

## BASIC PISTOL EQUIPMENT AND COMPETITION

**Pistol Clinic:** The following articles are from my notes and outlines I developed for the PISTOL MINI-CLINIC at the NORTHERN VIRGINIA GUN CLUB back in 1995.

**INSTRUCTOR:** CDR Robert King, USN (RET) - U. S. Navy Double Distinguished (Officer #17), captain of Navy Pistol Team 1983-1992, Atlantic Fleet Pistol Champion (1988), #7 Gold Pistol Leg 1983 National Pistol Championships, have held pistol MASTER competitive rating, have held following NRA certifications:

- Pistol instructor
- Rifle instructor
- NRA Personal Protection
- Class "C" Pistol Coach
- Class "C" Rifle Coach

Mini-clinic content - three parts:

- Equipment
- Technique/pistol marksmanship instruction
- Pistol courses of fire/where to shoot

**Equipment:** Match firearms, whether rifle or pistol, have three common requirements - match barrel, match trigger, match sights.

Automatics dominate pistol competition. Revolvers are used by tyro's and masters - either the only equipment they own or they seek a greater challenge.

**Barrels** - The elemental component, it establishes the inherent accuracy potential of firearm. You can never shoot better than the quality of your equipment. My personal preferences - Kart NM or Bar-Sto national match barrels.

**Trigger** - Converts inherent accuracy to practical accuracy. Crisp, clean break, breaking weight established by the rules (by type of pistol), and ranges from 2 lb to 4 lb. A trigger stop to adjust over-travel sweetens a trigger immeasurably. Sear jigs or a gunsmith are required to obtain a safe trigger. My preference is for Videcki triggers - affordable.

**Sights** - Great strides have been made in recent years. Sights range from open fixed to open adjustable to optical. Sight limitations are established by the pistol competition rules. Open fixed sights are rarely used on competition guns - no allowance for changing light conditions. Open adjustable sights have a standard - Bomar. Everything else is "almost as good". Aging eyes struggle with open sights but can achieve some relief with variable diopters and special lenses. The Merit optical attachment, the Clearsight lens, and shooting glasses like Knoblock are examples. Optical sights include scopes in 1x - 2x - 4x, and also electronic dot sights. I prefer electronic dot sights. With open sights you are trying to see a target, the front sight, and the rear sight, all in different optical planes. It just can't be done. Optical sights have one optical plane - target and sights are in focus. I don't recommend any specific electronic dot sight other than to get the same

type for all your pistols - only one battery type to stock, and sight adjustment directions and values all the same. There are three ways to mount optical sights - on the slide - on a grip mount - or a frame mount. Generally grip mounts require no drilling or modification of frame but also place the sight the highest. I find the high weight detrimental to balance; it's awkward, and not personally recommended. Slide mounts require balancing your load and recoil springs for functional reliability. Slide mounted means a lot of mass is reciprocating and may slow down your recovery between shots. Frame mounts are more expensive and a little trickier to install but allow for standard loads. Springs require no special treatment; standard springs are used.

**Firearms:** Start with selecting a .22 LR pistol. It's cheaper to buy, cheaper to shoot, used in most all matches, and teaches "sight alignment & trigger control." The Ruger 5 inch adjustable sight models are the best deal for the money. Slightly better pistols cost much, much more. Browning and Colt and Smith & Wesson have some pistols that may be suitable at reasonable cost but I have not used them. For more expensive pistols look to Smith & Wesson Model 41, used High Standard, Mitchell High Standard, used Kart national match conversions. The Colt .22 conversion on .45 will not be match accurate. It's designed for functional training only. European pistols can be very expensive - Hammerli, FAS, Walther, Bennelli, Pardini, etc. For a centerfire pistol look to the Series '70 Colt (the Series '80 is not my first choice), Springfield Armory, used Smith & Wesson model 52 (.38 Special). Caspian Arms and Les Baer make superior frames and slides but Essex Arms are acceptable as well. Consider a .45 caliber pistol since it can be used in centerfire matches and .45 matches. .45's can be built up over time, spreading cost - trigger job first, match sights one time, match barrel another. Note the differences from NRA Wad .45 (3.5 lb trigger, fancy grips, lots of sight options, light loaded 185 grain loads) and DCM Hardball .45 (4 lb trigger, open adjustable or open fixed sights only, limited grip options, 230 grain full service load). Read the rules!

