

Here, multiple players participate in a hostage situation drill.



# AIRSOFT GUNS

## ECONOMICAL FORCE-ON-FORCE TRAINING

BY KARL REHN

Over the past several years, a new generation of inexpensive, high-quality BB guns has sprung up largely unnoticed by the firearms community. Modern Airsoft gas blowback guns (GBBs) have the look and feel of their "real steel" counterparts, complete with slides that cycle for each shot and magazines that contain both projectiles and propellant. In addition to being fun to shoot, GBBs are excellent training tools for teaching gun safety to novices, practicing shooting and gun handling skills and conducting force-on-force exercises.

Airsoft BB guns have been around in various forms since the 1980s. The earliest models were the SoftAir™ guns produced by Daisy. Designed purely for recreational use, GBBs fire 6mm (.24 caliber) plastic pellets at velocities below 300 feet-per-second (fps). Pellets come in a variety of weights, typically 0.20-0.25 grams. The projectiles lack the power of traditional BB guns, lacking the power to penetrate a soda can or inflict injury on bare skin at seven yards. These guns were popular with gun enthusiasts in the U.S., Asia, and Europe, particularly in countries where firearms ownership was difficult or impossible. Paintball players and others interested in combat simulations also began using Airsoft guns for recreational war games.

Over the past decade, Japanese and Taiwanese companies made significant improvements to the early models, developing gas-powered pistols and electric-powered rifles that mimicked the look, feel, function and cyclic rate of real guns, complete with removable magazines. U.S. government regulations require that all Airsoft guns sold in the U.S. have orange markings on the muzzle. Often, the realism of the guns is so good that the orange mark is the only way to tell them from the original.

The electric guns, commonly known as Auto Electric Guns (AEGs), use a battery in the gun's stock to power a geared electric motor driving a spring piston. Two varieties of pistols are available: spring-powered and gas blowback. The spring-powered guns are considerably cheaper than the GBBs, and are sold in U.S. retail stores for as little as twenty-five dollars. The spring guns are extremely realistic replicas, but their slides must be manually cycled for each shot. The gas blowback guns have true semiautomatic operation. Each time the trigger is pulled, the gun fires, the slide cycles and a new round is loaded.

The key to the GBB design is the magazine. It contains plastic BBs fed by a spring mechanism similar to semi-auto firearms, and a small gas reservoir that is filled from a large can of gas. The most popular propellant

is "green gas," which is an environmentally friendly Freon™ substitute that includes atomized lubrication. Silicone is the only lubricant that should be used on Airsoft guns—standard gun oil will damage them. "Duster gas" (the cans of compressed air sold for cleaning dust from computers) can also be used if the guns are lubricated separately. Several different types of gas and lubricant are available.

Typically the magazine has capacity equal to or greater than the original firearm model's magazine, and holds enough gas to fire all the BBs in the magazine. Many of the models lock back when the last shot is fired. Some guns can be fired without BBs in the magazine, allowing a form of dry firing where the slide cycles for each shot. Airsoft guns mimicking a particular make/model can be used with holsters and



A KWC 1911 Airsoft replica with plastic BBs.



Gun vs. knife: The author shoots Tim Gahagan. Note participants are using safety equipment which is mandatory in force-on-force training. The knife is a dulled-edge, blunt-tip Spyderco training knife.

mag pouches designed for that handgun, and in many cases accessories, such as weapon mounted lights, lasers, and scopes, can be used on their Airsoft duplicates as well. Airsoft enthusiast websites show photos of everything from IPSC Open-style "raceguns" with faux compensated barrels and red-dot scopes, to SWAT-style submachine guns with mounted lights and lasers.

Presently, Airsoft GBBs are available in models that replicate popular designs from Glock, Beretta, SIG, HK, S&W, many 1911 variants, double and single-action revolvers and more. Some U.S. firearm manufacturers have partnered with Airsoft companies to produce official Airsoft clones. STI supplies grips to KSC, which produces the detailed STI replicas shown in the accompanying photo.

Some of the GBB models can be upgraded with metal slides, which increases the felt recoil and realism of the gun. Some models are labeled "lite GBB" which means that all the functions of the real gun (safeties, for example) may not be mimicked in the Airsoft gun. The full GBB models provide more realism for training purposes. The newest GBB designs have a "hop up" mechanism that adds backspin to the BB and improves accuracy. Shooting indoors, the author was able to shoot a two-inch group at ten yards with a KJW Airsoft G19 replica. However, as the gas level in the magazine drops, reduced velocity can affect accuracy and range.

Airsoft GBBs can be used in all levels of training, particularly those situations where students are first learning new skills and run the greatest risk of having a negligent

discharge. Many trainers use .22 pistols, or larger caliber firearms with .22 conversion kits, in beginning shooting courses. The Airsoft guns can be used in the same way, with the added benefit that if a student has a negligent discharge with the Airsoft gun the projectile won't penetrate flesh or cause property damage. At the more advanced level, trainers can use Airsoft guns when teaching how to draw, reload or perform any other gunhandling skills.

Many serious shooters do dry practice at home to supplement live-fire practice. With an appropriate BB trap and eye protection, the Airsoft guns can be used by anyone to practice virtually any shooting drill. Eye protection is essential because the hard plastic BBs bounce, even off of cardboard targets, soda cans and plastic bottles. Instead of doing dry draws, the shooter can draw, move and engage with multiple shots, run the gun dry, do a reload and re-engage the target—all out in the garage or the backyard, with no noise, no recoil and low risk of damage if a stray shot misses.

