

# Carlsbad Police Department Patrol Rifle Course



## COURSE OBJECTIVES

Under the supervision of a qualified instructor, and using an approved law enforcement rifle, each student will:

- I. Demonstrate their understanding of the Four Basic Safety Rules for handling firearms.
- II. Demonstrate the ability to field strip the weapon and to properly clean and maintain it.
- III. Be provided with and demonstrate understanding of the agency policy regarding the use of firearms.
- IV. Demonstrate the ability to properly load, unload, and fire the weapon and to clear malfunctions that might occur with the weapon.
- V. Demonstrate the ability to apply the fundamentals for rifle marksmanship to fire accurately from the prone, kneeling, sitting and standing positions.
- VI. Demonstrate proficiency with the weapon and obtain agency qualification.

## EXPANDED COURSE OUTLINE

### I. Introduction

#### A. Instructor introduction

#### B. Course synopsis

1. Law and policy
2. Safety procedures and range rules
3. Rifle characteristics
4. Ballistics
5. Maintenance
6. How to operate the rifle
  - i. Basic operation
  - ii. Shooting skills

This section should let the students know what to expect for today and tomorrow.

7. Tactical considerations and decision making
8. Range training
  - i. 300 round total with less than 50 handgun rounds
  - ii. Gun belt, vest, pistol, rifle, and flashlight or tac light needed
  - iii. Qualification

## II. Laws and Agency Policy

### A. Legal Concerns

1. PC 33220
2. L.E. authorized to possess on duty
3. Complete POST approved training (this 16-hour training)
4. Civil implications of a negligent discharge

#### B. Law Update

1. Tennessee vs. Garner
  - i. Fleeing felon
2. Graham vs. Conner
  - i. Reasonable use of force

#### C. Agency Firearms Use and Use of Force Policies

1. Use of Force options
  - i. Force continuum
2. Mission Objective: Deployment & Use of Rifle
  - i. 312.3.4 Deployment of Patrol Rifle
3. Department Policy
  - i. 300.3 Use of force
    - ii. 300.3.2 Factors used to determine the reasonableness of force
- iii. 312 Firearms
  - iv. 312.2.7 Patrol Rifle
  - v. 312.5 Warning shots
    - a. Discouraged

## III. Safety and Range Rules

### A. The Four Basic Safety Rules include

1. Treat all guns as if they are loaded.
2. Never point the muzzle at anything you are legally justified and within policy to do so.
3. Keep your finger off the trigger until your sights are on the target.
4. Always be aware of your target's environment. What is between you and the target and beyond it.

### B. Range Rules

#### **Learning Activity:**

Break class into two groups. Have them choose a team name using their phones to Google "Clan Name Generator."

They will compete in Tic-Tac-Toe. A correct answer gives their team a mark. Wrong answer, they get no mark.

1. After weapons have been grounded, and the line has been called safe by an instructor do not touch the weapon until all students are back from their targets, and the instructor has given the okay.
2. If a problem arises on the line, raise your non-gun-hand to summon an instructor.
3. Everyone has the authority to call a "Cease Fire" if they recognize anything unsafe.
4. No ammunition in the cleaning room.

#### IV. Nomenclature, Specifications and Capabilities

##### A. History and development of the AR-15

1. Technology progressed from single load rifles
2. Need for Intermediate rifle between SMG and large .30 cal rifle (replaced M-14).
3. Eugene Stoner's design as America's answer to the AK-47
4. Early reliability problems in 1960's solved through engineering
  - i. Improved metallurgy and chrome lined parts

##### B. How the rifle operates

1. Gas operated (Animated diagram demonstrates the firing-loading cycle)

##### C. Nomenclature

1. Furniture
  - i. Stock
  - ii. Forend
  - iii. Grip
2. Front and Rear Sights
3. Optic sights
4. Bolt Catch
5. Magazine Release
6. Safety/Selector
7. Trigger
8. Magazine well and magazine
9. Sling and Sling Attachments
10. Accessory rails and accessories (Carry handle, Tac light)
11. Gas tube (or piston)
12. Bolt carrier assembly
  - i. Bolt (w/ gas rings)
  - ii. Bolt carrier
  - iii. Firing pin retaining pin
  - iv. Firing pin
  - v. Cam pin

#### **Learning Activity:**

Hand out the blank Rifle Nomenclature work sheets. Have students complete them like a quiz for 3 -5 minutes.

