

HEALDSBURG POLICE DEPARTMENT 16-HOUR PATROL RIFLE COURSE

I. INTRODUCTION (DAY 1 CLASSROOM)

A. Purpose of the Course

1. The purpose of this course is to provide the training required per 33220(b) PC for sworn members of small law enforcement agencies in Sonoma County who carry the M4/AR-15 patrol rifle. By the end of this 16-hour course, officers shall be able to:
 - i. Demonstrate/explain safe operation of the rifle
 - ii. Identify and capably disassemble/reassemble the major functional components of the rifle
 - iii. Demonstrate/explain safe handling and loading/unloading of the rifle
 - iv. Demonstrate/explain proper storage and deployment of the rifle
 - v. Demonstrate/explain safe manipulation of the rifle during tactical movement
 - vi. Identify and capably address malfunctions of the rifle
 - vii. Demonstrate/explain the fundamentals of marksmanship (including zeroing) as they relate to the rifle
 - viii. Demonstrate/explain firearms and range safety rules
 - ix. Demonstrate/explain proficiency in firing the rifle at various distances
 - x. Pass the rifle qualification course(s)
 - xi. Pass the practical field disassembly/reassembly test(s)

B. Registration

1. POST Roster
2. Instructor introductions (departments and experience)
3. Student introductions (departments, experience, career goals)

II. JUSTIFICATION/CAPABILITIES OF PATROL RIFLE (DAY 1 CLASSROOM)

A. Adopted to allow officers to effectively address modern threat environment

1. Well-organized criminal/terrorist groups (multiple suspects)
2. "Lone Wolf" terrorists
3. Suspects deploying advanced firearms, body armor
4. Suspects with tactical/combat training and experience

B. Need to project deadly force capability beyond effective ranges of handgun, shotgun, and submachine gun (firing pistol ammunition)

C. Need for immediate, on-scene rifle capability prior to arrival of outside SWAT team(s)

D. Need for rifle in place of sniper capability (non-existent for most small agencies)

E. Need for sustained/suppressive fire

1. Movement of injured personnel, victims, and bystanders
2. Tactical positioning of officers

F. Ballistic capabilities of the M4/AR-15

1. Penetration at longer distances
2. Relatively flat shooting trajectory
3. Low recoil ensures faster, more accurate follow-up shots (faster neutralization of the threat)
4. Superior terminal ballistics relative to pistol and even other rifle calibers
 - i. Higher velocity
 - ii. Greater fragmentation
 - iii. Temporary cavitation

G. General characteristics of the M4/AR-15

1. Single projectile (accountability – one round per trigger pull)
2. Less felt recoil
3. Lightweight, well-balanced
4. Varying lengths depending on application
5. Better sighting system (longer sight radius = more accurate)
6. Modular design (can be fit to operator)
7. Greater accessibility of parts, accessories
8. Simple, rugged design
9. Easy to disassemble/reassemble
10. Easy to maintain

H. Operator perception & attitude

1. Short learning curve = operator quickly becomes confident in weapon handling
2. Officers with recent prior military service already familiar with weapon platform
3. Preferred over shotgun due to greater variance in skill with that platform (length, weight, manipulation)
4. Rifle easier to transition from and manipulate in varying threat scenarios

I. Agency Considerations

1. Potential for high-risk incidents involving suspects with high-power/high-capacity firearms
2. Desire of command staff
3. Limited per-shift staffing

III. LEGAL CONSIDERATIONS & RELEVANT POLICIES (DAY 1 CLASSROOM)

A. Special Requirements

PC 33220(b)

The possession of short-barreled rifles and short-barreled shotguns by peace officer members of a police department, sheriff's office, marshal's office, the California Highway Patrol, the Department of Justice, or the Department of Corrections and Rehabilitation, when on duty and the use is authorized by the agency and is within the course and scope of their duties, and the officers have completed a training course in the use of these weapons certified by the Commission on Peace Officer Standards and Training.

POST Administrative Manual, Section B, Regulation 1081

Outlines minimum standards for legislatively-mandated Courses

B. Use of Force law

PC 835a

Any peace officer who has reasonable cause to believe that a person has committed a public offense may use reasonable force to effect the arrest, overcome resistance, or prevent escape.

The peace officer need not retreat or desist, will not be deemed the aggressor, and does not lose their right to self-defense.

