



MESA TACTICAL

MEMO

To: **Everyone**

30 January 2013

Fm: **Mitch Barrie**

Re: **Mesa Tactical Burro Canyon Shooting Day**

Thank you for your interest in the Mesa Tactical Burro Canyon Shooting Day. We have reserved a private range for the first Saturday of every month, through 2013.

I have prepared this document for Mesa Tactical Burro Canyon Shooting Day participants to set the safety ground rules and also to tell you a little about the firearms that will be available. I don't want to turn what should be a pleasant social event into a tedious ordeal, but safe firearm handling is of the highest importance when shooting, especially with groups, and in any case new people are much more comfortable around guns when they understand how easy it is to be safe while shooting them. And it really is very easy.

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Burro Canyon Shooting Park

Burro Canyon is a concession in the Angeles National Forest, built atop a huge landfill.

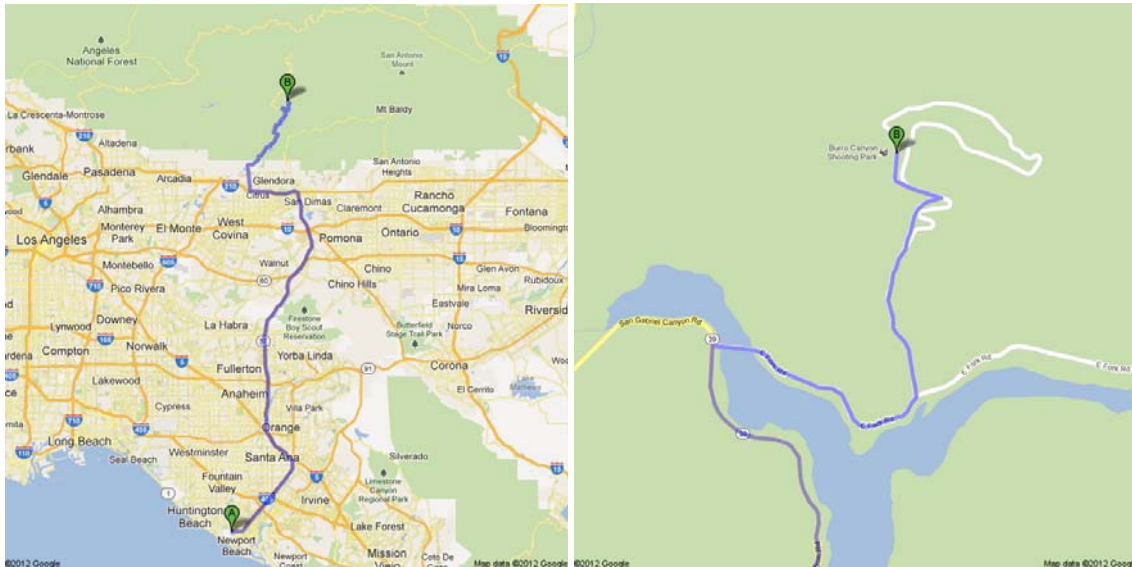
Gear and accessories for law enforcement, military and personal defense.

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How to get there

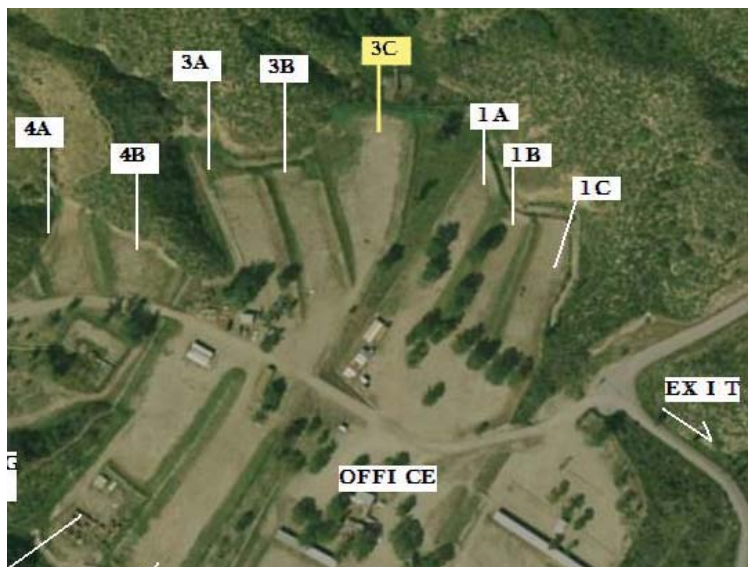
Burro Canyon Shooting Park can be reached by taking the Azusa Ave. exit off the 210 Freeway. Azusa Ave. turns into San Gabriel Canyon Rd. Drive north approximately 11 miles into San Gabriel Canyon and turn right at the junction of the East Fork Rd. and Route 39. Drive one mile on East Fork Rd. to the Entrance of Burro Canyon. Driving time from the 210 Freeway is approximately 18 minutes.

