local SOPs.

- f. **Evaluation Requirement.** Marines must achieve a minimum score of 18 hits out of 32 rounds.

Table 12-5. Multiple Target Engagement Exercise Supply List

Description	Quantity per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
Rifle Target "E"	1	6920-00-610-9086
Hearing Protection	1 set	not applicable
Black Pastors	1 roll	6920-00-165-6354
White Pastors	1 roll	6920-00-172-3572
5" Spotters	4	6920-00-713-8254
Spindle, Spotter	4	6920-00-713-8257

12502. Course of Fire

Drill #1 (Live Fire)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
50 yds	2 "E"	15 secs	4	2 Standing 2 Standing
50 yds	2 "F"	15 secs	4	2 Standing to Kneeling 2 Kneeling
50 yds	2 "F"	15 secs	4	2 Standing to Prone 2 Prone
Stage 2				
100 yds	2 "E"	15 secs	4	2 Standing 2 Standing
100 yds	2 "F"	15 secs	4	2 Standing to Kneeling 2 Kneeling
100 yds	2 "F"	15 secs	4	2 Standing to Prone 2 Prone
Stage 3				
200 yds	2 "E"	15 secs	4	2 Standing to Kneeling 2 Kneeling (Supported)
200 yds	2 "E"	15 secs	4	2 Standing to Prone 2 Prone (Supported)

Drill #2 (Live Fire Evaluation)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
200 yds	2 "E"	15 secs	4	2 Standing to Kneeling 2 Kneeling (Supported)
200 yds	2 "E"	15 secs	4	2 Standing to Prone 2 Prone (Supported)
100 yds	2 "E"	15 secs	4	2 Standing 2 Standing
100 yds	2 "F"	15 secs	4	2 Standing to Kneeling 2 Kneeling
100 yds	2 "F"	15 secs	4	2 Standing to Prone 2 Prone

Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 3				
50 yds	2 "E"	15 secs	4	2 Standing 2 Standing
50 yds	2 "F"	15 secs	4	2 Standing to Kneeling 2 Kneeling
50 yds	2 "F"	15 secs	4	2 Standing to Prone 2 Prone

12503. Range Commands

Drill #1 (Live Fire)

COMMAND: *"Relay ___ move to the 50-yard ready line and prepare a hasty sling. (Pause) Fill 2 magazines with 12 rounds each and 1 magazine with 8 rounds."*

COMMAND: *"Relay ___ move to the 50-yard firing line and cover down on your assigned targets. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. Coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of 12 rounds, load. (Pause) Make ready."*

COMMAND: *"When your targets appear, fire two shots standing on each 'E' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots kneeling on each 'F' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots prone on each 'F' target in a time limit of 15 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Sling arms."*

Note

When all weapons are in **condition 4**, have the Marines move back to the 100-yard ready line.

COMMAND: "Relay ___ move to the 100-yard firing line and cover down on your assigned targets. (Pause) Assume the tactical carry."

COMMAND: "With a magazine of 12 rounds, load. (Pause) Make ready."

COMMAND: "When your targets appear, fire two shots standing on each 'E' target in a time limit of 15 seconds."

COMMAND: "When your targets appear, fire two shots kneeling on each 'F' target in a time limit of 15 seconds."

COMMAND: "When your targets appear, fire two shots prone on each 'F' target in a time limit of 15 seconds. Then place your weapon in **condition 4**."

COMMAND: "Sling arms."

Note

When all weapons are in **condition 4**, have the Marines move back to the 200-yard ready line.

COMMAND: "Relay ___ move to the 200-yard firing line and cover down on your assigned targets. (Pause) Assume the tactical carry."

COMMAND: "With a magazine of eight rounds, load. (Pause) Make ready."

COMMAND: "When your targets appear, fire two shots kneeling supported on each 'E' target in a time limit of 15 seconds."

COMMAND: "When your targets appear, fire two shots prone supported on each 'E' target in a time limit of 15 seconds. Then place your weapon in **condition 4**."

COMMAND: "Unload, show clear."

COMMAND: "Relay ___ move off the firing line."

Drill #2 (Live Fire Evaluation)

COMMAND: "Relay ___ move to the 200-yard ready line and prepare a hasty sling. (Pause) Fill 2 magazines with 12 rounds each and 1 magazine with 8 rounds."

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned targets. (Pause) Assume the tactical carry."*

————— **Note** —————

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. Coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of eight rounds, load. (Pause) Make ready."*

COMMAND: *"When your targets appear, fire two shots kneeling supported on each 'E' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots prone supported on each 'E' target in a time limit of 15 seconds. Then reload your weapon with a magazine of 12 rounds."*

COMMAND: *"Assume the tactical carry."*

————— **Note** —————

When all weapons are reloaded to **condition 1**, have Marines, while staying on line, advance to the 100-yard ready line.

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned targets. (Pause) Assume the alert."*

COMMAND: *"When your targets appear, fire two shots standing on each 'E' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots kneeling on each 'F' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots prone on each 'F' target in a time limit of 15 seconds. Then reload your weapon with a magazine of 12 rounds."*

COMMAND: *"Assume the tactical carry."*

————— **Note** —————

When all weapons are reloaded to **condition 1**, have Marines, while staying on line, advance to the 50-yard ready line.

COMMAND: *"Relay ___ move to the 50-yard firing line and cover down on your assigned targets. (Pause) Assume the alert."*

COMMAND: *"When your targets appear, fire two shots standing on each 'E' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots kneeling on each 'F' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots prone on each 'F' target in a time limit of 15 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Section VI. Moving Target Engagement Exercise

This exercise evaluates a Marine's ability to engage moving targets accurately in a fixed time period. It also tests a Marine's ability to apply the fundamentals of marksmanship while engaging moving targets. Marines perform immediate/remedial action as necessary.

12601. Range Preparation

- a. **Range Requirement.** The range must have a 50-, 100-, and 200-yard firing capability.
- b. **Supply List.** See table 12-6.
- c. **Ammunition Requirement.** The moving target engagement exercise requires 26 rounds of ammunition

for each Marine: 14 rounds for the moving target practice drill and 12 rounds for evaluation.

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals between instructors and assistants must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements comply with MCO P3570.2_ and local SOPs.

f. **Evaluation Requirement.** Marines must achieve a minimum score of 8 hits out of 12 rounds.

Table 12-6. Moving Target Engagement Exercise Supply List.