Encourage students to attempt to complete as much as possible on their own before "cheating" off their neighbor.

After they checked with a neighbor, review the slide that gives the answer key.

#### D. Specifications

1. Type of Weapon
  - i. Smith and Wesson M&P 15 or Colt AR-15
2. Barrel Length
  - i. 16 inch
3. Overall Length
  - i. 35" extended/ 32" collapsed (6 position CAR stock)
4. Caliber
  - i. 5.56 mm (also .223 caliber)
5. Magazine Capacity
  - i. 30 round – detachable magazine
6. Weight (empty)
  - i. 6.67 pounds
7. Type of Sights
  - i. A2 front post
  - ii. Adjustable dual aperture rear sight (picatinny rail)
8. Approximate Muzzle Velocity
  - i. 3240 feet per second (from 24" barrel)

#### E. Capabilities

1. Maximum Range
  - i. About 4000 yards (2 ¼ miles)
2. Maximum Effective Range
  - i. About 550 yards (velocity down to about 1300 feet per second)
3. Penetration of Soft Body Armor
  - i. Level 2 armor through 3a
  - ii. Will not penetrate level 3 or 4 (rifle plates)
4. Full/Semi-Automatic
  - i. Full auto is beneficial for area fire (military application)
  - ii. Full auto is good to suppress adversaries (pin down)
  - iii. Full auto is beneficial for very close targets
  - iv. Full auto is hard to account for every round fired/ every round on one target

#### F. Limitations

1. Two hands required
2. Harder to "Go Hands-On"
3. Cumbersome (can't holster it)
4. Hard to carry magazines on the body in patrol
5. Limited penetration of intermediate barriers (vehicles, buildings)

## G. Ballistics

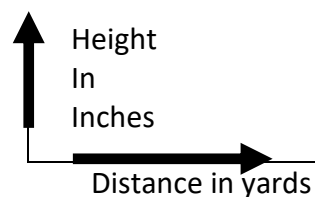
1. External ballistics
  - i. Varies with ammunition used and barrel length
  - ii. 50 yard zero – why do we zero at 50 yards?
  - a. Greater zone for “point-of-aim, point-of-impact” (shallow max. ordinate, approximately 1.5 - 2 inches)
  - b. Most patrol engagements will not occur farther than 250 yards
  - c. Second zero at approx. 225 yards
  - iii. Hold-over at close range, 5 to 15 yards
2. Terminal ballistics
  - i. What are preferred terminal ballistics for law enforcement rifle?
    - a. significant energy/ range increase compared to pistol
    - b. rapid incapacitation
    - c. will not over penetrate target
  - ii. Varies with caliber (.40 cal vs .223 vs .308)
  - iii. Varies with ammunition used (FMJ vs soft nose)
  - iv. Significantly affected by intermediate barriers
    - a. Structures (wood, metal, concrete, glass)
    - b. Vehicles (Sheet metal, frame metal, windshield, tempered glass)
  - v. Effects on tissue
    - a. FMJ vs soft nose rounds (ballistics gelatin video)
    - b. Soft nose generally does not over penetrate
    - c. Soft nose creates “Snow Storm” appearance on X-ray
    - d. Impact to head may be explosive due to High Velocity shock wave
    - e. Tangential impact to head less likely (than pistol) to ricochet

### **Learning Activity:**

Pass out the 25-yard Ballistic data table to one group and the 100-yard ballistic data table to the other group.

Draw the X and Y axis for a line chart on the white board. As an example, plot the data points for the 50-yard data table out to 260 yards.

Have each group plot the points and draw a line in their own color.



## V. Firearm Care, Disassembly/Assembly and Maintenance

### A. Disassembly

1. Take down pin
2. Remove bolt carrier assembly
3. Disassemble bolt carrier assembly

### B. Cleaning- remove carbon, don't over-clean

1. Bolt carrier assembly
2. Receiver
3. Chamber/ lugs
4. Barrel

### C. Lubrication- identify wear points

1. Bolt carrier assembly
2. Receiver

### D. Protection- understand what can corrode

1. Know your environment (coastal vs desert)
2. Do not over lubricate (can attract dirt)
3. Thin coat

Hand out the laminated "Bolt Carrier Disassembly diagram/ instructions.