Here are a couple of maps from Mesa Tactical's office:



The shooting park opens at 9:00 and I will be there when it opens. The first three quarters of an hour is usually spent unloading gear and setting up targets. After that we usually spend a lot of time with n00bs delivering a safety lecture. You can arrive later if you want, but it is unlikely we will be there past 2:00pm.

When you arrive, proceed directly up the hill past the office (and past the “Do not enter” sign) to our private range, **Range 3C** (on the right as you come up the first hill past the office). You can see the range at the top of this aerial photo:



I should be there. If I'm not there, I will be soon. Sign the waiver and guest list and ask for a sticker for your back. *Everyone who attends must sign the waiver and receive a sticker.*

If you are bringing any ammunition of your own, stop at the office and bring it in for them to inspect. Ferrous core ammunition is prohibited, as it can generate sparks that can cause brush fires (it is inspected by applying a magnet to the bullet).

What to bring

Here is what I suggest you bring to the Mesa Tactical Burro Canyon Shooting Day:

- **Sunglasses.** Sunglasses are useful for the usual reasons, and also because they count as mandatory eye protection.
- **Hearing protection.** I will have some spare ear muffs and maybe some foam ear plugs. Ear protection is available to rent or buy at the range office. But if you have your own, that's great too.
- **Hat and sunscreen.** The firing line and range are bereft of shade, so bring some protection from the sun.
- **Other clothing appropriate for conditions.** Burro Canyon is 2,100 feet high in the San Gabriel Mountains, so the weather can be quite different from what it is down in the valleys and beaches. Be sure to check the weather forecast at <http://1.usa.gov/11gKSAE> and dress accordingly.
- **Drinks and lunch.** I'll have a cooler with some drinks and food in it, but you might want to bring your own drinks. And I'm probably not going to share my lunch.
- **Chairs.** I'll bring a couple chairs, but it never hurts to have more.
- **Firearms.** If you have guns of your own, go ahead and bring them.
- **Ammunition.** I will have ammunition for all the guns I bring, but any contributions are welcome.
- **Plastic jugs or bottles filled with water.** We use these as targets. I'll have food coloring at the range. Most other things people use as targets are prohibited at Burro Canyon (steel because it causes sparks and can start fires; fruit because it leaves a smelly mess and attracts bees; glass for obvious reasons).

Cooper's Rules

There are four basic rules for safe firearm handling, codified by USMC Lieutenant Colonel Jeff Cooper. The interesting thing about these simple rules is that by following them it is *impossible* to accidentally harm yourself or anyone else with a firearm. Furthermore, in virtually all the stories you have heard about accidental firearm-related injuries or deaths, someone violated one or more of these rules. I have found that once nervous newcomers to shooting digest and understand these basic facts, they become a lot more relaxed around guns and much better prepared to enjoy themselves shooting.