Description	Quantity per Firing Point	NSN
Rifle Target "E" on Stick	1	6920-00-600-6874
Hearing Protection	1 set	not applicable
Black Pastes	1 roll	6920-00-165-6354
5" Spotters	4	6920-00-713-8254
Spindle, Spotter	4	6920-00-713-8257

12602. Course of Fire

Drill #1 (Live Fire)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
50 yds	"E"	20 secs	2	Standing: 1 L-R, 1 R-L
50 yds	"E"	20 secs	4	Standing: 2 L-R, 2 R-L
Stage 2				
100 yds	"E"	20 secs	4	Kneeling: 2 L-R, 2 R-L
Stage 3				
200 yds	"E"	30 secs	4	Prone: 2 L-R, 2 R-L (Supported)

Drill #2 (Live Fire Evaluation)				
Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
200 yds	"E"	30 secs	4	Prone: 2 L-R, 2 R-L (Supported)
Stage 2				
100 yds	"E"	20 secs	4	Kneeling: 2 L-R, 2 R-L
Stage 3				
50 yds	"E"	20 secs	4	Standing: 2 L-R, 2 R-L

12603. Range Commands

Drill #1 (Live Fire)

COMMAND: *"Relay ___ move to the 50-yard ready line and prepare a hasty sling. (Pause) Fill two magazines with four rounds each and one magazine with six rounds."*

COMMAND: *"Relay ___ move to the 50-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. Coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of six rounds, load. (Pause) Make ready."*

COMMAND: *"When your target appears, fire one shot standing on the 'E' target in a time limit of 10 seconds."*

COMMAND: *"When your target appears, fire one shot standing on the 'E' target in a time limit of 10 seconds."*

COMMAND: *"When your target appears, fire two shots standing on the 'E' target in a time limit of 10 seconds."*

COMMAND: *"When your target appears, fire two shots standing on the 'E' target in a time limit of 10 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Sling arms."*

Note

When all weapons are in **condition 4**, have the Marines move back to the 100-yard ready line.

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of four rounds, load. (Pause) Make ready. (Pause) Assume the kneeling."*

COMMAND: *"When your target appears, fire two shots kneeling on the 'E' target in a time limit of 10 seconds. Then remain in the kneeling position."*

COMMAND: *"When your target appears, fire two shots kneeling on the 'E' target in a time limit of 10 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Sling arms."*

Note

When all weapons are in **condition 4**, have the Marines move back to the 200-yard ready line.

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of four rounds, load. (Pause) Make ready. (Pause) Assume the prone."*

COMMAND: *"When your target appears, fire two shots prone supported on the 'E' target in a time limit of 15 seconds. Then remain in the prone position."*

COMMAND: *"When your target appears, fire two shots prone supported on the 'E' target in a time limit of 15 seconds. Then place your weapon in **condition 4**"*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 200-yard ready line and prepare a hasty sling. (Pause) Fill three magazines with four rounds each."*

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. Coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of four rounds, load. (Pause) Make ready. (Pause) Assume the prone."*

COMMAND: *"When your target appears, fire two shots prone supported on the 'E' target in a time limit of 15 seconds. Then remain in the prone position."*

COMMAND: *"When your target appears, fire two shots prone supported on the 'E' target in a time limit of 15 seconds. Then reload your weapon with a magazine of four rounds."*

COMMAND: *"Assume the tactical carry."*

————— **Note** —————

When all weapons are reloaded to **condition 1**, have Marines, while staying on line, advance to the 100-yard ready line.

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the alert. (Pause) Assume the kneeling."*

COMMAND: *"When your target appears, fire two shots kneeling on the 'E' target in a time limit of 10 seconds. Then remain in the kneeling position."*

COMMAND: *"When your target appears, fire two shots kneeling on the 'E' target in a time limit of 10 seconds. Then reload with a magazine of four rounds."*

COMMAND: *"Assume the tactical carry."*

————— **Note** —————

When all weapons are reloaded to **condition 1**, have Marines, while staying on line, advance to the 50-yard ready line.

COMMAND: *"Relay ___ move to the 50-yard firing line and cover down on your assigned target. (Pause) Assume the alert."*

COMMAND: *"When your target appears, fire two shots standing on the 'E' target in a time limit of 10 seconds."*

COMMAND: *"When your target appears, fire two shots standing on the 'E' target in a time limit of 10 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Section VII. Unknown Distance Firing Exercise

This exercise evaluates a Marine's ability to estimate the distance to a target by visual methods. It also evaluates a Marine's ability to take cover, reload the rifle, and apply a hasty sight setting to engage targets at various distances. Marines perform immediate/remedial action as necessary.

12701. Range Preparation

a. **Range Requirement.** The range must have a 500-yard firing capability. Terrain determines exact placement of the targets.

b. **Supply List.** See table 12-7.

c. **Ammunition Requirement.** The unknown distance firing exercise requires 32 rounds of ammunition per Marine: 16 rounds for the practice drill and 16 rounds for the evaluation.

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2. Communications gear or hand and arm signals between instructors and assistants must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements comply with MCO P3570.2 and local SOPs.

f. **Evaluation Requirement.** Marines must achieve a minimum score of 8 hits out of 16 rounds.

Table 12-7. Unknown Distance Firing Exercise Supply List.

Description	Quantity per Firing Point	NSN
Rifle Target "E"	12	6920-00-600-6874
Hearing Protection	1 set	not applicable

12702. Course of Fire

Drill # 1 (Live Fire: 16 Rounds, 12 Targets, 8 Minutes)

Time Limit	Target Location (yds)	Manner Fired
Stage 1		
2 min	300, 400, 200	Rooftop
Stage 2		
2 min	300, 350, 200	Window
Stage 3		
2 min	500, 300, 150	Rubble Pile
Stage 4		
2 min	350, 250, 300	Bunker Aperture

Drill #2 (Live Fire Evaluation: 16 Rounds, 12 Targets, 8 Minutes)

Time Limit	Target Location (yds)	Manner Fired
Stage 1		
2 min	300, 400, 200	Rooftop
Stage 2		
2 min	300, 350, 200	Window
Stage 3		
2 min	500, 300, 150	Rubble Pile
Stage 4		
2 min	350, 250, 300	Bunker Aperture

12703. Range Commands

Drill #1 (Live Fire)

COMMAND: *"Relay ___ move to the ready line and prepare a hasty sling. (Pause) Fill two magazines with eight rounds each."*