PC 198

Three elements needed to establish sufficiency of fear:

1. Circumstances must be sufficient to excite the fears of a reasonable officer
2. The officer must not act under the influence of fear alone; there must be some overt act
3. The decision to use deadly force must be made to save self or other from great bodily injury or death

Graham v. Connor

The reasonableness of a particular use of force must be:

1. Judged from the perspective of a reasonable officer
2. With similar training and experience
3. Facing similar circumstances

Tennessee v. Garner

Use of deadly force on a fleeing felon justified when:

1. Suspect had threatened an officer with a weapon, or there is probable cause to believe that he/she has committed a crime involving infliction of great bodily injury or death, and/or
2. There is probable cause to believe the suspect poses a threat of death or GBI to the officer or others, and
3. There is probable cause to believe that the use of deadly force is reasonably necessary (to prevent escape), and

4. When feasible, some warning should be given prior to the application of deadly force

C. Department-specific Use of Force and Patrol Rifle Policies

IV. FIREARMS SAFETY (DAY 1 CLASSROOM; DAY 2 PRACTICAL)

A. Cardinal safety rules

1. Treat all firearms as if they are loaded
2. Never point a firearm at something you are not willing to destroy
3. Keep your finger off the trigger until your sights are on target and you have made the decision to fire
4. Know your target and what is beyond it; never shoot at anything you have not positively identified

B. Additional general safety considerations

1. Keep all firearms pointed in a safe direction (i.e., a direction in which an accidental discharge is only likely to cause minor property damage if any)
2. If a firearm is dropped or falling, let it fall; an attempt to catch the firearm or break its fall can result in an accidental discharge in an unsafe direction
3. Your patrol rifle has two safeties:
 - a. You, the human safety, are the most important
 - i. use common sense, maintain situational awareness, and hold your peers accountable; their safety is your safety
 - b. Manual/mechanical safety
 - i. Mechanical safeties can and do fail. Do not rely on them in place of other safety measures

V. RANGE SAFETY (DAY 1 CLASSROOM; DAY 2 PRACTICAL)

- A. Adhere the four cardinal rules of firearms safety
- B. Practice and enforce strict muzzle control
- C. Firearms shall not be handled while anyone is forward of the firing line (weapons shall either be holstered or racked)
- D. Horseplay will not be tolerated
- E. Eye and ear protection shall be worn at all times
- F. When not on the firing line, officers shall keep their firearms on safe and holstered or slung
- G. Only personnel approved by the rangemaster/instructor(s) are permitted on the range
- H. Unless otherwise directed, loading and unloading of firearms shall be done only on the firing line at the command of an instructor
- I. Once on the firing line, officers must neither move forward or backward nor change elevation without the approval of an instructor
- J. Avoid talking while on the firing line, unless you have a safety concern
- K. If you experience a malfunction on the firing line, and are unable to safely clear/correct it, remain in place and alert an instructor using your support/non-gun hand

- L. All officers are safety officers. If you see a safety concern, alert the rangemaster/instructor(s)
- M. The rangemaster/instructor(s) reserve the right to impose the following penalties for violations of the above range safety rules:
 - 1. Removal from the firing line
 - 2. Removal from the training exercise
 - 3. Removal from the range/training facility

VI. PATROL RIFLE NOMENCLATURE & OPERATION (DAY 1 CLASSROOM)

A. General information

CATEGORY	SPECIFICATIONS
Caliber	.223 cal/5.56 mm
Weight	7.5 lbs
Overall length	29-30" (36" w/stock extended)
Barrel length	10.3", 14.5", 16", 18"
Rifling	1/7, 1/8, 1/9
Muzzle velocity	2,900-3,100 fps
Rates of fire	semi = 45 rpm, burst = 90 rpm
Max effective range	personnel target = 500-600, area target = 800
Sighting system	adjustable front, adjustable dual-aperture rear
Stock	6-position adjustable, fixed
Ammunition	40-77 grain (standard 55-62)
Magazine capacity	10, 20, 30, 60

B. Gas-operated direct impingement (DI) versus gas piston systems

- 1. Direct impingement
 - a. Reduces number and weight of operating parts
 - b. Allows for lighter and potentially shorter firearm
 - c. Breech and internal parts subject to fouling, reduced lubrication
- 2. Gas piston
 - a. Adds to mass of operating/recoiling parts
 - b. Cleaner operation
 - c. Tend to be heavier

