

Air Pistol Shooting

AFC-IWLA Sills Air Range

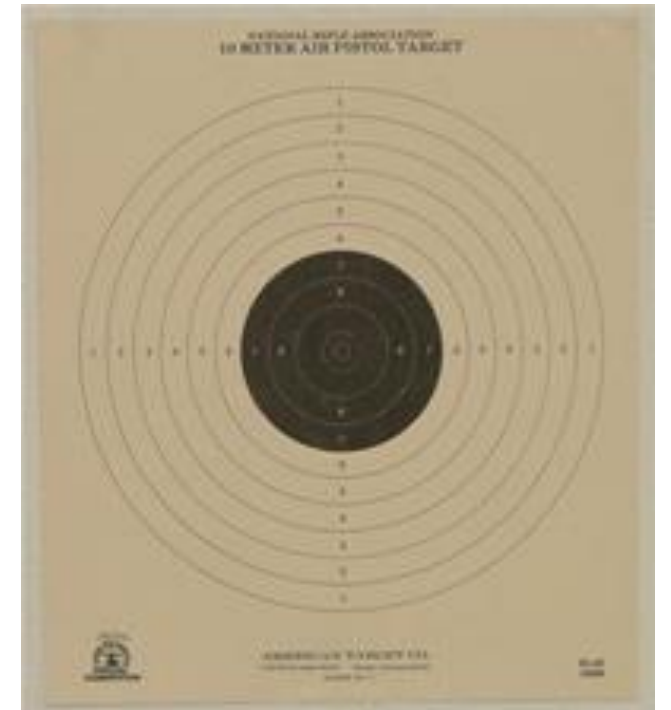
Overview

- **What is air pistol shooting?**
- **Benefits**
- **Safety**
- **Basics & Fundamentals**
- **Shooting at Sills Air Range**
- **Shooting at home**
- **Useful websites**

**Information for this briefing was obtained from
CMP, ISSF, NRA & USA Shooting sources**

What Is Air Pistol Shooting?

- Air pistol is shot with .177 caliber air guns at a distance of 10 meters
- Match consists of 60 shots within 75 minutes for men & 40 shots within 50 minutes for women
- Target is 6.7 x 6.7 inches with concentric score zones



Benefits

- **Inexpensive way to get started in precision target shooting**
- **No recoil/noise as experienced when firing a handgun**
- **Excellent way to practice shooting fundamentals**
- **Indoor activity – shoot year round**
- **Great sport for youth & family**
- **Opportunities for informal & competitive shooting**