COMMAND: *"Shooter # ___ move to the starting point and prepare to move to the first field firing position. Assume the tactical carry."*

COMMAND: *"This unknown distance firing drill consists of four stages, each allowing 1 minute and 50 seconds for firing and 10 seconds movement time between stages. The drill has a total time limit of 8 minutes. You will fire each stage from a different field firing position: rooftop, window, rubble pile, and bunker aperture. There will be three targets per stage at unknown distances between 50 and 500 yards. You have a total of 16 rounds to engage 12 targets and will reload once at your own discretion."*

COMMAND: *"On the firing line in lane one, insert a magazine of eight rounds. (Pause) Make ready. (Pause) Assume the tactical carry."*

COMMAND: *"When the first target appears, move to the first field firing position and commence firing."*

COMMAND: *"When all targets are down, move quickly to the next lane and assume the field firing position. Commence firing when the first target appears."*

COMMAND: *"When all targets are down in the final lane, place your weapon in **condition 4**."*

COMMAND: *"Unload, show clear, and move off the firing line."*

Note

When Marines have completed the four stages, the tower NCO/scorekeeper announces scores for each Marine by number.

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay___ move to the ready line and prepare a hasty sling. (Pause) Fill two magazines with eight rounds each."*

COMMAND: *"Shooter # ___ move to the starting point and prepare to move to the first field firing position. Assume the tactical carry."*

COMMAND: *"This unknown distance firing drill consists of four stages, each allowing 1 minute and 50 seconds for firing and 10 seconds movement time between stages. The drill has a total time limit of 8 minutes. You will fire each stage from a different field firing position: rooftop, window, rubble pile, and bunker aperture. There will be three targets per stage at unknown distances between 50 and 500 yards. You have a total of 16 rounds to engage 12 targets and will reload once at your own discretion."*

COMMAND: *"On the firing line in lane one, insert a magazine of eight rounds. (Pause) Make ready. (Pause) Assume the tactical carry."*

COMMAND: *"When the first target appears, move to the first field firing position and commence firing."*

COMMAND: *"When all targets are down, move quickly to the next lane and assume the field firing position. Commence firing when the first target appears."*

COMMAND: *"When all targets are down in the final lane, place your weapon in **condition 4**."*

COMMAND: *"Unload, show clear, and move off the firing line."*

Note

When Marines have completed the four stages, the tower NCO/scorekeeper announces scores for each Marine by number.

Chapter 13

Sustainment Level Courses of Fire

Section I. Rifle Presentation Exercise

This exercise helps Marines make the transition from known-distance firing to field firing. Marines practice weapons presentation and the application of marksmanship fundamentals in a field firing environment. Marines perform immediate/remedial action as necessary.

13101. Range Preparation

a. **Range Requirement.** The range should have a 25- and 50-yard firing capability. If a 25-yard line is not available, the 25-yard live fire drill may be fired from the 50-yard line.

b. **Supply List.** See table 13-1.

c. **Ammunition Requirement.** The rifle presentation exercise requires 32 rounds of ammunition per Marine.

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals among range personnel must be planned and used

e. **Safety Requirements.** Safety requirements must comply with MCO P3570.2_ and local SOPs.

Table 13-1. Rifle Presentation Exercise Supply List

Description	Quantity per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
Hearing Protection	1 set	not applicable
Black Pastes	1 roll	6920-00-165-6354
1 whistle w/lanyard	N/A	8465-00-254-8803

13102. Course of Fire

Drill #1 (Dry Fire/Simulation)

Distance	Target	Time Limit	# of Dry Fire	Manner Fired
25 yds	"E"	N/A	2	Alert: Standing
25 yds	"E"	N/A	2	Alert: Standing to Kneeling
25 yds	"E"	N/A	2	Alert: Standing to Sitting
25 yds	"E"	N/A	2	Tactical: Standing to Prone
25 yds	"E"	N/A	2	Alert: Standing to Prone
25 yds	"E"	N/A	2	Ready: Standing to Prone
25 yds	"E"	N/A	2	Strong Side: Standing
25 yds	"E"	N/A	2	Strong Side: Standing
25 yds	"E"	N/A	2	Weak Side: Standing
25 yds	"E"	N/A	2	Weak Side: Standing

Drill #2 (Live Fire Evaluation)

Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
25 yds	"E"	N/A	2	Alert: Standing
25 yds	"E"	N/A	2	Alert: Standing to Kneeling
25 yds	"E"	N/A	2	Alert: Standing to Prone
25 yds	"E"	N/A	2	Tactical: Standing to Prone
25 yds	"E"	N/A	2	Alert: Standing to Prone
25 yds	"E"	N/A	2	Ready: Standing to Prone
25 yds	"E"	N/A	2	Strong Side: Standing
25 yds	"E"	N/A	2	Weak Side: Standing
Stage 2				
50 yds	"E"	N/A	2	Alert: Standing
50 yds	"E"	N/A	2	Alert: Standing to Kneeling
50 yds	"E"	N/A	2	Alert: Standing to Prone
50 yds	"E"	N/A	2	Tactical: Standing to Prone
50 yds	"E"	N/A	2	Alert: Standing to Prone
50 yds	"E"	N/A	2	Ready: Standing to Prone

50 yds	"E"	N/A	2	Strong Side: Standing
50 yds	"E"	N/A	2	Weak Side: Standing

13103. Range Commands

Drill #1 (Dry Fire/Simulation)

COMMAND: *"Relay ___ move to the 25-yard ready line and prepare a hasty sling."*

COMMAND: *"Relay ___ move to the 25-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Make ready." (Remind Marines to automatically assume the alert on the command, "make ready.")*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"At the sound of the whistle, dry fire two shots standing."*

————— **Note** —————

If the targets are being run out of the pits, the range commands should be changed as follows: "When the target appears, dry fire two shots ..."

COMMAND: *"Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, dry fire two shots kneeling."*

COMMAND: *"Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, dry fire two shots sitting."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the tactical carry. At the sound of the whistle, dry fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, dry fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the ready. At the sound of the whistle, dry fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Unload. Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Assume strong side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Dry fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload. Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Assume strong side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Dry fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload. Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Assume weak side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Dry fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload. (Pause) Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Assume weak side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Dry fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Place the weapon in **condition 4**."*

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 25-yard ready line and prepare a hasty sling. (Pause) Fill 2 magazines with 16 rounds each."*

COMMAND: *"Relay ___ move to the 25-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of 16 rounds, load. (Pause) Make ready." (Remind Marines to automatically assume the alert on the command, "make ready.")*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"At the sound of the whistle, fire two shots standing."*

Note

If the targets are being run out of the pits, the range commands should be changed as follows: "When the target appears, fire two shots. . ."