**SIGHT ALIGNMENT AND TRIGGER CONTROL:** Listen up. Here are the secrets of shooting well! Pistol marksmanship, and rifle marksmanship for that matter, is deceptively simple and yet difficult to master. It is simple because it has only two requirements, sight alignment and trigger control. It is difficult to master because you have to do them at the same time. In computer terms, your brain is a serial processor, consciously doing one thing and then doing another. But shooting requires two simultaneous acts, parallel processing, and the mind is just not up to it. "Hey, wait a minute. I can chew gum and walk at the same time!" Yes, you can, but one of the acts is sublimated to your subconscious. The answer is practice, practice, practice. Practice until one of the acts becomes second nature. That's what happens to trigger control. The more you practice and the more your subconscious takes over your trigger action. Your conscious thought remains on sight alignment. In sighting there is a target, a front sight, and a rear sight. Your focus MUST be on the front sight. The rear sight will be slightly out of focus but you can see it. The bullseye on the target will be a grey blob. It's out there and you can tell its there, but it is not perfectly round and black. If it is you are looking at the target. If you are looking at the target, you are not looking at the sights. If you are not looking at the sights, you don't know precisely where the pistol is pointed. Look at the front sight. Focus on the front sight. After firing a shot you should be able to describe the most intimate details about the front sight... the serrations, the dings, the

scratches, everything.

**Trigger control** is simply smoothly adding pressure to the trigger until the trigger causes the hammer to fall, without disturbing the sight alignment. Watch the front sight as you apply the pressure. Does the front sight move right or left in the rear sight notch? That means your trigger finger is not placed correctly. For right handed shooters putting your finger in too far causes the front sight to move right when applying pressure. Too little finger causes the front sight to move left. Somewhere in between pressure causes the trigger to come straight back. Find it, remember where it is, and always put your finger in the same spot.

**HOLDING THE PISTOL:** There are two laws of physics that govern the firing of a rifle or pistol. For every action there is an equal but opposite reaction. The other law is Force is equal to Mass times Acceleration. These are the laws we want to use to our benefit. The bullet and expanding gasses going out the end of the barrel cause the pistol to go in the opposite direction. The bullet has acceleration in one direction and the pistol has another in the opposite direction. The mass of the pistol times its acceleration (recoil) is equal to the mass of the bullet (plus propellant gases) times its acceleration. Part of the answer is a good grip. After I load the pistol I take it in my non-shooting hand to place it carefully and exactly in my shooting hand. It goes in the same place every time. I want the hand as high up as possible to the line of the bore, and I want the pistol aligned as an extension of my arm, not cocked left or right. This allows the recoil to come straight up the arm. Another part of the answer is a heavier pistol and lighter bullets and powder charges. I mentioned  $F=MA$ . To my mind, recoil is strictly the acceleration of the pistol and not so much its Force. If I add mass to the pistol, the acceleration to the rear is less since the product remains constant. When I grasp the pistol I have added the mass of my hand to the pistol. If I use a firm wrist, I add the mass of my lower and upper arm, even that of my shoulder. This all adds mass to the pistol and decreases the acceleration. For my hardball pistol, I even put over an ounce of lead in the bottom of the magazine. The electronic scopes that are finding favor in pistol shooting also add mass to the pistol and soften recoil. Grip the pistol firmly but not so tight that you shake or your knuckles turn white. "If your knuckles are white, you're holding too tight." It's a firm handshake, that's all.