Since the first two rules are more or less the same, and the last rule doesn't really apply so much on formal shooting ranges, it is easy to remember the rules, too. Here they are:

1. **All guns are always loaded.** Even if they are not, treat them as if they are. This rule is controversial among some gun nuts (including me) because if all guns were always loaded

you would never be able to clean them, for example. And the main issue, the concern about “accidentally” firing and hurting someone is covered by Rule 2:

2. **Never let the muzzle cover anything you are not willing to destroy.** Be very aware of and very careful where the muzzle of the gun (any gun) is pointed. Always keep it pointed *in a safe direction*. This can be downrange, or at the ground, or toward the sky (up or down varies depending on local range rules and preferences, etc). Avoid “sweeping” people or other things you are not willing to destroy. This can take a bit of practice before it becomes second nature. If you see someone else “sweeping” the muzzle, be sure to point it out.
3. **Keep your finger off the trigger till your sights are on the target.** This is the *Golden Rule*. Its violation is directly responsible for about 60 percent of inadvertent discharges. The fact is, a modern firearm will not “go off” unless the trigger has been pulled. Get in the habit, when picking up and handling any firearm, of placing your trigger finger above the trigger guard, pointing down toward the muzzle. Place your finger inside the trigger guard only after you have the target in your sights.
4. **Identify your target, and what is behind it.** Never shoot at anything that you have not positively identified. At a formal range like Burro Canyon, this is less of a concern, because shooting anywhere downrange is generally safe. However, you might want to verify that there are no targets beyond the target you are shooting that you might inadvertently hit; or targets *in front of* your target.

Of course, I will go over these rules in person at the range, with both handguns and long guns.

House rules

In addition to the more general Cooper’s Rules, I will enforce some safety rules specific to the shooting venue at Burro Canyon.

Firearms will be located in two places: in a vertical storage rack back of the firing line; or at the firing line (on the ground or on a shooting bench). Ideally, the only long guns left at the firing line will be those in current use; handguns will stay on the shooting bench most of the time.

The firing line will be identified by a yellow rope staked on the ground.

When the range is “hot,” people are free to shoot at their targets. When the range is “cold,” there is no shooting and people are free to go downrange and set up new targets, etc.

- **No alcohol!** No drinking and shooting. If you have a beer or something, you won’t handle any more guns for the rest of the day. Alcohol is prohibited at Burro Canyon anyway. Please don’t drink anything in the morning before we start, either.
- **No loaded guns back of the firing line.** Yeah, yeah, I know, *All Guns Are Always Loaded*; this is just another example of the impracticality of Rule 1. What I mean is that guns in the storage area must be unloaded, preferably with the actions open so their status can be easily seen. Use empty chamber indicator flags if available. If you want to bring a gun back from the firing line, ensure it is unloaded first. Ask me for help if you aren’t sure.
- **Stop shooting immediately when you hear “Cease fire!”** Anyone who sees something unsafe on the range can yell “Cease fire!” When someone calls “Cease fire,” you should repeat it yourself to ensure others can hear you. All shooting stops with the first call of “Cease fire,” and the range is “cold.”
- **No one crosses the firing line for any reason when the range is “hot.”** Listen carefully for verbal announcements of whether the range is “hot” (people are shooting) or “cold” (no one

is shooting and people are free to go downrange to check targets, etc). The range is *de facto* “hot” if someone is handling a firearm for any reason at the firing line; the range is *de facto* “cold” if there are people forward of the firing line for any reason. So look first.

- **Eye and ear protection on at all times when the range is “hot.”** Whether you are shooting or not.
- **When the range is “cold,” all firearms should be unloaded, actions open.** Let me know if you need help with this.
- **When the range is “cold,” none of the guns on the firing line can be handled.** Basically, when the range is “cold,” *stay away from any guns remaining on the firing line.* Better yet, just stay away from the firing line. This is a safety issue, but mostly it’s really unnerving for people downrange to see their friends handling guns on the firing line. Guns in the storage area back of the firing line can be handled at any time (mind the Four Rules), though there isn’t really much reason to do so.
- **Do not load any gun until you are on the firing line and the range is “hot.”** You can load detachable magazines any time you want, though.
- **When transporting firearms, keep the muzzle pointed down toward the ground.** This helps to ensure you are not inadvertently pointing the gun at some tall person’s head (particularly mine). Don’t point it at your feet, either.
- **If you experience a misfire or jam, keep the gun pointed downrange for 15 seconds before doing anything else.** Call me over if you need help.

Ensure everyone around you is following the safety rules. Speak up if you see someone doing something unsafe. We will be that much safer if everyone is watching out for each other.