C. Nomenclature

- 1. Upper receiver group
 - a. Barrel
 - b. Front and rear sights
 - c. Gas block
 - d. Gas tube
 - e. Handguard(s)
 - f. Charging Handle
 - g. Ejection port w/ dust cover
 - h. Brass deflector

- i. Forward assist

2. Lower receiver group

- a. Butt stock
- b. Takedown and pivot pins
- c. Trigger guard
- d. Grip
- e. Trigger group (trigger assembly w/ hammer)
- f. Bolt catch
- g. Selector lever/switch
- h. Magazine well
- i. Magazine catch/release

3. Bolt carrier group

- a. Bolt carrier
- b. Carrier key
- c. Bolt
- d. Gas rings
- e. Extractor
- f. Cam pin
- g. Firing pin
- h. Firing pin retaining pin

D. Cycle of Operation

1. Firing

With a round in the chamber, the hammer cocked, and the selector on FIRE, the officer squeezes the trigger. The trigger rotates on the trigger pin, depressing the nose of the trigger, and disengaging the notch on the bottom of the hammer. The hammer spring drives the hammer forward. The hammer strikes the head of the firing pin, driving the firing pin through the bolt into the primer of the round. When the primer is struck by the firing pin, it ignites and causes the powder in the cartridge to ignite. The gas generated by the rapid burning of the powder forces the projectile from the cartridge and propels it through the barrel. After the projectile has passed the gas port (located on the upper surface of the barrel under the front sight) and before it leaves the barrel, some gas enters the gas port and moves into the gas tube. The gas tube directs the gas into the bolt carrier. It passes through the key downward into a space between the rear of the carrier's bolt cavity and the rear of the bolt itself. The gas then expands. The bolt is locked into the barrel extension and unable to move forward, thus the carrier is forced to the rear by the expanding gas.

2. Unlocking

As the bolt carrier moves to the rear, the bolt cam pin follows the path of the cam track (located in the bolt carrier). This action causes the cam pin and bolt assembly to rotate simultaneously until the locking lugs of the bolt are no longer in line behind the locking lugs of the barrel extension.

3. Extracting

The bolt carrier group continues to move to the rear. The extractor (which is attached to the bolt) grips the rim of the cartridge case, holds it firmly against the face of the bolt, and withdraws the cartridge case from the chamber.

4. Ejecting

With the base of a cartridge case firmly against the face of the bolt, the ejector and ejector spring are compressed into the bolt body. As the rearward movement of the bolt carrier group allows the nose of the cartridge case to clear the front of the ejection port, the cartridge is pushed out by the action of the ejector and spring.

5. Cocking

The rearward movement of the bolt carrier overrides the hammer, forcing it down into the receiver and compressing the hammer spring, cocking the hammer in the firing position. The action of the rifle is much faster than human reaction; therefore, the officer cannot release the trigger fast enough to prevent multiple firing.

6. Feeding

As the bolt carrier group moves rearward, it engages the buffer assembly and compresses the action spring into the lower receiver extension. When the bolt carrier group clears the top of the magazine, the expansion of the magazine spring forces the follower and a new round up into the path of the forward movement of the bolt. The expansion of the action spring sends the buffer assembly and bolt carrier group forward with enough force to strip a new round from the magazine.

7. Chambering

As the bolt carrier group continues to move forward, the face of the bolt thrusts the new round into the chamber. At the same time, the extractor claw grips the rim of the cartridge, and the ejector is compressed.

8. Locking

As the bolt carrier group moves forward, the bolt is kept in its most forward position by the bolt cam pin riding in the guide channel in the upper receiver. Just before the bolt locking lugs make contact with the barrel extension, the bolt cam pin emerges from the guide channel. The pressure exerted by the contact of the bolt locking lugs and barrel extension causes the bolt cam pin to move along the cam track (located in the bolt carrier) in a counterclockwise direction, rotating the bolt locking lugs in line behind the barrel extension locking lugs. The rifle is ready to fire.