**AREA HOLD:** Now that you have correctly grasped the pistol, extended your arm toward the target, and focused on the front sight, the rest becomes easy. Extend the pistol, close your eyes, and let the pistol settle naturally. Open your eyes. Are you left or right of the target? Rotate your whole body, move your feet, to allow your natural alignment to be on target. Notice that even after doing this you still seem to wobble around the target. This is called your area of hold. When you have settled into your area of hold, apply pressure to the trigger and let the trigger fire the pistol *anywhere in your area of hold*. If you are holding seven ring or better (most new shooters can), you will hit a seven, eight, nine, ten, X, ten, nine, eight, or seven. New shooters have a larger area of hold. Experienced shooters have a smaller area of hold. See what practice does for you? You can't shoot better than you can hold so practice, your area of hold gets smaller, and you score higher. There is no way that you can quickly snatch the trigger just as you point at the ten ring. You just have to settle on a distribution of shots within your area of

hold.

**Books for Pistol Shooters:** If you stop reading, you stop learning. If you stop learning, you'll never get better. These are just some of the books in my pistol shooter's library - there are a like number in my rifle and hunting libraries as well. See if your public library has these, or check with the NRA, or check with me to see where I found it. They all say pistol shooting is "sight alignment and trigger control" but sometimes translated from German or Russian it sounds different.

Competitive Pistol Shooting - Dr. Laslo Antal  
Pistol Shooting as a Sport - Hans Standl  
Modern Pistol Shooting - P. C. Freeman  
NRA Clinic Series: Three-Gun Bullseye Pistol Shooting - NRA  
NRA Clinic Series: Silhouette Rifle and Pistol Shooting - NRA  
The Pistol Shooter's Treasury - Gil Hebard Guns  
No Second Place Winner - Bill Jordan  
Hit the White Part - Massad Ayoob  
You Can't Miss - John Shaw  
Shoot to Win - John Shaw  
Colt .45 Automatic - Jerry Kuhnhausen  
Pistol Marksmanship Guide - USAMTU  
The Book of Shooting for Sport and Skill - Frederick Wilkinson ed.  
Gun Digest Book of Autoloading Pistols - Dean Grennell  
Gun Digest Book of the .45 - Dean Grennell  
The Target Gun Book of Pistol Coaching - John Chandler  
Coaching Young Athletes - Martens, Christina, Harvey, Sharkey  
The NRA Instructors Guide - NRA  
Book of Pistols and Revolvers - W. H. B. Smith  
Colt .45 Service Pistol - Clawson  
Hallock's .45 Auto Handbook - Ken Hallock  
Mental Training - Bob Hickey  
Mental Training for Shooting Success - Richard Domey, Ph.D.  
With Winning in Mind - Lanny Bassham  
Competitive Shooting - A. A. Yur' Yev (Russian to English translation by the NRA)

**COURSES OF FIRE:** NRA competition involves three guns (.22, Centerfire, and .45) and three basic types of firing (slow fire, timed fire, and rapid fire). The three calibers were from the turn of the century when match shooting was formalized. The .22 was considered a civilian's pistol. The centerfire was the policeman's pistol, and the .45 was from the military. Early matches saw a number of fine revolvers in competition but nowadays automatics dominate. Part of the reason is the timed and rapid fire stages of the matches.

**Slow fire** is just that. Ten rounds, ten minutes. That's a long time. Most people bring the pistol up, settle in, and fire one shot at the target. They relax and bring the pistol down and rest before the next shot. Each shot demands your utmost attention. The target is at fifty yards and the scoring rings are the same size as the 25 yard target. There is

another black ring (the 8 ring) so that the apparent size of the bullseye is the same as the 25 yard target. In our NVGC matches, we use a reduced 25 yard slowfire target so the target is about one half size. Either way, slow fire is mentally demanding.

**Timed fire** is fired at 25 yards and a string is composed of five shots in 20 seconds. 20 seconds is a fairly long time because you bring your arm up once, and squeeze off a five shot string. There is time to carefully sight each shot. Trigger control is a key to success in timed fire. Another string is repeated so you shoot a total of ten shots on the target.