On a more relaxed note

If you are new to shooting, don’t let these last couple of pages make you nervous. You are being asked to learn a lot of new stuff at once, but in fact this is all really easy and the main idea is for you to be safe and comfortable so you can have some fun. You shouldn’t be too embarrassed if you are caught making a mistake; no one will bark at you, and as you can see from studying Cooper’s Rules, it’s actually a challenge to get yourself into real trouble.

How to shoot

Lucy or I will demonstrate basic shooting techniques at the range, but I wanted to make sure I included sighting diagrams here instead of resorting to scratching diagrams in the sand at the range.

Stance

The correct shooting posture is extremely important. There are four basic positions:

- Prone
- Sitting or kneeling
- From a bench
- Standing or “off-hand”

The details of each of these will be covered in person, but here are some general guidelines to get you started. You will want to stand up straight and erect, with your “weak foot” (the foot opposite your strong hand, ie, your left foot if you are right handed) forward, while leaning slightly into your “weak foot.” You will want to exaggerate this forward leaning a bit with a high recoil weapon like a shotgun.

With long guns, bring the weapon up to your face; do not bend your neck down to meet the stock. The butt of the stock should be pulled back into the pocket inside your shoulder.

The trigger

There are two kinds of trigger pulls on some of the guns, a heavy double action and a very light single action (all of the guns have a single action trigger). You will be doing almost all your shooting in single action (light trigger pull).

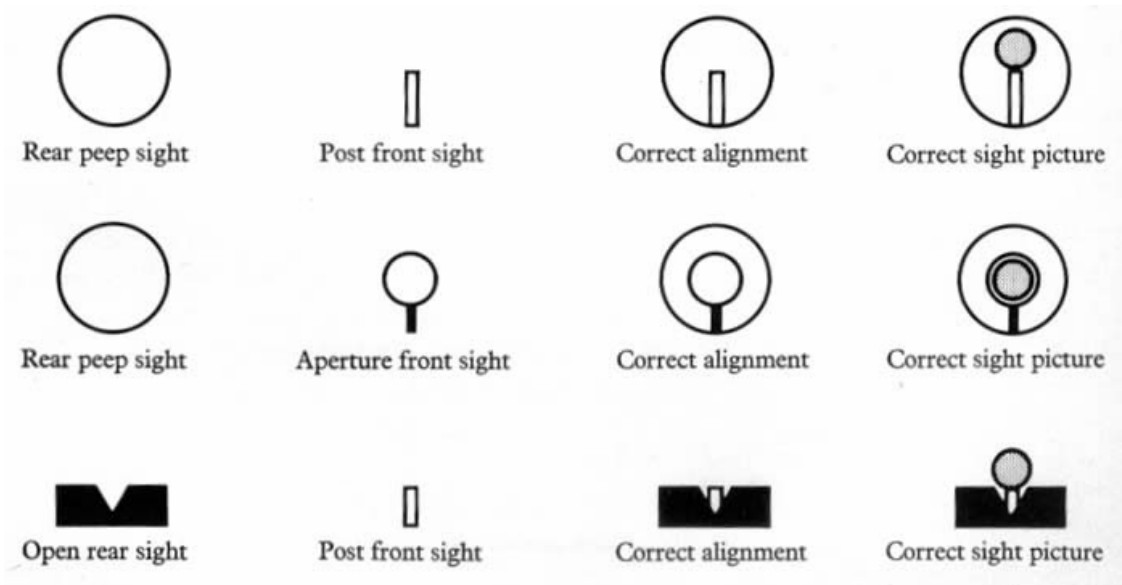
To shoot single action, first bring your target into your sights (Rule 3), then place the *tip* of your index finger on the trigger (not the back of the first knuckle, as seems natural). When you are on target, *squeeze* (don’t pull) the trigger back.

If you do any double action shooting (pulling the hammer back with the trigger alone), you do the same thing except hold the trigger with the back of your first knuckle.

Sights

The rifles and handguns all have front and rear sights. Aiming the weapons is a matter of lining up front sight and rear sight with the target (a bullseye or water bottle, etc).