COMMAND: *"Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots kneeling."*

COMMAND: *"Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the tactical carry. At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the ready. At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Unload. Assume the tactical carry."*

COMMAND: *"With a magazine of four rounds, load. (Pause) Assume strong side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload, (Pause) recover the ejected round and reinsert it into the magazine."*

COMMAND: *"Load. (Pause) Assume weak side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Fire two shots standing."*

COMMAND: *"Empty rifle. Do not search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Unload."*

————— **Note** —————

When all weapons are in **condition 4**, Marines move back to the 50-yard ready line.

COMMAND: *"Relay ___ move to the 50-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of 16 rounds, load. (Pause) Make ready." (Remind Marines to automatically assume the alert on the command, "make ready.")*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"At the sound of the whistle, fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots kneeling."*

COMMAND: *"Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the tactical carry. (Pause) At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Assume the ready. At the sound of the whistle, fire two shots prone."*

COMMAND: *"Search and assess. (Pause) Kneel. Search and assess. (Pause) Stand. Search and assess. (Pause) Unload. Assume the tactical carry."*

COMMAND: *"With a magazine of four rounds, load. (Pause) Assume strong side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Fire two shots standing."*

COMMAND: *"Search and assess. (Pause) Unload. (Pause) Recover the ejected round and reinsert it into the magazine."*

COMMAND: *"Load. (Pause) Assume weak side sling arms."*

COMMAND: *"At the sound of the whistle, present the weapon to the target. Make ready. Fire two shots standing."*

COMMAND: *"Empty rifle. Do not search and assess. (Pause) Place the weapon on SAFE and keep the trigger finger straight. Assume the alert."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move down range. Analyze and paste your targets."*

Section II. Limited Exposure Time Exercise

This exercise teaches Marines to apply the fundamentals of marksmanship to engage targets of limited exposure time with accurate fire. Marines perform immediate/remedial action as necessary.

13201. Range Preparation

- a. **Range Requirement.** The range must have a 200- and 300-yard capability.
- b. **Supply List.** See table 13-2.
- c. **Ammunition Requirement.** The limited exposure time exercise requires 20 rounds of ammunition per Marine.

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals among range personnel must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements must comply with MCO P3570.2_ and local SOPs.

f. **Evaluation Requirement.** Marines must achieve a minimum score of 12 hits out of 20 rounds.

Table 13-2. Limited Exposure Time Exercise Supply List

Description	Quantity per Firing Point	NSN
"F" Target Repair Center	1	6920-00-610-9086
Rifle Target "E"	1	6920-00-600-6874
Hearing Protection	1 set	not applicable
Black Pastors	1 roll	6920-00-165-6354
White Pastors	1 roll	6920-00-172-3572
5" Spotters	4	6920-00-713-8254
Spindle, Spotter	4	6920-00-713-8257

13202. Course of Fire

Drill #1 (Dry Fire/Simulation)

Distance	Target	Time Limit	# of Dry Fires	Manner Fired
Stage 1				
200 yds	"F"	10 secs	2	Standing
200 yds	"F"	10 secs	2	Standing to Kneeling
200 yds	"F"	10 secs	2	Standing to Sitting
200 yds	"F"	10 secs	2	Standing to Prone
200 yds	"F"	15 secs	4	2 Standing to Kneeling 2 Prone
Stage 2				
300 yds	"E"	10 secs	2	Standing to Kneeling
300 yds	"E"	10 secs	2	Standing to Prone
300 yds	"E"	15 secs	4	2 Standing to Kneeling 2 Prone

Drill #2 (Live Fire Evaluation)

Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
300 yds	"E"	10 secs	2	Standing to Kneeling
300 yds	"E"	10 secs	2	Standing to Prone
300 yds	"E"	15 secs	4	2 Standing to Kneeling 2 Prone
Stage 2				
200 yds	"F"	10 secs	2	Standing
200 yds	"F"	10 secs	2	Standing to Kneeling
200 yds	"F"	10 secs	2	Standing to Sitting
200 yds	"F"	10 secs	2	Standing to Prone
200 yds	"F"	15 secs	4	2 Standing to Kneeling 2 Prone

13203. Range Commands

Drill #1 (Dry Fire/Simulation)

COMMAND: *"Relay ___ move to the 200-yard ready line and prepare a hasty sling."*

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

————— **Note** —————

Marines should search and assess after each target engagement. They should move from the prone or sitting to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With an empty magazine, load. (Pause) Make ready."*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your 'F' target appears, dry fire two shots standing in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, dry fire two shots kneeling in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, dry fire two shots sitting in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, dry fire two shots prone in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, dry fire two shots kneeling then two shots prone in a time limit of 15 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Sling arms."*

————— **Note** —————

When all weapons are in **condition 4**, Marines move back to the 300-yard ready line.

COMMAND: *"Relay ___ move to the 300-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Make ready."*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your 'E' target appears, dry fire two shots kneeling in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, dry fire two shots prone in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, dry fire two shots kneeling then two shots prone in a time limit of 15 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 300-yard ready line and prepare a hasty sling. (Pause) Fill 1 magazine with 8 rounds and 1 magazine with 12 rounds."*

COMMAND: *"Relay ___ move to the 300-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

————— **Note** —————

Marines should search and assess after each target engagement. They should move from the prone or sitting to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of eight rounds, load. (Pause) Make ready."*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your 'E' target appears, fire two shots kneeling in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, fire two shots prone in a time limit of 10 seconds."*

COMMAND: *"When your 'E' target appears, fire two shots kneeling then two shots prone in a time limit of 15 seconds. Then reload with a magazine of 12 rounds."*

COMMAND: *"Assume the tactical carry."*

Note

When all weapons are reloaded to **condition 1**, Marines, while staying on line, advance to the 200-yard ready line.

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target."*

COMMAND: *"Assume the alert. (Pause) When your 'F' target appears, fire two shots standing in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots kneeling in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots sitting in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots prone in a time limit of 10 seconds."*

COMMAND: *"When your 'F' target appears, fire two shots kneeling then two shots prone in a time limit of 15 seconds."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Section III. Low-Light/Darkness Engagement Exercise

This exercise evaluates a Marine's ability to engage targets accurately in low light (without illumination) and in darkness (with illumination). It also evaluates a Marine's ability to maintain night vision and detect targets using low-light and darkness observation skills. Marines perform immediate/remedial action as necessary.