There is a great deal of latitude in the cleaning method.

## VI. Tactical Considerations

### A. Based on agency guidelines and training

1. Must pass qualification
2. Only deploy when authorized per policy

### B. Physical environment

1. Be aware of cover and concealment

### C. The Rifle is a useful resource in a team environment (arrest team, long rifle)

### D. Rifle caliber rounds will penetrate soft body armor... (yours or theirs!).

1. Consider a plate carrier

### E. The Patrol Rifle affords the opportunity to maintain safe distances to adversaries.

1. Deploy at distances where you have the advantage
2. The Patrol Rifle affords an increased effective range over the service shotgun and handgun.

### F. Patrol Rifle Vs Shotgun

1. Rifle has greater accuracy.
2. The Patrol Rifle is easier to load and re-load than a service shotgun.
3. The Patrol Rifle has a larger ammunition capacity than a service shotgun.

## VII. Shooting Decision

### A. Know your abilities and limitations, and those of your weapon.

- B. Exercise fire discipline within agency guidelines and the parameters of applicable State and Federal laws.
  - 1. We are accountable for every shot fired
- C. Just because you CAN shoot does not always mean you SHOULD

**End of Day One:**

Students should show up tomorrow with empty rifle magazines and all required gear to shoot:

Gun belt, vest, pistol, rifle, and flashlight or tac light needed, Tactical pants preferred. Jeans and T-Shirt are OK. Bring water and lunch for a full day outside.

## VIII. Basic Shooting Skills

### A. Master Grip

1. Keep the index finger off the trigger, along the frame until ready to fire

### B. Low Ready

1. Master grip on the rifle, pointed at the ground

### C. High Ready

1. Master grip on the rifle, stock to the shoulder, pointed at the target

### D. Stance/Position

1. Standing
  - i. combat stance vs. NRA target stance
  - ii. Fighting stance, balance forward
  - iii. squared to target, knees slightly bent
  - iv. elbows down under the rifle, braced against the body
2. Kneeling
  - i. Strong side knee down
  - ii. Avoid bone to bone
3. Sitting
  - i. Use knee for support if possible
4. Prone
  - i. Lower to the ground is more stable
  - ii. Do not use the magazine as a mono-pod
5. Support vs no support
  - i. Unsupported is fast, familiar
  - ii. Supported is more stable
6. Barricade use
  - i. Maximize cover- use it
  - ii. Shoot around cover rather than over it
  - iii. Shooting support hand vs exposing self
    - a. Support hand is slower
    - b. Strong hand means essentially no cover

### E. Sight Alignment/Picture

1. Sight Alignment
  - i. Top of front sight post centered in the rear peep.
  - ii. 100 percent focus is on the top edge of the front sight post. The rear peep and target are blurred.
  - iii. Instructor will illustrate proper sight alignment
2. Sight alignment factors
  - i. Large aperture setting
  - ii. small aperture setting
  - iii. Proximity of eye to rear sight
    - a. Stock extended or retracted

### **Equipment for Day Two:**

- Red Gun
- An unloaded, but functional rifle
- Two empty magazines
- Dummy Rounds
- 8 X 10 bull's eye targets
- Dept. Silhouette targets.

Consider using a Red Gun for this section.

**Ensure all students have empty rifles and empty magazines.**

Demonstrate, then have them practice stance and sight alignment.



- b. Prone brings the eye closer to rear sight
- 3. Field of view options
  - i. Large field of view
    - a. Greater awareness of the target's surroundings
    - b. Easier for moving targets or a moving shooter
    - c. Easier to acquire close targets
    - d. Easier to acquire sight picture in low light or under stress
    - e. Harder to hit accurately at distance
  - ii. Narrow field of view
    - a. Greater potential for increased accuracy
    - b. The small opening focuses light like a lens
    - c. Harder to acquire sight picture under stress or low light
    - d. Greater potential for front post - protective wing error
    - e. Reduced awareness of the target's environment
    - f. Difficult while moving or moving targets

#### F. Trigger Control

- 1. Emphasize that this is the single most important element.
- 2. Shooter must apply gradual pressure on the trigger for a surprise trigger break so as to not disturb sight alignment when the shot is made.
- 3. Support hand control is critical (flinch control)
- 4. Instructor development techniques
  - i. dry fire
  - ii. dummy rounds