The following diagram shows how sight alignment works. The lower sight, or open rear sight, is the most common one and you can see how you are supposed to line up the front post with the notch in the rear sight and place the bullseye on top.



Generally, when you are aiming the rear sight will be out of focus, and the target may be so far away it will be an indistinct blob of color.

The M1 rifle is “zeroed” for about 150 yards, and rather than change the sights for the 90 yard range we’ll just employ “Kentucky elevation” (trial and error) to hit the targets at the reduced range.

NPOA

Natural Point of Aim (NPOA) has been said to be the one factor which separates the riflemen from the wannabees. If you don't get your natural point of aim, your shots will be to one side or the other of the target, even if fired perfectly, because your body is out of position, and you have to muscle the rifle onto the target. A rifleman takes position so that his rifle, with his body relaxed, is pointing at the target. He doesn't have to fight muscle strain and he makes his job of firing the shot a lot easier – and his shots will be on target.

Get your NPOA by lining up on the target with your sights, closing your eyes, relaxing your body, taking a deep breath in and letting it out. Open your eyes and shift position using your forward elbow as a pivot to bring the sights back on the target. Repeat until when you open your eyes, your sights are on the target. Once you establish your NPOA, keep it by not moving that forward elbow supporting the rifle (prone) or keeping your feet in the same spot (all other positions).

Six steps to taking the shot

These are from the Appleseed training.

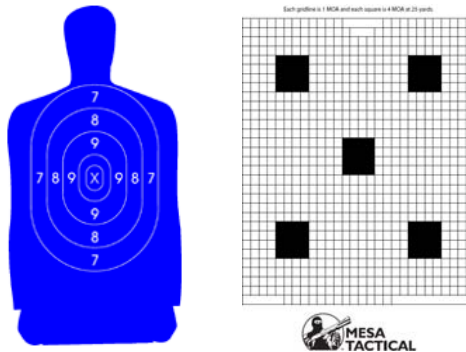
1. **Sight alignment.** Line up the front and rear sights. Simply center the front sight in the rear sight (a scope does it automatically for you).
2. **Sight picture.** Keeping the sights lined up, bring them onto the target. Most people set the target on top of the front sight like a pumpkin on a fence post..
3. **Respiratory pause.** Take a deep breath in; the front sight will dip. Let your breath out, watching the front sight rise until it barely touches the bottom of the bullseye – now hold your breath. Use a natural act – breathing – to establish your correct elevation (now's when you get your NPOA).
4. **Focus.**
 - a. Focus your eye on the front sight. It may be a little hard to do at first – you naturally want to look at the target – but focus on the front sight. This will be hard for some shooters past 40, and some may need to switch to a scope because of inability to focus on the front sight.
 - b. Focus your *mind* on keeping that front sight on the target. This is the most important one on this list. Do it – or miss!
5. **Squeeze the trigger.** While you are doing step 4, take up the slack and squeeze the trigger straight back – but keep your concentration on the front sight! Don't let the front sight wander off the target. You are trying so do two tasks at once, and the more important is to *keep the front sight on the target!* This is where practice pays.
6. **Follow through.** When the hammer falls:
 - a. Keep your eyes open;
 - b. Take an instant mental photo of where the front sight was on the target when the hammer fell (call the shot); and
 - c. Hold the trigger back.

In field shooting you want to quickly observe the impact of the bullet on the target and the target reaction. If the shot is a miss, try to spot any bullet splash so you can correct the next shot.

Targets

We will be shooting at paper targets and plastic bottles and jugs filled with water. Targets will be at the following ranges:

- **10 Yards:** There will be paper targets and maybe a couple of hanging water bottles for *handguns only!*
- **25 Yards:** There will be two kinds of paper targets at 25 yards, a silhouette and the one inch squares target as shown below (or other 25 yard Appleseed targets).



The 25 yard silhouettes are best used with shotguns. The square targets are set up for folks who are practicing for their Appleseed patch. Please be respectful of these folks by not shooting at the targets they are using.

We might also hang some water bottles or jugs at 25 yards, mostly for shotguns.

- **85-90 Yards:** Water jugs will be set up on the far berm. Please do not put any targets on the top of the berm.