13301. Range Preparation

- a. **Range Requirement.** The range must have a 100-yard capability. If a 100-yard firing line is not available, the exercise should be fired at the 200-yard line.
- b. **Supply List.** See table 13-3.

c. **Ammunition Requirement.** The low-light/darkness engagement exercise requires 30 rounds of ammunition per Marine. For ground illumination, .10 L495 surface flares per Marine are required. For air illumination, .14 B535 40mm parachute flares per Marine are required.

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2. Communications gear or hand and arm signals among range personnel must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements comply with MCO P3570.2 and local SOPs.

f. **Evaluation Requirement.** Marines must achieve a minimum score of 18 hits out of 30 rounds.

Table 13-3. Low-Light/Darkness Engagement Exercise Supply List

Description	Quantity per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
Hearing Protection	1 set	not applicable
Black Pastors	1 roll	6920-00-165-6354
3" Spotters	10	6920-00-713-8255
Spindle, Spotter	10	6920-00-713-8257

13302. Course of Fire

Drill #1 (Dry Fire/Simulation)

Distance	Target	Time Limit	# of Dry Fires	Manner Fired
Stage 1				
100 yds	"E"	N/A	2	Standing
100 yds	"E"	N/A	2	Standing to Kneeling
100 yds	"E"	N/A	2	Standing to Prone
100 yds	"E"	N/A	4	2 Standing to Kneeling 2 Prone
Stage 2				
100 yds	"E"	N/A	10	Standing to Prone (Ground Illumination)
100 yds	"E"	N/A	10	Standing to Prone (Air Illumination)

Drill #2 (Live Fire Evaluation)

Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
100 yds	"E"	N/A	10	Standing to Prone (Ground Illumination)
100 yds	"E"	N/A	10	Standing to Prone (Air Illumination)
Stage 2				
100 yds	"E"	N/A	2	Standing
100 yds	"E"	N/A	2	Standing to Kneeling
100 yds	"E"	N/A	2	Standing to Prone
100 yds	"E"	N/A	4	2 Standing to Kneeling 2 Prone

13303. Range Commands

Drill #1 (Dry Fire/Simulation)

COMMAND: *"Relay ___ move to the 100-yard ready line and prepare a hasty sling."*

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

————— **Note** —————

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With an empty magazine, load. (Pause) Make ready."*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your 'E' target appears, dry fire two shots standing."*

————— **Note** —————

Allow Marines to complete firing.

COMMAND: *"When your 'E' target appears, dry fire two shots kneeling."*

————— **Note** —————

Allow Marines to complete firing.

COMMAND: *"When your 'E' target appears, dry fire two shots prone."*

————— **Note** —————

Allow Marines to complete firing.

COMMAND: *"When your 'E' target appears, dry fire two shots kneeling then two shots prone. Then place your weapon **incondition 4**."*

————— **Note** —————

Allow Marines to complete firing.

COMMAND: *"With an empty magazine, load. (Pause) Make ready."*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your 'E' target is illuminated, dry fire 10 shots prone."*

Note

Allow Marines to complete firing.

COMMAND: *"When your 'E' target is illuminated, dry fire 10 shots prone. Then place your weapon in **condition 4**."*

Note

Allow Marines to complete firing.

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 100-yard ready line and prepare a hasty sling. (Pause) Fill 3 magazines with 10 rounds each."*

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of 10 rounds, load. (Pause) Make ready."*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your 'E' target is illuminated, fire 10 shots prone. Then reload with a magazine of 10 rounds."*

Note

Allow Marines to complete firing.

COMMAND: *"When your 'E' target is illuminated, fire 10 shots prone. Then reload with a magazine of 10 rounds."*

COMMAND: *"When your 'E' target appears, fire two shots standing."*

Note

Allow Marines to complete firing.

COMMAND: *"When your 'E' target appears, fire two shots kneeling."*

Note

Allow Marines to complete firing.

COMMAND: *"When your 'E' target appears, fire two shots prone."*

Note

Allow Marines to complete firing.

COMMAND: *"When your 'E' target appears, fire two shots kneeling, then two shots prone."*

Note

Allow Marines to complete firing.

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Section IV. Field Protective Mask Firing Exercise

This exercise evaluates a Marine's ability to engage stationary targets accurately using offset aiming techniques while wearing a field protective mask. Marines apply immediate/remedial action as necessary.

13401. Range Preparation

- a. **Range Requirement.** The range must have a 200- and 300-yard capability.
- b. **Supply List.** See table 13-4.
- c. **Ammunition Requirement.** The field protective mask firing exercise requires 20 rounds of ammunition per Marine.

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals among range personnel must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements must comply with MCO P3570.2_ and local SOPs.

f. **Evaluation Requirement.** Marines must achieve a minimum score of 7 hits out of 14 rounds. Stage one of the live fire is not evaluated.

Table 13-4. Field Protective Mask Firing Exercise Supply List.

Description	Quantity per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
Hearing Protection	1 set	not applicable
Black Pastors	1 roll	6920-00-165-6354
White Pastors	1 roll	6920-00-172-3572
5" Spotters	4	6920-00-713-8254
Spindle, Spotter	4	6920-00-713-8257

13402. Course of Fire

Drill #1 (Dry Fire/Simulation)

Distance	Target	Time Limit	# of Dry Fires	Manner Fired
Stage 1				
200 yds	"E"	20 secs	2	Standing
200 yds	"E"	20 secs	2	Standing to Kneeling
200 yds	"E"	20 secs	2	Standing to Prone
200 yds	"E"	30 secs	4	2 Standing 2 Kneeling
Stage 2				
300 yds	"E"	20 secs	2	Prone
300 yds	"E"	20 secs	2	Prone

Drill #2 (Live Fire Evaluation)

Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
300 yds	"E"	30 secs	3	Prone
300 yds	"E"	30 secs	3	Prone
Stage 2				
300 yds	"E"	20 secs	2	Standing to Prone
300 yds	"E"	20 secs	2	Standing to Prone
Stage 3				
200 yds	"E"	20 secs	2	Standing
200 yds	"E"	20 secs	2	Standing to Kneeling
200 yds	"E"	20 secs	2	Standing to Prone
200 yds	"E"	30 secs	4	2 Standing 2 Kneeling

13403. Range Commands

Drill #1 (Dry Fire/Simulation)

COMMAND: *"Relay ___ move to the 200-yard ready line and prepare a hasty sling. (Pause) Don and clear your field protective mask."*

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

————— **Note** —————

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With an empty magazine, load. (Pause) Make ready."*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your 'E' target appears, dry fire two shots standing in a time limit of 20 seconds."*

COMMAND: *"When your 'E' target appears, dry fire two shots kneeling in a time limit of 20 seconds."*

COMMAND: *"When your 'E' target appears, dry fire two shots prone in a time limit of 20 seconds."*

COMMAND: *"When your 'E' target appears, dry fire two shots standing then two shots kneeling in a time limit of 30 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Sling arms."*

————— **Note** —————

When all weapons are in **condition 4**, Marines move back to the 300-yard ready line.