E. Safety/Carrying Conditions

1. Condition One (“Make Ready” condition)

- a. Magazine inserted
- b. Round in the chamber
- c. Bolt forward
- d. Dust cover closed
- e. Selector on SAFE

2. Condition Three (“Patrol Ready” condition)

- a. Magazine inserted
- b. Chamber empty
- c. Bolt forward
- d. Dust cover closed
- e. Selector on SAFE

3. Safe (“Racked” condition)

- a. Magazine removed
- b. Chamber empty
- c. Bolt locked back
- d. Dust cover open
- e. Selector on SAFE

VII. CLEANING & FUNCTION CHECKS (DAY 1 CLASSROOM/PRACTICAL)

A. Rifle Maintenance

1. Disassembly

- a. Use the charging handle to draw back and lock open the bolt carrier group with the bolt catch
- b. Visually and physically inspect the chamber
- c. Once you have confirmed that no round is in battery, drop the bolt carrier group forward, dry fire and then field strip the rifle
- d. Pull out the rear takedown pin
- e. Remove the bolt carrier group and charging handle
 - i. Disassembly and cleaning of the bolt carrier group:
 - 1) Remove the firing pin retaining pin and firing pin
 - 2) Push the bolt into the carrier, rotate cam pin 90° and remove it
 - 3) Remove the bolt assembly
 - 4) Inspect gas rings
 - 5) Remove and inspect extractor pin and extractor
- f. Pull out the pivot pin and disarticulate the upper and lower receiver groups
- g. Remove and inspect the buffer assembly (buffer and buffer spring)

2. Lubrication

- a. Wipe the buffer, buffer spring, and charging handle with a lightly oiled shop rag

- b. Use a chamber brush lightly coated with solvent (or a firearm-specific cleaner/lubricant) to clean chamber and locking lugs
- c. Use a .22 cal/5.56 mm bore brush or bore snake lightly coated with cleaner/lubricant to clean the barrel from breech to muzzle
- d. Use a slotted-tip patch holder and run through the barrel until clean; not necessary if you're using a bore snake
- e. Using the same patch holder, apply a small amount of oil to a patch, and lubricate the bore; not necessary if you're using a cleaner/lubricant with a bore snake
- f. While following the above steps, soak the bolt carrier group parts in solvent to loosen fouling deposits
- g. Once soaked, remove and scrub all parts with a wire brush until fouling is thoroughly removed; a pick or other carbon scraper tool may be necessary to remove fouling on some parts
- h. Lightly oil all parts and reassemble the bolt carrier group

3. Reassembly

Reassemble the rifle in the reverse order from which it was disassembled

B. Functions Check

A complete functions check consists of checking the rifle's operation with the selector lever in both SAFE and FIRE positions. Therefore, it is imperative that the rifle be rendered safe before conducting any functions check

1. Remove the magazine, use the charging handle to draw back and lock open the bolt carrier with the bolt catch, and visually and physically inspect the chamber. To ensure that no round is in battery, draw the charging handle back, and let the bolt carrier move forward with the force of the buffer/action spring (do this three times).
2. **Safety check:**
 - a. Once the bolt carrier is closed, set the selector on SAFE.
 - b. Pull the trigger. You should hear nothing, as the hammer is prevented from falling.
 - c. Remove your finger from the trigger and trigger guard.
3. **Checking the FIRE setting:**
 - a. Set the selector on FIRE.
 - b. Pull the charging handle to the rear and release it.
 - c. Pull the trigger. You should hear a loud click from the hammer falling. Keep the trigger pulled.
 - d. Keeping the trigger depressed, pull the charging handle to the rear again and release it.
 - e. Release trigger until you hear a light click; this is the sear reset
 - f. Pull the trigger again. You should again hear a loud click as the hammer falls.
4. **Checking the magazine and bolt catch mechanisms:**

- a. Insert an EMPTY magazine into the magazine well until you hear a light click from the magazine catch finding the slot on the magazine.
- b. Press the magazine catch/release button and the magazine should fall freely from the magazine well.
- c. Re-insert the magazine, and pull the charging handle to the rear.
- d. Release the charging handle. The bolt carrier should be held rearward by the bolt catch, which is activated by the magazine follower.
- e. Keeping fingers clear of the ejection port, release the bolt catch to allow the bolt carrier to close.
- f. Conduct a safety check.

VIII. FUNDAMENTALS OF MARKSMANSHIP (DAY 1 CLASSROOM; DAY 2 PRACTICAL)

A. Stance

1. There is no shortage of commentary on what the “proper” shooting stance should look like (e.g., Isosceles, Weaver, Fighting).
2. In thinking about stance, the officer should defer to whatever position provides them with the most stable shooting platform. For many, this is a bladed or “fighting” stance, with the officer keeping their feet shoulder-width apart and their torso squared to the target.
3. Ultimately, one’s stance should not tire them unnecessarily.

