

ALL AMERICAN FIREARMS TRAINING

Fundamentals of Rifle Shooting

Disclaimer: The use of firearms can be dangerous. By reading this material, you agree that you assume any and all risks involved and release All American Firearms Training from any liability whatsoever.

Three Rules For Safer Gun Handling

1. Always keep the rifle pointed in a safe direction.

Always assume that every rifle is loaded, and never point a rifle at another person or at anything you would not want to shoot.

2. Always keep your finger off the trigger until you are ready to shoot.

3. Always keep the rifle unloaded until you are ready to use it.

Shooting Fundamentals: **B.R.A.S.S**

1. **Breathe**

- a. Your breathing should be steady, and each time you fire the weapon, try to be at the same point in your breathing cycle, whatever is most comfortable for you. For example, some people feel comfortable putting pressure on the trigger and letting the trigger “break” when they are [briefly] holding their breath after taking a deep breath and exhaling 1/3 of the air out of their lungs. Hold your breath, then apply pressure.

2. **Relax**

- a. Take a few breaths, and by thinking positive thoughts. Relax your body and take a comfortable stance, holding your weapon the same exact way each time and touching the same part of your finger to the trigger. The particular part of your finger that touches the trigger doesn't matter, as long as you are able to put pressure straight to the rear, towards the butt of the rifle and your shoulder. Grip everything firmly, as you might shake someone's hand.

3. **Aim**

- a. Remember to **focus on the front sight post**, not so much on the rear sight post or the target. Focus intently on the front sight post, and more of your shots will go on target. When you are aiming, your eye should go from:

- i. Rear sight
- ii. Front sight
- iii. Target
- iv. Front sight

After your eye moves to the front sight, your focus stays there. After you identify your target as something that you need to shoot, focus your eye on the front sight. Your brain will tie the other stuff into the picture if you focus on the front sight.

4. **Squeeze**

- a. Squeeze the trigger (not pull, not jerk, not snatch, but gradual **PRESSURE**) straight back to the rear. Imagine that there is

a string attached to the target, and the end of the string has a loop on it that you put your finger in. The only way you can pull the string is straight back. Trigger squeeze should be a smooth, constant increase of pressure. Once you have your sights lined up on the target (not perfect, just on target – start squeezing before the sights are perfectly aligned), start squeezing the trigger firmly until it “breaks” and the shot goes off. Just hold as steady as you can on target, and try not to disturb the sights when the shot goes off.

5. **Surprise**

- a. You should be surprised when the shot goes off, as you are focused on the front sight post and not on the target, the rear sight post, or on the trigger. Remember, the law of averages says that if your sights are lined up correctly on the target, you will hit it most of the time. So, your main goal is to let the rifle remain aimed at the target while the trigger squeeze is happening. When you are shooting, after taking a shot, hold the trigger down and evaluate the position of your sights before you release the trigger and begin breathing again. This is referred to as “follow-through,” just like you’d do in any sport where a projectile is launched (i.e. baseball, football field goal kicker, shot-put, discus) – the human body needs follow through as a part of the process, otherwise your brain will try and begin to cut corners and start doing other things before the shot goes off.

Tips:

1. **PRACTICE THE SAME WAY YOU WILL SHOOT.** Practice tired, hungry, hot, sweaty, lots of gear, etc. Yes, you should start off with as few variables as possible in order to get the blocking & tackling down, and there’s no reason to “suit up” just to get some dry fire practice. But

if you never practice with body armor on, it will be different to you when it counts.

2. Only two things affect the bullet once it leaves the barrel – gravity and wind. If you are shooting at a steep angle downhill, gravity will not have as much of an effect, so aim on target or low. If you're shooting uphill, gravity will have more of an effect, so you will have to aim high.

3. How far you can shoot is determined by how tight your group is. If you can make tight groups, you can hit a target a long way away. Use dry fire drills, zero ranges and simulators to work on your grouping over and over (the EST2000 is a good place), and you will be more successful. When you go to a KD range or record fire range, you should already know in your mind that you will be 100% on target.

4. Zero your rifle at a distance farther than 25 meters. Zero ranges are 25 meters because 28 meters was too hard for lazy people to measure out. The farther out you zero your rifle, the more accurate you will be. Put a target (can be as simple as a white piece of paper) out at 100 meters and see where you are hitting. Confirm your zero on a KD range with a spotter (who needs to have binoculars). You will learn a lot about your rifle and about how far out you can hit a target. Sight your rifle in, and get it to hit targets at 500 yards. Then, memorize the trajectory of the round so that you know how to hold at shorter ranges. If you zero at longer ranges, you will have to hold a little lower when shooting at close range, but it is a lot easier to align your sights low than to try and cover up the target with the front sight while you're trying to hold high during long range shooting.