COMMAND: *"Relay ___ move to the 300-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Make ready. (Pause) Assume the prone position."*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your 'E' target appears, dry fire two shots prone in a time limit of 20 seconds. Remain in the prone position."*

COMMAND: *"When your 'E' target appears, dry fire two shots prone in a time limit of 20 seconds. Place your weapon **incondition 4**."*

COMMAND: *"Relay ___ move off the firing line and remove your field protective mask."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 300-yard ready line and prepare a hasty sling. (Pause) Fill 2 magazines with 10 rounds each. (Pause) Don and clear your field protective mask."*

COMMAND: *"Relay ___ move to the 300-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With a magazine of 10 rounds, load. (Pause) Make ready. (Pause) Assume a prone position."*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your 'E' target appears, fire three shots prone in a time limit of 30 seconds. Remain in the prone position."*

COMMAND: *"Standby for your groups."*

Note

Allow Marines to complete firing.

COMMAND: *"Groups on the right? Groups on the left?"*

COMMAND: *"When your 'E' target appears, fire three shots from the prone position in a time limit of 30 seconds."*

COMMAND: *"Standby for your groups."*

COMMAND: *"Groups on the right? Groups on the left?"*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"When your 'E' target appears, fire two shots prone in a time limit of 20 seconds."*

COMMAND: *"When your 'E' target appears, fire two shots prone in a time limit of 20 seconds. Then reload with a magazine of 10 rounds."*

COMMAND: *"Assume the tactical carry."*

Note

When all weapons are reloaded to **condition 1**, Marines, while staying on line, advance to the 200-yard ready line.

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"When your target appears, fire two shots standing in a time limit of 20 seconds."*

COMMAND: *"When your target appears, fire two shots kneeling in a time limit of 20 seconds."*

COMMAND: *"When your target appears, fire two shots prone in a time limit of 20 seconds."*

COMMAND: *"When your target appears, fire two shots standing then two shots kneeling in a time limit of 30 seconds."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line and remove your field protective mask."*

Section V. Multiple Target Engagement Exercise

This exercise helps Marines practice and evaluate supported and unsupported firing positions and multiple target engagement techniques. Marines perform immediate/remedial action as necessary.

13501. Range Preparation

- a. **Range Requirement.** The range must have a 200- and 300-yard capability.
- b. **Supply List.** See table 13-5.
- c. **Ammunition Requirement.** The multiple target engagement exercise requires 32 rounds of ammunition per Marine.

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals among range personnel must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements must comply with MCO P3570.2_ and local SOPs.

f. **Evaluation Requirement.** Marines must achieve a minimum score of 18 hits out of 32 rounds.

Table 13-5. Multiple Target Engagement Exercise Supply List

Description	Quantity per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
"F" Target Repair Center	1	6920-00-610-9086
Hearing Protection	1 set	not applicable
Black Pastes	1 roll	6920-00-165-6354
White Pastes	1 roll	6920-00-172-3572
5" Spotters	4	6920-00-713-8254
Spindle, Spotter	4	6920-00-713-8257

13502. Course of Fire

Drill #1 (Dry Fire/Simulation)

Distance	Target	Time Limit	# of Dry Fires	Manner Fired
Stage 1				
200 yds	2 "E"	15 secs	4	2 Standing 2 Standing
200 yds	2 "F"	15 secs	4	2 Standing to Kneeling 2 Kneeling
200 yds	2 "F"	15 secs	4	2 Standing to Prone 2 Prone
Stage 2				
200 yds	2 "E"	15 secs	4	2 Standing 2 Standing
200 yds	2 "F"	15 secs	4	2 Standing to Kneeling 2 Kneeling
200 yds	2 "F"	15 secs	4	2 Standing to Prone 2 Prone
Stage 3				
300 yds	2 "E"	15 secs	4	2 Standing to Prone 2 Prone (Supported)
300 yds	2 "E"	15 secs	4	2 Standing to Prone 2 Prone (Supported)

Drill #2 (Live Fire Evaluation)

Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
300 yds	2 "E"	15 secs	4	2 Standing to Prone 2 Prone (Supported)
300 yds	2 "E"	15 secs	4	2 Standing to Prone 2 Prone (Supported)
Stage 2				
200 yds	2 "E"	15 secs	4	2 Standing 2 Standing
200 yds	2 "F"	15 secs	4	2 Standing to Kneeling 2 Kneeling

Distance	Target	Time Limit	# of Rounds	Manner Fired
200 yds	2 "F"	15 secs	4	2 Standing to Prone 2 Prone
Stage 3				
200 yds	2 "E"	15 secs	4	2 Standing 2 Standing
200 yds	2 "F"	15 secs	4	2 Standing to Kneeling 2 Kneeling
200 yds	2 "F"	15 secs	4	2 Standing to Prone 2 Prone

13503. Range Commands

Drill #1 (Dry Fire/Simulation)

COMMAND: *"Relay ___ move to the 200-yard ready line and prepare a hasty sling."*

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned targets. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With an empty magazine, load. (Pause) Make ready."*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your targets appear, dry fire two shots standing on each 'E' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, dry fire two shots kneeling on each 'F' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, dry fire two shots prone on each 'F' target in a time limit of 15 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"With an empty magazine, load. (Pause) Make ready."*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your targets appear, dry fire two shots standing on each 'E' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, dry fire two shots kneeling on each 'F' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, dry fire two shots prone on each 'F' target in a time limit of 15 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Sling arms."*

————— **Note** —————

When all weapons are in **condition 4**, Marines move back to the 300-yard ready line.