Paper targets are useful for practicing and reviewing your aim. The object is to generate tight groups of holes in the target; then once you have accomplished that, work on moving that group into the center of where you are aiming. Unfortunately, beyond 20 yards or so it is difficult to see the holes in the targets except when you inspect them up close when the range is cold.

Water jugs are a bit more interesting because they will usually explode when hit by a centerfire rifle or shotgun, and that can be seen from a distance. If you have some plastic milk jugs around the house you would like to bring, please feel free to do so. For best results, add red, green or blue food coloring to the water and then shake it up.

Note that .22s simply poke holes in water jugs and allow the water to drain out. At longer ranges, you often won't even know whether you hit the target. Same with most handgun calibers (except magnum calibers). So leave the water jugs for folks shooting rifles and shotguns and maybe big bore handguns.

The guns

There are basically three kinds of firearms in general use, rifles, handguns and shotguns. It is generally easier to learn with rifles, since the sight radius is longer and, when using a bench, they are easier to keep steady than handguns.

Rifles

Most rifles are either semi-automatic (also called autoloading) or bolt action. Lever actions are also popular for fun shooting and some hunting. With the bolt action and lever action, you have

to manually cock the rifle after every shot to eject the case and chamber a new cartridge. With the semi-automatic, this is done automatically with every shot.

Rifles are typically far more powerful than handguns. We will be shooting rifles (except the .22 rifles) at ranges of at least 50 yards, out to 100 yards. The .22s are a lot easier for folks to learn with because they are smaller and lighter and have no recoil and aren't very loud.

The most popular rifles at the Mesa Tactical Burro Canyon Shooting Day are inevitably the AR-15s, especially with the girls. This is perplexing because these are also the same rifles everyone in Washington and Sacramento and the bicoastal media want to ban. No one knows why. We usually have one or two AR-15s in 5.56mm NATO (.223 Remington), and maybe a couple in .22 Long Rifle.

Handguns

Handguns are most familiar to non-shooters since police carry them and they are ubiquitous on teevee and in movies. They are also common first-time firearms in the US because they are better for personal defense than rifles, and indoor handgun ranges are easier to find than outdoor rifle and shotgun ranges. But they are actually pretty challenging to shoot accurately and proficiently.

There are two general types, revolvers and semi-automatics ("pistols"). Semi-automatics enjoy much more popularity these days than revolvers because of their adoption by police and the military, but I don't like them because they are not as reliable as revolvers, are far more complicated to operate, and in fact can be difficult or impossible for people with limited strength to operate safely and reliably.

Again, we usually have a couple of .22 handguns, which are especially useful for n00bs.

Shotguns

Shotguns are different from rifles in that the bores (the inside of the barrels) are smooth instead of rifled, and they are normally used to fire shot (many small pellets) instead of bullets. Shotguns are most commonly used for hunting, but the shotguns we work with at Mesa Tactical are so-called tactical shotguns, for police work and self defense. Shotgun competition and recreational shooting traditionally take the form of shooting clay pigeons in the air to simulate hunting birds, but we'll use our tactical shotguns a lot like rifles and simply shoot at targets set up downrange. Shotguns make a lot of noise, can feature impressive recoil, and are extremely destructive, so they are a lot of fun to shoot!

We will bring three different kinds of ammunition for our 12 gauge shotguns, bird shot, buck shot and deer slugs. Bird shot is very fine lead pellets that spread quickly and don't have a lot of recoil. It's easy to get started shooting with bird shot. Buck shot is nine 00 size pellets (basically 0.30" in diameter) to a shot, and can provide a pretty reasonable kick (recoil). Deer slugs are essentially .73 caliber bullets fired out of the shotgun, and because they are so powerful the recoil is pretty substantial. Fortunately, Mesa Tactical makes specialized stocks to absorb some of the severe recoil.

Clean up

Before we leave for the day, we will police the area for litter on both sides of the firing line. Especially, we will pick up all the cartridge cases and shell husks we can find, as well as destroyed water jugs.

Please place all shiny cartridge cases in the designated container. Place shotgun husks in a separate container, as these are also collected by someone we know.