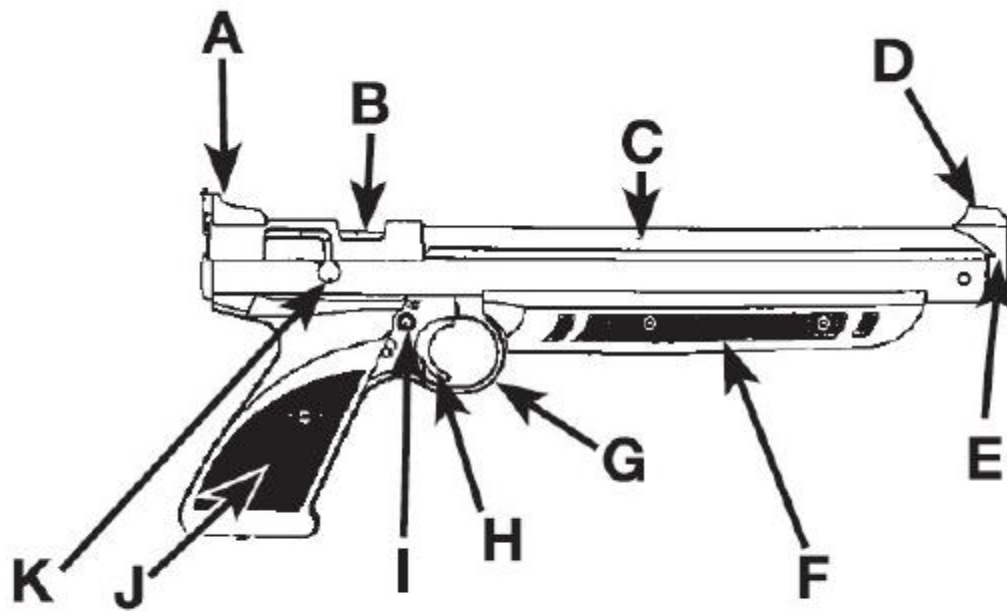
Safety

- **Always treat air guns just like firearms!**
- **Three golden rules**
 - **Always keep the muzzle pointed in a safe direction**
 - **Always keep your finger off the trigger until ready to shoot**
 - **Always keep the air gun unloaded until it is ready to use**

Safety

- **Eye protection for shooter & observers is mandatory**
- **Store air guns so unauthorized personnel cannot access**
- **Insert Clear Barrel Indicator (CBI) during cease fire & moving air gun off the range**
- **Maintain air gun per the owner's manual**
- **Don't drink/eat while shooting, wash hands after shooting**

Basics – Air Pistol Components



- A.** Rear sight
- B.** Breech
- C.** Barrel
- D.** Front sight
- E.** Muzzle
- F.** Forearm
- G.** Trigger Guard
- H.** Trigger
- I.** Safety
- J.** Grip
- K.** Bolt handle

Basics – Types of Air Pistols



Mechanical Pump
Inexpensive (\$50-\$170)
Relatively accurate
Must break grip to pump
& load

CO₂ Cylinder
Inexpensive (\$50-\$200)
Relatively accurate
Must change cylinder
every 40 pellets
Becoming obsolete



Pre-Charged Pneumatic
Range \$400-\$1500+
Very accurate
Need compressed air
Internal cylinder model
less expensive than
removable cylinder

Basics – Equipment

- **Air pistol**
- **Pellets**
- **CO₂ cylinders or air for pre-charged pneumatic air guns**
- **Fill adapter**
- **Safety glasses**
- **Targets**
- **Pellet trap**
- **Spotting scope or binoculars to assess shots**

Basics – Filling Air Pistol Cylinder



Fill Adapter

Cylinder



Fill Adapter In Tank Valve

Cylinder On Fill Adapter



1. Insert fill adapter in tank valve
2. Insert cylinder on fill adapter
3. Slowly open tank valve
4. Let pressure equalize
5. Close tank valve
6. Remove cylinder from fill adapter
7. Remove fill adapter from tank valve

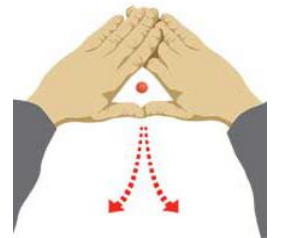
WHEN FILLING DO NOT LOOK AT GAUGE!

Basics – Equipment Setup



Basics – Eye Dominance

- **Eye dominance is the tendency to prefer visual input from one eye to the other**
- **Side of dominant eye & dominant hand do not always match**
- **Test for eye dominance**
 - **Extend arms forward & form open triangle with both hands**
 - **Look through open triangle at distant object & pull hands to face**
 - **Space you are looking through will align with dominant eye**
- **Most shooters use dominant eye for precision pistol shooting**
- **Cross-dominant shooters use dominant hand & block vision from the dominant eye with an occluder**
 - **Occluder can be placed on glass lens or bill of shooting hat**
 - **Opaque tape over glass lens works also**
 - **Eyes work in pairs so do not use eye patch or squint – this will create eye strain, muscle fatigue & headache**