#### G. Grip/Stock Weld- each contact point is the same every time

- 1. Identify location the face touches the rifle when shooting accurately.
- 2. Toe of stock into pocket where shoulder meets arm
- 3. Rifle comes up to meet eye, head should not move much
- 4. Option is to touch the nose to the charging handle

#### H. Breathing

- 1. Breath must be held at the moment the shot is made.
- 2. The breathing pause may be anywhere in the breathing cycle.
- 3. Breathing while firing will cause vertical stringing of shots.
- 4. Holding breath too long will cause vision to blur and muscles to tremble, so the shot must be made before this happens.

#### I. Follow Through

- 1. The last step of the firing cycle is to release the trigger until the sear re-engages.
- 2. Maintain a proper sight picture as though expecting the rifle to not fire.
- 3. Ride the recoil of the rifle without attempting to compensate.
  - i. The flinch response will develop by anticipating the recoil and unconsciously attempting to control it before the shot.

## IX. Clearing Malfunctions and Stoppages

- A. In close quarter confrontations, consider immediate transition to the handgun
- B. Failure to fire
  - 1. "Tap & Rack"
    - i. Seat magazine by hitting it with heel of hand
    - ii. Pull bolt to rear and release
    - iii. Obtain sight picture
    - iv. Assess if follow-up shots are necessary
- C. Stove pipe
  - 1. Tilt rifle so that ejection port faces the ground
  - 2. Pull bolt to rear and release
  - 3. Verify the brass cleared
  - 4. Obtain sight picture
  - 5. Assess if follow-up shots are necessary
- D. Double feed
  - 1. Lock the bolt to the rear
  - 2. Remove the magazine from the weapon
    - i. Discard magazine
  - 3. Clear live rounds from the receiver and chamber
  - 4. Insert a fresh loaded magazine
  - 5. Chamber a round
  - 6. Obtain sight picture
  - 7. Assess if follow-up shots are necessary
- E. Squib rounds
  - 1. The cartridge discharges, but the bullet fails to exit the barrel
  - 2. Do not fire subsequent shots, damage or injury may result

Use the dummy rounds for this section.

Demonstrate, then have students practice clearing each malfunction.

## X. Basic Operation

- A. Safety circle
  - 1. Rifle should point down at all times until a threat/ threat area is identified.
- B. Rifle selector set to "Safe" at all times until a threat is identified and the shooter intends to fire.
  - 1. Shooters should keep their thumb (or finger for left handed shooters) on the selector while gripping the rifle.
  - 2. As the rifle is raised, the selector is set to fire.
- C. Manipulations should be done with the support hand when practical
  - 1. Carry spare magazines where they are accessible by the support hand.
  - 2. Reload by holding the magazine with the support hand.

3. The rifle's stock may be tucked under the strong arm if the weight is too great to hold.
4. The charging handle should be manipulated with the support hand.

D. Clearing the rifle (ensuring it is unloaded)

1. Ensure the selector is set to safe
2. Remove the magazine
3. Lock the bolt to the rear
4. Visually and physically inspect the chamber and magazine well (use flashlight if necessary)

E. Patrol ready the rifle

1. The rifle should be inspected for proper maintenance during this phase (lubrication, etc.)
2. Ensure the selector is set to safe
3. Remove the magazine
4. Lock the bolt to the rear
5. Visually and physically inspect the chamber and magazine well (use flashlight if necessary)
6. Close the bolt on an empty chamber
7. Insert a full magazine
8. Close the dust cover

Have students demonstrate patrol ready.

F. Speed reload

1. Retrieve new magazine first
2. Drop the expended magazine
3. Insert fresh magazine and tug to confirm its seated
4. Close the bolt by slapping the bolt catch

Have students demonstrate speed reload by locking the bolt to the rear first.