B. Grip

1. Unlike for a pistol, where one’s grip should be geared toward consuming as much of the pistol’s frame as possible, gripping the patrol rifle is more an extension of the stance or shooting platform.
2. Less emphasis is placed on the actual grip of the strong/shooting hand, since this hand often shifts position to operate the selector switch.
3. For the patrol rifle, the officer’s grip is oriented around their preferred length of pull and the positioning of their support hand (e.g., handguard versus vertical foregrip placement).

C. Sight Alignment & Sight Picture

1. Together, sight alignment and sight picture comprise one of the two primary factors in the fundamentals of marksmanship.
2. Sight alignment refers to the proper alignment of the front and rear sights. For the M4/AR-15, the top of the front sight post should be level and centered in the rear sight aperture.
3. Sight picture refers to how the officer’s sights appear on the target. A “center hold” on center mass (the middle- to upper-chest area on a human target), wherein the top of the front sight post is in clear focus

while the target and rear aperture are slightly out of focus, is the optimal sight picture.

D. Trigger Control

1. Trigger control is the second primary factor in the fundamentals of marksmanship.
2. Trigger control is the ability of the officer to apply continual gradual pressure rearward, **PRESSING** the trigger with the first pad of the trigger finger – without affecting sight alignment/sight picture – until a round is discharged.
3. Trigger control also refers to not simply removing one's finger from the trigger after firing, but instead riding it through the sear reset.

E. Breathing

1. Exercising consistent breath control can significantly improve the officer's accuracy.
2. Breath control involves pausing one's breathing at the natural apex of inhaling or exhaling, and timing this pause with the terminus of trigger press.

F. Follow Through

1. Follow through refers to maintaining the fundamentals of marksmanship (e.g., realigning one's sights and guiding the trigger to its point of reset).
2. This can be likened to a golfer focusing on the top of the tee while completing his/her stroke rather than looking for the ball.

G. Scan and Reassess

1. The officer should keep his/her muzzle directed at the threat until it is neutralized.
2. At the same time, the officer must scan side-to-side and behind them to maintain situational awareness

IX. SHOOTING POSITIONS (DAY 1 CLASSROOM/PRACTICAL; DAY 2 PRACTICAL)

1. Standing

- a. As noted above, the officer should defer to whatever standing position provides them with the most stable shooting platform. For many, this is a bladed or "fighting" stance, with the officer keeping their feet shoulder-width apart and their torso squared to the target.
- b. The use of a "hasty sling" can improve accuracy and reduce fatigue.

2. Kneeling

- a. The kneeling position is used when behind cover, or when a lower profile is more advantageous.
 - i. High kneeling (unsupported)
 - ii. Low kneeling (supported)

3. Sitting

- a. Although rare, instances in which the officer may need to fire the patrol rifle from a seated position may arise, and it is important to be familiar with firing from this position.
- b. There are a variety of seated positions the officer can fire from depending on their equipment and flexibility.

4. Prone

- a. The prone position is used when behind cover, or when an extremely low profile is advantageous.
- b. The officer should familiarize themselves with shooting effectively from this position, employing various covers they may be likely to employ while responding to threats in a patrol environment (e.g., curbs, patrol vehicle wheels, etc.)

X. LOADING & UNLOADING (DAY 1 CLASSROOM/PRACTICAL; DAY 2 PRACTICAL)

A. Administrative (Non-Tactical) Loading

1. During any loading or unloading of the patrol rifle, keep your finger off the trigger and the muzzle pointed in a safe direction.
2. If the action is not already open, use the charging handle to draw back and lock open the bolt carrier with the bolt catch. Visually and physically inspect the chamber.
3. Depress the bolt catch to allow the bolt carrier to close (the forward assist may be used to ensure the bolt carrier is fully forward with bolt locked). Place the selector on SAFE.
4. Insert a FULL magazine into the magazine well until you hear a light click from the magazine catch finding the slot on the magazine; it may be necessary to tap the base of the magazine with the palm of the support hand to ensure it seats correctly.
5. Pull the charging handle back, and let the bolt carrier move forward with the force of the buffer/action spring (DO NOT "RIDE" THE CHARGING HANDLE!).
6. The rifle should now have a round in battery, and the fire selector should be on SAFE.