COMMAND: *"Relay ___ move to the 300-yard firing line and cover down on your assigned targets. (Pause) Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Make ready."*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your targets appear, dry fire two shots prone supported on each 'E' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, dry fire two shots prone supported on each 'E' target in a time limit of 15 seconds. Then place your weapon in **condition 4**."*

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 300-yard ready line and prepare a hasty sling. (Pause) Fill 2 magazines with 12 rounds each and 1 magazine with 8 rounds."*

COMMAND: *"Relay ___ move to the 300-yard firing line and cover down on your assigned targets. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of eight rounds, load. (Pause) Make ready."*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your targets appear, fire two shots prone supported on each 'E' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots prone supported on each 'E' target in a time limit of 15 seconds. Reload your weapon with a magazine of 12 rounds."*

COMMAND: *"Assume the tactical carry."*

Note

When all weapons are reloaded to **condition 1**, Marines, while staying on line, advance to the 200-yard ready line.

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned targets. (Pause) Assume the alert."*

COMMAND: *"When your targets appear, fire two shots standing on each 'E' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots kneeling on each 'F' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots prone on each 'F' target in a time limit of 15 seconds. Reload your weapon with a magazine of 12 rounds."*

COMMAND: *"When your targets appear, fire two shots standing on each 'F' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots kneeling on each 'F' target in a time limit of 15 seconds."*

COMMAND: *"When your targets appear, fire two shots prone on each 'F' target in a time limit of 15 seconds."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ___ move off the firing line."*

Section VI. Moving Target Engagement Exercise

This exercise evaluates a Marine's ability to engage moving targets accurately in a fixed time period. It will also test a Marine's ability to apply the fundamentals of marksmanship while engaging moving targets. Marines perform immediate/remedial action as necessary.

13601. Range Preparation

- a. **Range Requirement.** The range must have a 100- and 200-yard capability.
- b. **Supply List.** See table 13-6.
- c. **Ammunition Requirement.** The moving target engagement exercise requires 12 rounds of ammunition per Marine.
- d. **Communications Requirements.** Live communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals among range personnel must be planned and used throughout the exercise.
- e. **Safety Requirements.** Safety requirements comply with MCO P3570.2_ and local SOPs.
- f. **Evaluation Requirement.** Marines must achieve a minimum score of 8 hits out of 12 rounds.

Table 13-6. Moving Target Engagement Exercise Supply List

Description	Quantity per Firing Point	NSN
Rifle Target "E"	1	6920-00-600-6874
Hearing Protection	1 set	not applicable
Black Pastors	1 roll	6920-00-165-6354
5" Spotters	4	6920-00-713-8254
Spindle, Spotter	4	6920-00-713-8257

13602. Course of Fire

Drill #1 (Dry Fire/Simulation)

Distance	Target	Time Limit	# of Fires	Manner Fired
Stage 1				
100 yds	"E"	20 secs	4	Standing: 2 L-R, 2 R-L
100 yds	"E"	20 secs	4	Kneeling: 2 L-R, 2 R-L
Stage 2				
200 yds	"E"	30 secs	4	Prone: 2 L-R, 2 R-L (Supported)

Drill #2 (Live Fire Evaluation)

Distance	Target	Time Limit	# of Rounds	Manner Fired
Stage 1				
200 yds	"E"	30 secs	4	Prone: 2 L-R, 2 R-L (Supported)
Stage 2				
100 yds	"E"	20 secs	4	Kneeling: 2 L-R, 2 R-L
100 yds	"E"	20 secs	4	Standing: 2 L-R, 2 R-L

13603. Range Commands

Drill #1 (Dry Fire/Simulation)

COMMAND: *"Relay ___ move to the 100-yard ready line and prepare a hasty sling."*

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

Note

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With an empty magazine, load. (Pause) Make ready."*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your target appears, dry fire two shots standing on the 'E' target in a time limit of 10 seconds."*

COMMAND: *"When your target appears, dry fire two shots standing on the 'E' target in a time limit of 10 seconds."*

COMMAND: *"When your target appears, dry fire two shots kneeling on the 'E' target in a time limit of 10 seconds. Remain in the kneeling position."*

COMMAND: *"When your target appears, dry fire two shots kneeling on the 'E' target in a time limit of 10 seconds. Place your weapon in **ircondition 4**."*

COMMAND: *"Sling arms."*

Note

When all weapons are in **condition 4**, Marines move back to the 200-yard ready line.

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

COMMAND: *"With an empty magazine, load. (Pause) Make ready. (Pause) Assume the prone."*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your target appears, dry fire two shots prone supported on the 'E' target in a time limit of 15 seconds. Remain in the prone position."*

COMMAND: *"When your target appears, dry fire two shots prone supported on the 'E' target in a time limit of 15 seconds. Place your weapon in **condition 4**."*

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the 200-yard ready line and prepare a hasty sling. (Pause) Fill one magazine with four rounds and one magazine with eight rounds."*

COMMAND: *"Relay ___ move to the 200-yard firing line and cover down on your assigned target. (Pause) Assume the tactical carry."*

————— **Note** —————

Marines should search and assess after each target engagement. They should move from the prone to the kneeling, then to the standing position, then assume the alert. PMI/coaches must remind Marines of this procedure if they do not perform it.

COMMAND: *"With a magazine of four rounds, load. (Pause) Make ready." (Pause) Assume the prone."*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When your target appears, fire two shots prone supported on the 'E' target in a time limit of 15 seconds. Remain in the prone position."*

COMMAND: *"When your target appears, fire two shots prone supported on the 'E' target in a time limit of 15 seconds. Reload your weapon with a magazine of eight rounds."*

COMMAND: *"Assume the tactical carry."*

————— **Note** —————

When all weapons are reloaded to **condition 1**, have Marines, while staying on line, advance to the 100-yard ready line.

COMMAND: *"Relay ___ move to the 100-yard firing line and cover down on your assigned target. (Pause) Assume the alert. (Pause) Assume the kneeling."*

COMMAND: *"When your target appears, fire two shots kneeling on the 'E' target in a time limit of 10 seconds. Remain in the kneeling position."*

COMMAND: *"When your target appears, fire two shots kneeling on the 'E' target in a time limit of 10 seconds."*

COMMAND: *"When your target appears, fire two shots standing on the 'E' target in a time limit of 10 seconds."*

COMMAND: *"When your target appears, fire two shots standing on the 'E' target."*

COMMAND: *"Unload, show clear."*

COMMAND: *"Relay ____ move off the firing line."*

Section VII. Unknown Distance Firing Exercise

This exercise evaluates a Marine's ability to estimate the distance to a target by visual methods. It also evaluates a Marine's ability to take cover, reload the rifle, and apply a hasty sight setting to engage targets at various distances. Marines perform immediate/remedial action as necessary.