5. Zeroing: the movement of the strike of the round will follow the movement of the rear sight. For example, move the rear sight to the right, and the rounds will shift to the right on target. The opposite is true for vertical adjustments. If the front sight moves down towards the barrel, the strike of the round will move up on target.

6. Stock weld / Cheek weld: Consistency is key in any kind of shooting. Put your face on the rifle in the same way every time. Give yourself an index point, such as putting your nose on the charging handle, or putting a piece of tape on the stock that you can feel, so you know when you have your face too far forward or too far back.

7. Positions: Get your elbow under the rifle if you have something to support you. Support the rifle equally with both arms if you are standing. If you are standing, practice until you can find your natural point of aim – form a habit of placing your feet a particular (comfortable) way when shooting, teach your body to remember it. If you are comfortable **YOU WILL SHOOT BETTER**. If you are standing and have to shift left or right, turn your whole body from the waist or pivot on one foot if you have time. Cock one leg to the side if you're prone. This will help keep your back straight and reduce wobble.

8. Stock length: Adjust the stock to fit your body, taking into account gear and armor. A good starting point is measure from your trigger finger's first joint to the inside of your elbow (measure with your arm bent 90 degrees). Make the stock this length, then work it from there.

9. Surprise: Make the rifle surprise you when it goes off. If not, you may commit rookie errors like flinching or hunching up a split second before the shot breaks. Repetitive dry firing can correct this, as well as loading dummy rounds in with your live rounds.

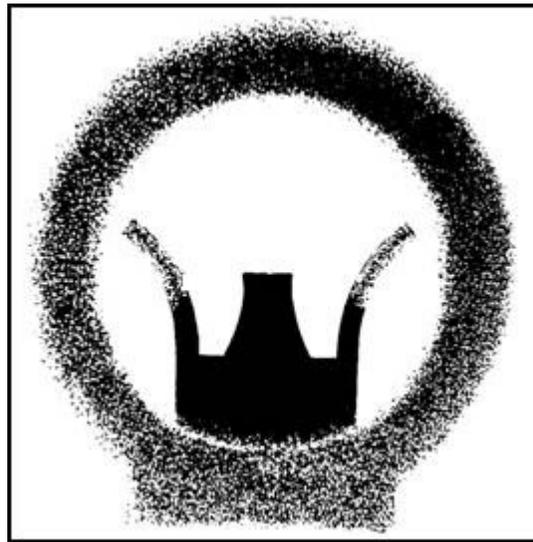
10. Look at the heat waves rising up from the ground. Flatter waves mean the wind is moving fast to one side or the other, taller waves indicate that the wind is relatively calm. Watch grass, leaves, fabric, etc. in between you and the target. If the wind is blowing from the left to right, aim (hold) left, and vice versa.

11. Minute of Angle: A Minute of Angle is $1/60^{\text{th}}$ of a degree on a compass, which equates to about 1 inch at 100 meters. Most military rifles are about as accurate as 1 MOA (ammunition is the most limiting factor). Most sights, such as the EOTech holographic sight, are

designed to be accurate enough so that you can adjust them at a 1 MOA standard; this means 1 click means you theoretically move the strike of the round 1 inch at 100 meters, 3 inches at 300 meters, etc.

Sight picture:

A perfect sight picture (this example has a ring/post style sight). Notice, only the front sight is in clear focus.



If the sights are aligned and pointed at the target, you will hit it. Remember, a small error in sight alignment means you will not hit your target, so pay attention to the **FRONT SIGHT**.

Remember, PUT THE SIGHTS ON TARGET, FOCUS ON THE FRONT SIGHT AND USE YOUR FINGER TO PUT JUST ENOUGH PRESSURE ON THE TRIGGER TO CAUSE THE HAMMER TO FALL, WITHOUT DISTURBING THE RIFLE SIGHT ALIGNMENT. Shooting is the hardest simple thing you will ever do. Remember, the goal is to locate a target, get the sight on target, and hold the sights on target as you fire a shot.