B. Reloading

1. Combat (Speed) reloading

- a. Refers to the condition in which there is an immediate need for more ammunition.
- b. May be conducted either before or after the last round from the magazine has been fired. If the last round has been fired and the magazine is empty, the follower will activate the bolt catch, locking the bolt carrier to the rear (prompting an emergency reload).
- c. When the rifle is in this condition, the officer must get their weapon back into battery as quickly as possible.
- d. The magazine is released and allowed to fall as a new magazine is placed into the magazine well.

2. Tactical reloading

- a. Conducted with a round in battery, and while there are still rounds in the magazine, and when the officer perceives a lull in the fight
- b. The officer must draw a spare magazine with their support hand and, while holding the new magazine, remove the used magazine with the same hand. While cradling both magazines, the officer then inserts the new magazine in the magazine well, securing the partially expended magazine for later re-use.
- c. As with nearly all aspects of gunfighting, there are conflicting opinions about the effectiveness of tactical reloads; there are many who prefer combat “retention” reloads or in place of a tactical reload.

C. Unloading

1. Point the rifle in a safe direction
2. Place the selector lever on SAFE
3. Remove the magazine
4. Use the charging handle to pull the bolt carrier rearward, and lock it back using the bolt catch; if a round was in battery, this action will cause the round to eject (DO NOT ATTEMPT TO CATCH THE ROUND!).
5. Visually and physically inspect the chamber to ensure that it is empty.

XI. MALFUNCTIONS (DAY 1 CLASSROOM/PRACTICAL; DAY 2 PRACTICAL)

A. Malfunctions

1. Most malfunctions are caused by a fouled or dirty firearm
2. Stoppages refer to malfunctions that prevent the rifle from completing the cycle of operation
3. There are four typical stoppages:

a. Failure to fire

- i. No round in chamber

- ii. Fouled bolt assembly
- iii. Broken firing pin
- iv. Broken hammer/hammer spring

b. Failure to feed

- i. Improperly seated round
- ii. Weak/broken magazine catch
- iii. Defective magazine/magazine follower

c. Failure to extract (“Double feed”)

- i. Defective extractor/extractor pin/extractor spring
- ii. Fouled chamber
- iii. Damaged casing rim
- iv. Short stroking of action

d. Failure to eject (“Double feed”)

- i. Broken ejector
- ii. Weak/broken ejector spring
- iii. Short stroking of action

B. Immediate action sequence

The most common malfunctions can typically be cleared by conducting an immediate action sequence:

1. Tap

Use your palm to make sure the magazine is properly seated

2. Rack

Use the charging handle to pull the bolt carrier back and lock it open using the bolt catch

3. Sweep

Visually inspect the ejector port and chamber for obstructions; if there are none, release the bolt carrier forward

4. Forward Assist

Use the forward assist may be used to ensure the bolt carrier is fully forward with bolt locked

5. Assess

C. Remedial action

1. If the above immediate action sequence does not correct the malfunction, there may be a cartridge jammed in the chamber.
2. If the officer suspects this is the case, unload the rifle and restore it to the SAFE/racked condition.
3. With the muzzle pointed in safe direction, allow the rifle to cool before safely conducting a complete inspection and cleaning.

NOTE: IF A MALFUNCTION/STOPPAGE OCCURS DURING A GUNFIGHT, THE OFFICER SHOULD ALWAYS TRANSITION TO HIS/HER PISTOL AND CONTINUE TO ENGAGE THE THREAT UNTIL IT IS NEUTRALIZED, OR UNTIL THERE IS TIME TO ASSESS AND CORRECT THE MALFUNCTION/STOPPAGE.