13701. Range Preparation

a. **Range Requirement.** The range must have a 500-yard capability. Terrain determines exact placement of the targets.

b. **Supply List.** See table 13-7.

c. **Ammunition Requirement.** The unknown distance firing exercise requires 16 rounds of ammunition per Marine.

d. **Communications Requirements.** Live fire communications requirements must comply with MCO P3570.2_. Communications gear or hand and arm signals among range personnel must be planned and used throughout the exercise.

e. **Safety Requirements.** Safety requirements must comply with MCO P3570.2_ and local SOPs.

f. **Evaluation Requirement.** Marines must obtain a score of 8 hits out of 16 rounds.

Table 13-7. Unknown Distance Firing Exercise Supply List.

Description	Quantity per Firing Point	NSN
Rifle Target "E"	12	6920-00-600-6874
"F" Target Repair Center	12	6920-00-610-9086
Hearing Protection	1 set	not applicable

13702. Course of Fire

Drill #1 (Dry Fire/Simulation: 16 Rounds, 12 Targets, 8 Minutes)

Time Limit	Target Location (yds)	Manner Fired
Stage 1 2 min	300, 400, 200	Rooftop
Stage 2 2 min	300, 350, 200	Window
Stage 3 2 min	500, 300, 150	Rubble Pile
Stage 4 2 min	350, 250, 300	Bunker Aperture

Drill #2 (Live Fire Evaluation: 16 Rounds, 12 Targets, 8 Minutes)

Time Limit	Target Location (yds)	Manner Fired
Stage 1 2 min	300, 400, 200	Rooftop
Stage 2 2 min	300, 350, 200	Window
Stage 3 2 min	500, 300, 150	Rubble Pile
Stage 4 2 min	350, 250, 300	Bunker Aperture

13703. Range Commands

Drill #1 (Dry Fire/Simulation)

COMMAND: *"Relay ___ move to the ready line and prepare a hasty sling."*

COMMAND: *"Shooter # ___ move to the starting point and prepare to move to the first field firing position. Assume the tactical carry."*

COMMAND: *"This unknown distance dry firing drill will consist of four stages, each allowing 1 minute and 50 seconds for dry firing and 10 seconds movement time between stages. The drill has a total time limit of 8 minutes. You will dry fire three shots in each stage from a different field firing position: rooftop, window, rubble pile, and bunker aperture. There will be three targets per stage at unknown distances between 50 and 500 yards."*

COMMAND: *"On the firing line in lane one, with an empty magazine, load. (Pause) Make ready. (Pause) Assume the tactical carry."*

————— **Note** —————

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When the first target appears, move to the first field firing position and commence dry firing."*

COMMAND: *"When all targets are down, move quickly to the next lane and assume that field firing position. Commence dry firing when the first target appears. Place your weapon in **condition 4**."*

COMMAND: *"Relay ___ move off the firing line."*

Drill #2 (Live Fire Evaluation)

COMMAND: *"Relay ___ move to the ready line and prepare a hasty sling. (Pause) Fill two magazines with eight rounds each."*

COMMAND: *"Shooter # ___ move to the starting point and prepare to move to the first field firing position. Assume the tactical carry."*

COMMAND: *"This unknown distance firing drill will consist of four stages, each allowing 1 minute and 50 seconds for firing and 10 seconds movement time between stages. The drill has a total time limit of 8 minutes. You will fire each stage from a different field firing position: rooftop, window, rubble pile, and bunker aperture. There will be three targets per stage at unknown distances between 50 and 500 yards. You have a total of 16 rounds to engage 12 targets and will reload once at your own discretion."*

COMMAND: *"On the firing line in lane one, with a magazine of eight rounds, load. (Pause) Make ready. (Pause) Assume the tactical carry."*

Note

Allow coaches time to observe and correct the procedures for the load before giving the command "make ready." The "make ready" should only be given when the entire relay has completed the load.

COMMAND: *"When the first target appears, move to the first field firing position and commence firing."*

COMMAND: *"When all targets are down, move quickly to the next lane and assume the field firing position. Commence firing when the first target appears."*

COMMAND: *"Unload, show clear, and move off the firing line."*

Note

When Marines have completed the four stages, the tower NCO/scorekeeper announces scores for each Marine by number.

Appendix A
Sample Battlesight Zero Targets

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Appendix B

References and Related Publications

Fleet Marine Force Manual

FMFM 0-8	Basic Marksmanship
FMFM 0-10	Field Firing for the M9 Service Pistol (under development)

Technical Manuals

TM 0-5538C-10/1A	Operator's Manual w/Components List Rifle, 5.56-mm, M16A2 W/E (1005-01-128-9936)
TM 0-5538C-23&P2	Organizational and Intermediate Maintenance, M16A2 Rifle

Marine Corps Orders

MCO P3570.2/AR 385-63	Policies and Procedures for Firing Ammunition for Training Target Practice and Combat
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Marine Corps Institute Order

P91500.44B	The Marine Battle Skill Training/Essential Subjects Handbook
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User Suggestion Form

From:

To: COMMANDING GENERAL, DOCTRINE DIVISION (C 42), MARINE CORPS COMBAT DEVELOPMENT COMMAND, 3300 RUSSELL ROAD SUITE 318A, QUANTICO, VIRGINIA 22134-5021

Subj: RECOMMENDATIONS CONCERNING FMFM 0-9, *FIELD FIRING FOR THE M16A2 RIFLE*

1. In accordance with the Foreword to FMFM 0-9, which invites individuals to submit suggestions concerning this FMFM directly to the above addressee, the following unclassified recommendation is forwarded:

<u>Page</u>	<u>Article/Paragraph No.</u>	<u>Line No.</u>	<u>Figure/Table No.</u>
Nature of Change:	<input type="checkbox"/> Add		
	<input type="checkbox"/> Delete		
	<input type="checkbox"/> Change		
	<input type="checkbox"/> Correct		

2. Proposed new verbatim text: (Verbatim, double-spaced; continue on additional pages as necessary.)

3. Justification/source: (Need not be double-spaced.)

Note: Only one recommendation per page.