

Bolt Gun vs. Gas Gun for LE Operations

By Paul Howe

I've have started to teach Urban Marksman (Sniper) courses to Law Enforcement personnel and wanted to address the issue of whether to use a Bolt Action Rifle (Bolt Gun) or Semi-Automatic Rifle (Gas Gun) for law enforcement applications. I think both have their pros and cons, but I want to go over them with you. Here are a few topics I wish to discuss:

- Safety
- Accuracy
- Reliability
- Training Time
- Cost
- Misc.

While assigned to Special Operations in the 90's, I served two years as a sniper. In the "old days," I used a bolt action platform which fired a .300 Winchester Magnum cartridge and a gas operated platform, the .308 M1A magazine fed rifle. Since that time, a variety of both bolt and gas guns have hit the markets, from custom makers to major manufacturers.

Safety

While the Remington 700 bolt action platform is generally the standard for the police urban marksman weapon, there has been a old controversy about the mechanical safety and its reliability. I have been around two bolt guns that when the safety was moved from safe to fire, the weapon discharged. I have heard about and read similar stories.

Speaking with gunsmiths, they attribute this to two causes. The first is the adjustment of the trigger by someone who does not know what they are doing. The other is excessive dirt I debris in the safety/trigger area resulting from lack of maintenance.

The Gas Guns I have used and tested have not had any problems to my knowledge. Newer guns are built on the proven AR type platforms and operate similar to patrol rifles in function and reliability.

Have said that, I have run two classes thus far firing close to 1,000 rounds and only saw one safety issue and that was with a custom Remington 700. When the safety was pushed forward, it did not go all the way and the student attempted to pull the trigger. The round did not fire. The student reached back to further disengage the safety and the weapon discharged.

Accuracy

Next to safety, accuracy is my next concern. Being away from surgical world of urban marksmanship, I wanted to see what the new guns on both sides of the fence were capable of without too much custom work or aftermarket adjustments.

I have found the bolt gun in this area to be more reliable and consistent in the accuracy department. I can't put my finger on it, but trying to get a gas gun to shoot the same tight groups as a bolt gun is both a mental, physical and technical challenge. Mentally, it seems I have to put more focus and energy into each shot. Physically, I feel I must do the same. Technically, I must try and find which ammo it likes best and which reliably functions the guns.

On a side note, some gas guns seem to shoot tighter groups as they heat up. I don't know if the gun metals are expanding at the same rate and firming up all the locking surfaces or it is just my imagination. This would be a plus in a war footing with multiple targets,.

Reliability

If you are looking at only firing one shot, both weapons are about equal. The weak link here is the operator. During my classes, I see many failures to fire due to a poor loading sequence and either failure to do a press check on gas guns or to observe a round feed on bolt guns. On the bolt guns, I teach officers to slightly cant the rifle and see the round feed. Failure to do so may result in a loud click.

With the gas gun platform, some have a forward assist, similar to that of an M4 variant and the operator can pull back, see brass and then use the forward assist to seat the round. If the weapon does not have a forward assist, you can pull the magazine and see if a round has fed off the top, similar to using an MP-5 submachine gun.

As for internal or box magazines, I also saw problems with both weapons. There are techniques to loading an internal box magazine and if done incorrectly, it can lead you to a malfunction of sorts. As for the external box magazine type weapons, ammunition, shoulder lock, the weapon itself all contribute to an occasional malfunction. As a note, gas guns seem to run better broken in and with a little oil.

Training Time

With the proliferation of M-4 style patrol rifles, the gas gun built on this type platform may have the edge on ergonomics and employment. Generally any officer that has gone through a patrol rifle program can operate an urban marksman gas gun with little training.

Cost

While the cost of gas guns are coming down, bolt guns are still cheaper and easier to find. The cost of an average gas gun was \$2,100.00 where I could find bolt guns for \$900-1,000.00. These are prices without optics.

Misc.

Urban Marksman rifles come in both .308 and 5.56 versions and for initial shots and employment, those using the 5.56 version are generally faster during employment of the weapon. Much of this is due to familiarity with the weapon system and the little recoil it produced.

Courses of Fire

I first teach students to shoot a cold clean or cold dirty admin shot to determine their first round zero. I allow them to use the bipod and support bag when doing this.

I also run a set of standards in my course of fire, firing one shot from various positions from 100 to 7 yards on a timer. Coupled with these standards, I also require officers to deploy from their vehicle with their weapon in the stowed or carried position, safely put it into action and then surgically engage five targets with partially obscured threats holding hostages. LE targets will be producing these targets shortly and they work for sniper, rifle and pistol work.

The first tactical firing position is a hasty bipod position. The next is off a rucksack. Next we shoot from a table through an open window, an urban hide if you will. In Midland, we shot off a simulated roof pitch. All were done with a reload during the sequence.

Misses or a hostage hit required 25 pushups per shot. Even a clothing hit, however partial was considered a bad shot. I want students to know their capabilities of their capabilities, that of their rifle and ammo. I also want to hold them accountable for each round fired.

Conclusion

For administrators, cost will be an overriding factor in the purchase of a bolt or gas gun along with maintenance and support.

Were I a law enforcement officer and I had to grab one gun, make a surgical shot, with only one shot, it would have to be a bolt gun. Simplicity, ease of use, accuracy and reliability all equal the ability and confidence to make the shot.

This is what is critical at the end of the day. Snipers can spew data charts, statics and their beliefs to me all day long, but in the end, is that first round bullet where you wanted it?

About the Author

Paul R. Howe is a 20-year veteran and former Special Operations soldier and instructor. Paul currently owns Combat Shooting and Tactics (CSAT) where he consults with, trains and evaluates law enforcement and government agencies in technical and tactical techniques throughout the special operations spectrum. See www.combatshootingandtactics.com for details.

Photos:



Admin Shots



Surgical Shots



Bolt Gun vs. Gas Gun



Rapid Deployment Drills



Window Position



Kneeling Position



Standing at 7 Yards



Gas Gun from Roof Pitch