Diagnosing shooting errors

1. Horizontal dispersion – shots are mostly in the center of the target area, but you are missing on both sides of the target. In this case, the position of your trigger finger and your grip on the rifle are probably inconsistent. Work

on making your grip consistent, and put the same part of your finger on the trigger each time.

2. Vertical dispersion – shots are mostly in the center of the target area, but you are hitting either too high or too low. This indicates that you are breathing while you take shots. Make sure you hold your breath at a consistent point in your breathing cycle.

Common Sources of Errors:

1. Not Looking at the Sights. This quite frequently is listed as "looking at the target." A shooter may be focusing his eye on neither the sights nor the target, but since he does not see the target in clear focus he assumes he is looking at the sights. You must concentrate on sight alignment.
2. Holding Too Long. When you get your sights on target, start putting pressure on the trigger immediately (but slowly, gradual pressure). By the time you finish getting your sights aligned, your trigger squeeze will be far enough along to cause the hammer to drop.
3. Improper Grip or Body Position. You have to practice your grip and body position. Consistency is key – if you practice it 1,000 times, you will do it the same way when it counts.
4. Trigger jerk. Applying inconsistent pressure on the trigger. The trigger has to move straight to the rear – any deflection or more pressure on one side of the trigger will have an adverse effect.
5. Anticipation. Anticipation can cause muscular reflexes of an instant nature that so closely coincide with recoil that extreme difficulty is experienced in making an accurate shot. You can eliminate anticipation if you force the rifle to surprise you when it goes off. If you can't predict the exact moment when it will go "bang," your brain can't "jump the gun."
6. Lack of Follow Through. Follow through is the subconscious attempt to keep everything just as it was at the time the shot broke. In other words you are continuing to fire the shot even after it is gone. Basketball free-throw shooters, who depend on a high percentage of well-aimed shots, also place a large emphasis on follow-through; you can see them hold their hands in a "follow-through" position for several seconds after they release the ball.

If you have any questions or need more help, call me at 866-697-6446 or e-mail aafirearmstraining@gmail.com. We are always happy to teach you or anyone else about shooting. Visit our web site at: www.allamericangunsmith.com

Useless M4 Trivia:

1. What is the FM concerning the M4 Rifle?

FM 3-22.9

2. Time Sensitive / Field expedient SPORTS:

1. Tap – tap up on the magazine (or up on the forward assist, but tapping the magazine works better); many times if the rifle's chamber is dirty or, more commonly, the rounds are dirty, the cartridge may get stuck during the chambering process. Tapping the magazine or forward assist can release any tension caused by dirty elements, letting the bolt move the round forward.

2. Rack – if nothing happens when you tap the magazine or forward assist, grab the charging handle, pull it to the rear and thrust rifle over with the ejection port toward the ground. Hopefully, this will eject any loose brass, rounds, or junk that is causing the rifle to malfunction. Hold the charging handle to the rear.

3. Assess – while holding the charging handle to the rear, turn the rifle back over/upright and look with your eyes inside the ejection port to check for further obstructions (i.e. a piece of brass still in the chamber). If there is an obstruction, you will need to lock the charging handle back to the rear and deal with it, but if not, just release the charging handle and watch it go forward, then resume firing.

3. What are the steps required in order to mechanically zero the M4?

1. Adjust the front sight post up or down until the base of the front sight post is flush with the front sight post housing.
2. Adjust the elevation knob counterclockwise (when viewed from above) until the rear sight assembly rests flush with the detachable carrying handle and the 6/3 marking is aligned with the index line on the left side of the carrying handle.
3. Position the apertures so the unmarked aperture (the small one) is up and the 0-200 meter aperture (the big one) is down. Rotate the windage knob (the thing that causes the rear sight to move side-to-side) to align the index mark on the 0-200 meter aperture with the long center index line on the rear sight assembly.

4. What are the 7 types of ammunition that can be used with the M4 Rifle?

1. M193 – Ball
2. M196 – Tracer
3. M199 – Dummy
4. M200 – Blank (Violet tip and 7 petal rose crimp)
5. M855 – Ball (Green Tip)
6. M856 – Tracer (Red Tip)
7. M862 – Short Range Training Ammunition (Plastic with a Blue Tip)

5. Weights:

Without Magazine and Sling - 6.49 pounds

With Sling and a loaded 20 round magazine - 7.19 pounds

With Sling and a loaded 30 round magazine - 7.50 pounds

6. Cycles of function:

1. Feed
2. Chamber
3. Lock
4. Fire
5. Unlock
6. Extract
7. Eject
8. Cock