G. Tactical reload

1. Preferably done when tactically appropriate
  - i. Behind cover
  - ii. Supported by other armed officers
  - iii. Significant gap in time since the threat was immediate
2. Method one
  - i. Retrieve fresh magazine in support hand
  - ii. Grip partially expended magazine where it meets the mag well with the support hand (both magazines in the same hand at the same time).
  - iii. Release the magazine from the rifle. The fresh magazine should be higher than the partially expended magazine.
  - iv. Insert the fresh magazine and tug to ensure its seated
  - v. Store the partially expended magazine apart from where fresh magazines are stored.
3. Method two
  - i. Grip partially expended magazine
  - ii. Release the magazine from the rifle

Have them demonstrate tactical reload.

- iii. Store the partially expended magazine apart from where fresh magazines are stored.
- iv. Insert the fresh magazine and tug to ensure its seated

H. Transition to handgun

- 1. When the rifle fails to fire for ANY reason at close range, transition to handgun.
- 2. With a sling, allow the rifle to hang to the side opposite the handgun.
- 3. Without a sling, hold the rifle's forend with the support hand firmly against the chest. Pistol shooting will be one-handed
- 4. Seek cover, support of armed officers, and distance prior to attempting to fix the rifle

Have students demonstrate transitioning to handgun.

I. Sling use

- 1. The sling should rest on the shoulder on the same side as the holstered sidearm. (i.e. right hander will put left arm through the sling)
- 2. No sling
  - i. At least one hand is permanently occupied (cannot go hands on)
  - ii. Transition to handgun shooting will be one-hand shooting
- iii. The least obstructive to rifle shooting
- 3. Two-point sling
  - i. As issued- parade sling
    - a. Not intended for tactical use
  - ii. Tactical two-point sling
    - a. More secure to body
    - b. Rifle less likely to dangle and hit a prone suspect
    - c. Can obstruct the reloading process
- 4. One-point sling
  - i. Versatile- support side shooting easy
  - ii. Minimal obstruction to function of rifle
    - a. Three-point sling
      - i. Most secure to the body
      - ii. May obstruct the bolt catch
    - iii. Most complicated to attach and operate

J. Lighting use

- 1. Mounted tactical light preferred
- 2. Turn on light during shooting
- 3. Turn off light, if possible move
- 4. Turn light on again to assess
- 5. Hand-held flashlight techniques:
  - i. Switch on barrel near bulb - Support hand holds forend and light in same hand
  - ii. Tail cap switch – Support hand grips the light while the forend rests on top of the wrist.

Have students demonstrate activating the light, shoot, and move.

iii. Set the active flashlight down to illuminate area

K. Movement while shooting

1. Never move faster than you can shoot
2. Maintain a stable platform
  - i. Groucho walk, short steps
  - ii. If possible, find a rhythm
3. Lateral movement: avoid cross stepping
4. When turning, pivot on one foot, stepping forward, not back
5. Rearward movement should be controlled
  - i. Every step should expect a trip hazard at knee level

Have students demonstrate looking through the sights at a target while moving.

Have students turn by pivoting and exercise proper safety circle.

XI. Skill Development

A. Dry Firing Exercises

1. Done on the range under the direct supervision of the instructors.
2. Dry fire each position (standing, kneeling, sitting, and prone).

B. Live Fire Exercises – all will be done under the supervision of a range instructor and range safety officer.

C. Required equipment: Gun belt, vest, pistol, rifle, and flashlight or tac light

1. Paste 4 bull's eye targets on the same cardboard backer
  - i. Rifle Zero – Bull's eye target
2. 50 yards prone fire 4 rounds and adjust the sights as necessary. Repeat until all shooters are properly zeroed.
  - i. Accuracy shooting/ positional – three bull's eye targets
3. 50 yards, 5 rounds from each position on different targets– seated, kneeling, standing. No time limit. Repeat as necessary.
4. 25 yards, 5 rounds from each position on different targets– seated, kneeling, standing. No time limit. Repeat as necessary.

D. Paste a white silhouette target

1. Low light shooting (*This exercise will only be conducted at the Carlsbad PD location*).
  - i. Lighting will require the shooter to use a flashlight or tac light
  - ii. 25 yards standing, 5 rounds center mass
2. Distance / precision shooting
  - i. 100 yards prone, 5 rounds center mass
  - ii. 50 yards, 5 rounds from each position, center mass– seated, kneeling, standing. No time limit. Repeat as necessary.
3. Reloading exercises
  - i. 25 yards, standing. Load only 3 rounds in each magazine, fire and reload continuously until magazines are expended. Repeat 2 – 3 evolutions, or more as necessary.