XII. ZEROING THE PATROL RIFLE (DAY 1 CLASSROOM/PRACTICAL; DAY 2 PRACTICAL)

A. Zeroing refers to the alignment of point of aim (POA) and point of impact (POI) at a specified range/distance

B. For the patrol rifle, the zeroing process is based on two factors

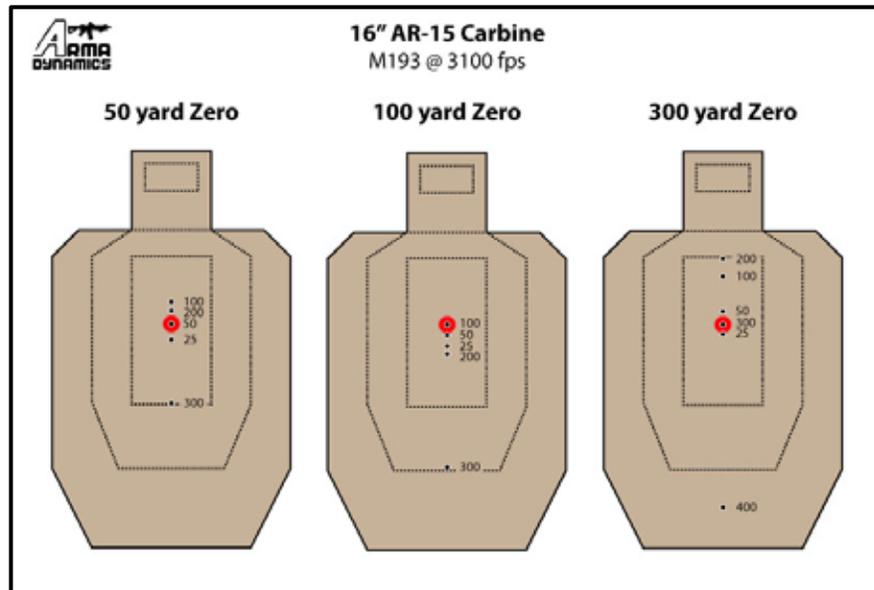
1. Range (distance from target)
2. Bullet trajectory/drop

C. The most common zeroing distances are 25 and 50 yards.

1. The below table illustrates the amount of approximate hold-over/hold-under for point of aim with 25 yard and 50 yard zeros.

Distance	25 yds	50 yds	75 yds	100 yds	200 yds	300 yds
25 yd zero	0	-2"	-4"	-5"	-10"	0
50 yd zero	+1"	0	-1"	-2"	0	+8"

2. The below image depicts point of impact at various ranges for a rifle zeroed at 50 yards, 100 yards, and 300 yards.



3. As the above images illustrate, the 50 yard zero provides for a flatter trajectory when engaging targets out to 200 yards

D. Adjusting elevation and windage

1. The front sight must move in the opposite vertical direction that the officer wants to move their shots

2. The rear sight must move in the same horizontal direction that the officer wants to move their shots

XIII. TACTICAL/DEPLOYMENT CONSIDERATIONS (DAY 1 CLASSROOM; DAY 2 PRACTICAL)

A. Deploying from a patrol vehicle

1. **Placement in the vehicle**
 - a. Driver's compartment
 - b. Trunk
2. **Deploying with additional equipment**
 - a. Perimeter position
 - b. Active shooter response
 - i. Plate carrier
 - ii. Helmet
 - iii. IFAKs

B. Use of barricades/cover

1. **Cover vs. concealment**
 - a. Cover provides both concealment AND protection
 - b. Concealment simply hides your location but is penetrable
2. **Shooting from barricaded positions**
 - a. Weapon/hand placement
 - i. Muzzle discipline (sight/optic vs. bore axis)
 - b. Shooting positions
 - i. Static range
 - 1) Strong side standing/kneeling/prone
 - 2) Support side standing/kneeling/prone

Strong side to support side transition:
PULL, SWITCH, PUSH, DROP
 - ii. Operational environment
 - 1) Urban prone/lateral
 - 2) High vs. low kneeling
 - c. Distance from barricade/cover

C. Shooting on the move

1. **Moving to shoot**
 - a. Getting off the "X" shifts time and distance to the officer's advantage
 - b. Aggressive but disciplined movement (AVOID CROSSING YOUR FEET!), pause, shoot, scan/reassess, move again if necessary

2. Shooting while moving

- a. Generally not recommended
- b. If becomes necessary, focus should be on moving only the lower body, and in a manner that allows for as stable a shooting platform as possible with the upper body
- c. This is often achieved with a controlled heel-to-toe transfer of weight (“duck walk”)

XIV. COURSE REVIEW & EXAM (DAY 1)

XV. SKILL DEVELOPMENT & QUALIFICATION (DAY 2 PRACTICAL)

XVI. REMEDIATION, RIFLE CLEANING & COURSE CRITIQUE (DAY 2 CLOSING)