**Rapid fire** is also fired at 25 yards and is composed of five shots in ten seconds. Ok, here things start to get a bit challenging. The secret is the cadence or rhythm. Start adding pressure before the fire command is given so when commence fire is given, you only need to add a bit more pressure to get the first shot of the string off. Immediately after the shot get back on the sights and start the pressure building on the trigger. As the pressure on the trigger builds you are settling in on the bullseye and the next shot will happen. Keep up the rhythm and all five shots will happen in the allotted time. If you break cadence, it will be hard to get started again. Again, a second string (with another whole ten seconds) is fired on the target so that ten shots have been fired.

A typical one gun aggregate is composed of 90 shots (900 possible points). That includes the 20 shot Slow Fire Match (two ten-shot targets), a 30 round National Match Course (with a ten-shot slow fire, a ten shot timed fire, and a ten shot rapid fire target), a 20 shot Timed Fire Match (two ten-shot targets), and the 20 shot Rapid Fire Match (two ten-shot targets).

A two gun match (like we fire at NVGC) is the same course over again but with a different caliber. A three gun match would shoot this course three times: for .22, for centerfire, and for .45. Many shooters use their .45's in both of the last two aggregates.

**COMPETITIVE PISTOL MATCHES:** Now is a good time to start planning on attending your first NRA pistol match and starting to obtain your Outdoor Pistol Classification Card.

All new shooters enter their first match in the Master/Unclassified class. After that, you will have a temporary classification and will enter and compete against those of comparable skill level. Based on your scores fired in that first match, you may enter subsequent matches in the Marksman, Sharpshooter, Expert or Master class depending on your shooting average. Further, you may use your outdoor temporary classification to enter Indoor matches and NRA International style matches where an assigned classification is accepted. This is most matches other than the National Championships and some state and regional matches.

The Quantico Marines host matches on a monthly basis and you can get information from them or by reading it in an NRA publication called "Shooting Sports USA". The Cavalier Gun Club in Richmond also holds monthly matches. If there is enough interest, the NVGC can host NRA Approved matches.

Shooters who are new to competitive shooting can always be more organized and prepared. When you have fired your first match you will know what I mean. A few things come to mind:

- a. Pistol reliability - some people show up with new issue pistols. For information, a newly built pistol needs to be fired 200-400 rounds or more to wear in. Further, this break in period will also allow you to find the magazines that feed reliably. Match day is a tough time to find this out.
- b. The right support equipment helps. A staple gun and a spotting scope (or a pair of binoculars) really come in handy. No point in training yourself to squint at the target to see the bullet holes when this is one of the worst habits you can develop.
- c. Know your ammo. Know that it reliably functions in your pistol and in your magazines. You can use Hardball .45 but understand that the softer recoil of .45 Wad will allow you to shoot more accurately and you may learn to shoot better in the process. Standard velocity .22 LR groups better than High Velocity. Know where the ammo strikes the target and adjust your sights BEFORE the match. Sight changes in the match should be slight, attributed to changing light conditions only.
- d. It is a pistol **match**. If you want to do well, use **match** pistols. A revolver is a handicap in rapid fire and this is 1/3 of the shots you will fire. Yes, you can use a .44 Mag or a Model 92 Beretta but you won't score well.

The best book to learn about shooting, including competitive shooting, is published by Gil Hebard Guns called "The Pistol Shooters Treasury". These can be gotten at a discount price of \$5.00 and it is the best five bucks you'll ever spend. You can get his catalog by writing to:

Gil Hebard Guns  
125-129 Public Square  
Knoxville, Illinois 61448

Tell him you are active duty military or police (if you are), and tell him I referred you to him. I've dealt with him for 25 years and have always been satisfied. If you don't qualify for the military and police discount, let me know and we can get an order in through other channels.