Where the Airsoft GBBs really have potential is in force-on-force training. Force-on-force training comes in many forms, all using live opponents and firearm replicas. The replicas can be as simple as a pointed index finger, a non-firing rubber gun, a paintball gun, or a real firearm converted to fire blanks or Simunition FX™ marking rounds. Simunition products are popular because they allow the user the most realism: the weight and feel of a real firearm, a slide that cycles, brass that ejects, and a projectile that hits the target. The negatives are that the 9mm FX projectiles travel at 400 fps—faster than the accepted maxi-

mum velocity for paintballs of 300 fps, and that Simunition products can only be purchased by a certified instructor for use in law enforcement or military training only. Additionally, the cost of the conversion kits and ammunition is considerably higher than their Airsoft counterparts.

Airsoft guns provide a way for anyone to acquire the equipment to do highly realistic force-on-force training. Why is that important? Taking classes is an excellent way to learn new skills, but without practice those skills can fade quickly. If defensive pistolcraft is a martial art, then force-on-force is sparring. Live-fire training is essential to learning and mastering shooting and gunhandling skills, and there are many different target systems available to add realism to live-fire training. No inanimate target, however, can substitute for a live opponent who thinks, moves, communicates and fights back. If simple safety procedures are followed and appropriate equipment used Airsoft guns can be ideal training tools for force-on-force practice.

Part of the full-power, force-on-force training experience is psychological: standard paintballs and Simunition FX projectiles cause pain (and often welts and bruising) when they hit, particularly at realistic gunfight distances. Some trainers encourage students to use limited safety gear to increase the "pain penalty" and induce fear. In my opinion, this approach is the equivalent of placing someone who has only punched a heavy bag into a full contact sparring drill with no pads. While it certainly causes more fear and pain, it can also leave students overwhelmed and discouraged. The impact of the 6mm Airsoft pellets is less painful than any of the marking rounds, making Airsoft force-on-force training analogous to light contact sparring.

These low-powered guns allow students to test basic skills such as deciding when to move, draw and shoot, or use cover effectively. In simple drills, the impact of the BB is soft enough to be tolerable for dozens of hits in a training day, yet hard enough to be felt through clothing. The same equipment also can be used for more complex, full-speed scenarios.

A few common sense safety rules must be followed if Airsoft guns are used in force-on-force training. Everyone in the training area must be checked for live weapons, head to toe. All real weapons (firearms, knives, and others) must be removed and stored away from the training area. All training gear must be checked and verified by all participants before any shots are fired. Anyone who leaves the area and returns must be checked again. Commercial

closed-goggle paintball masks, preferably those that provide full-face protection, are mandatory. Neck and groin protection are essential, and long sleeved shirts and long pants are best. Hits on bare skin at close range are unpleasant. Baseball-style catcher chest protectors can be used to provide additional chest and groin protection.

Unlike paintball rounds, which break on impact, the plastic pellets tend to bounce off the target. Although paintballs are available for the Airsoft guns, experienced users claim that reliability and accuracy is poor compared to the harder pellets.

Just like paintball and traditional BB guns, Airsoft guns are not toys and require responsible use. They can also be a lot of fun, just for backyard plinking or for serious training. Their popularity and availability is just starting to grow here in U.S. as more people learn about them.

Airsoft GBBs are primarily available from online and mail order importers. Costs range from \$75-\$300 and models vary in detail and finish quality. A bag of 2,500 BBs costs \$20, and a can of gas (that can propel all of those 2,500 BBs) also costs about \$20, making Airsoft highly affordable for training. The sources below are recommended. Readers can also contact the author via email at: rehn@krtraining.com with questions.

Safe shooting! ☺

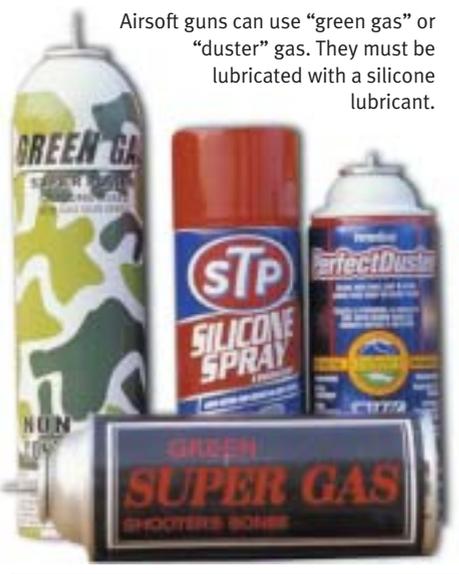
**SOURCES:**

Airsoft Atlanta  
5603 Peachtree Road  
Chamblee, GA 30341  
678-530-0364  
www.airsoftatlanta.com

STI International, Inc.  
114 Halmar Cove  
Georgetown, TX 78628  
512-819-0656  
www.stiguns.com

Infinity Airsoft  
767 West Blaine St. Unit A  
Riverside, CA 92507  
909-545-6595  
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Airsoft guns can use "green gas" or "duster" gas. They must be lubricated with a silicone lubricant.



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