4. Tactical reloading exercises
  - i. 25 yards, standing. Load 2 magazines to capacity. Fire 3 rounds center mass, then conduct a tactical reload and repeat continuously for 10 reloading cycles (encourage students to try both methods).
5. Failure Drill
  - i. 15 yards, standing. Fire 2 rounds center mass followed by a head shot (total of 3 rounds). Conduct a tactical reload and repeat continuously for 10 reloading cycles (or until magazines are expended).
6. Malfunction exercises
  - i. Simple malfunction
    - a. 25 yards, standing. Load two magazines, each with 5 dummy rounds randomly mixed with 25 live rounds. Fire continuously, clearing malfunctions as they occur until all magazines are expended. Tap base of magazine with support and, rack charging handle with support hand.
7. Double-Feed:
  - i. 25 yards, standing. Set up one magazine, without live rounds, inserted in the rifle. Create the double feed with dummy rounds. One in the chamber, one being pushed by the bolt. Have a spare magazine with live rounds.
  - ii. Clear the malfunction, insert the fresh magazine and fire 5 rounds. Lock bolt open with bolt catch and charging handle, strip out magazine, rack, rack, look, insert fresh magazine, slap bolt catch.

Continued...

E. **Tactical Shoot** – Set up: Shooting mat at the 50-yard line, #5 lane; low barricade (barrel) at the 25-yard line, #2 lane. Place silhouette targets in lanes #2, #3, and #4, and #5. High barricades should be placed at the 15-yard line in lanes #1 and lane #6. Shooters should have a loaded handgun. - Times are for reference and time pressure only and are not disqualifying. The course has a 40 round total with 400 possible points, 280 points is the minimum theoretical passing score with 70% (this is not a qualification).

1. Course of Fire – Shooter starts at the 100-yard line. Shooter demonstrates patrol ready and places on the rifle rack. Upon the signal the timer will start and the shooter will safely pick-up the rifle and make it ready to deploy (sling the rifle, chamber a cartridge, adjust/ turn on sights, adjust stock, verify the selector is set to safe)
  - i. Shooter will run to the 50-yard line and fire 5 rounds kneeling and 5 rounds prone on target #5.
  - ii. Shooter will run to the low barricade and fire 5 rounds kneeling on target #2.
  - iii. Shooter will move tactically toward target #2 and fire 5 rounds while advancing toward the target prior to reaching the high barricade at the 15-yard line. Shooter should perform an emergency reload. Shooter will use the barricade as cover/concealment.
  - iv. Shooter will shoot from the barricade, spread fire on the nearest 3 targets with a total of 2 rounds on each for a total of 6 rounds (i.e. - #2, #3, #4, #4, #3, #2).
  - v. Shooter will move tactically laterally from lane #1 to the high barricade in lane #6 firing one round on each of the 4 targets prior to reaching the barricade.
  - vi. Shooter will shoot from the barricade, spread fire on the nearest 3 targets with a total of 2 rounds on each for a total of 6 rounds (i.e. - #5, #4, #3, #3, #4, #5).
  - vii. Shooter will move tactically laterally from lane #6 to the high barricade in lane #1 firing one round on each of the 4 targets prior to reaching the barricade.
  - viii. Shooter should recognize the rifle is empty and draw their handgun and fire 1-5 rounds on target #2. End of the course of fire.

## **XII. Qualification**

### **A. Department qualification shoot**

1. Two magazines with 25 rounds in each.
2. 500 possible points with a minimum of 400 to pass.
3. A hit in the arm is 5 points, all other hits are 10 points.
4. If the hole breaks the line, the higher score will be given to the shooter.
5. If shooting with electronic sights, a second qualification is required.
6. Shooter must first demonstrate Patrol Ready.

#### **Course of Fire:**

- i. 5 rounds standing at 50 yards in 15 seconds.
- ii. 5 rounds kneeling at 50 yards in 15 seconds.
- iii. 5 rounds prone at 50 yards in 10 seconds.
- iv. 5 rounds standing, 5 rounds kneeling, speed reload, 5 rounds prone at 25 yards in 40 seconds.
- v. 10 rounds standing at 15 yards in 12 seconds.
- vi. 10 rounds standing at 10 yards in 10 seconds.

End of Course of Fire