Basics – Grip



Basics – Grip

- **Use support hand to place air gun into shooting hand**
- **Top of grip should be placed at web of thumb & forefinger as high as possible, but comfortable**
- **Forefinger should be straight along side of air gun & not on the trigger!**
- **Second & third fingers should have light pressure on grip**
- **Fourth finger should lay on grip but no pressure**
- **Thumb should have light pressure on grip**

Basics – Body Position



Position should be balanced, comfortable & repeatable

Basics – Body Position

- **Build position from the feet up to the upper body & head**
- **Place feet shoulder width apart, feet flat on ground, body is balanced**
- **Set foot position so body is 90 degrees to target**
- **Raise arm so deltoid muscle is supporting arm**
- **Extend arm towards target, straighten arm but do not lock elbow**
- **Check natural point of aim so deltoid muscle is supporting arm**
- **Adjust feet so body position is stable & comfortable, about 10-30 degrees from the target**
- **Do not twist upper torso to adjust position, adjust foot position**
- **Head should be level**
- **Support hand is not used in precision pistol shooting – place support hand on belt or in pocket**

Fundamentals

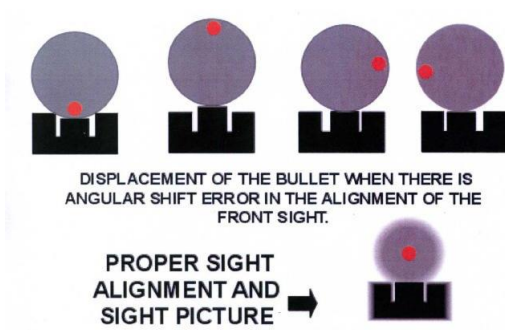
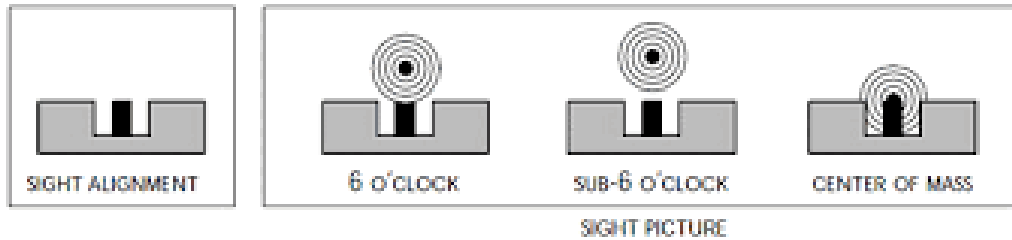
- **Aiming**
- **Breath control**
- **Hold control**
- **Trigger Control**
- **Follow through**

**See slide 27 for Air Pistol eLearning websites
ISSF, Tenrings Coaching & USA Shooting**

Fundamentals – Aiming

Align Sights on Target

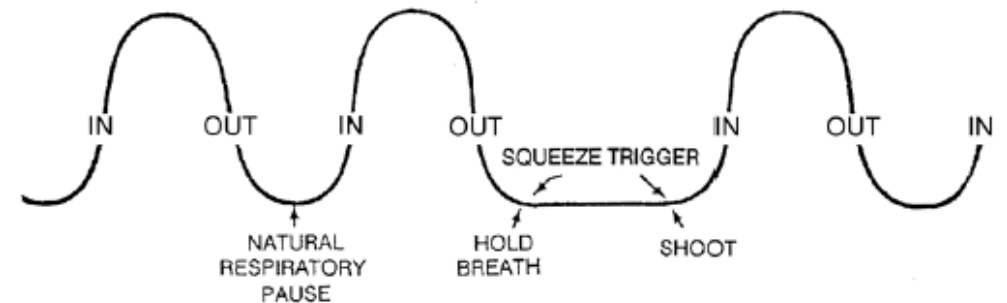
Sight alignment is the relationship of the front and rear sights. The eye must be lined up with the front and rear sights and sights positioned so that their alignment is in the proper relationship with the target. Examples of variations of a correct sight picture are included below.



Sight Alignment + Sight Picture = Aiming

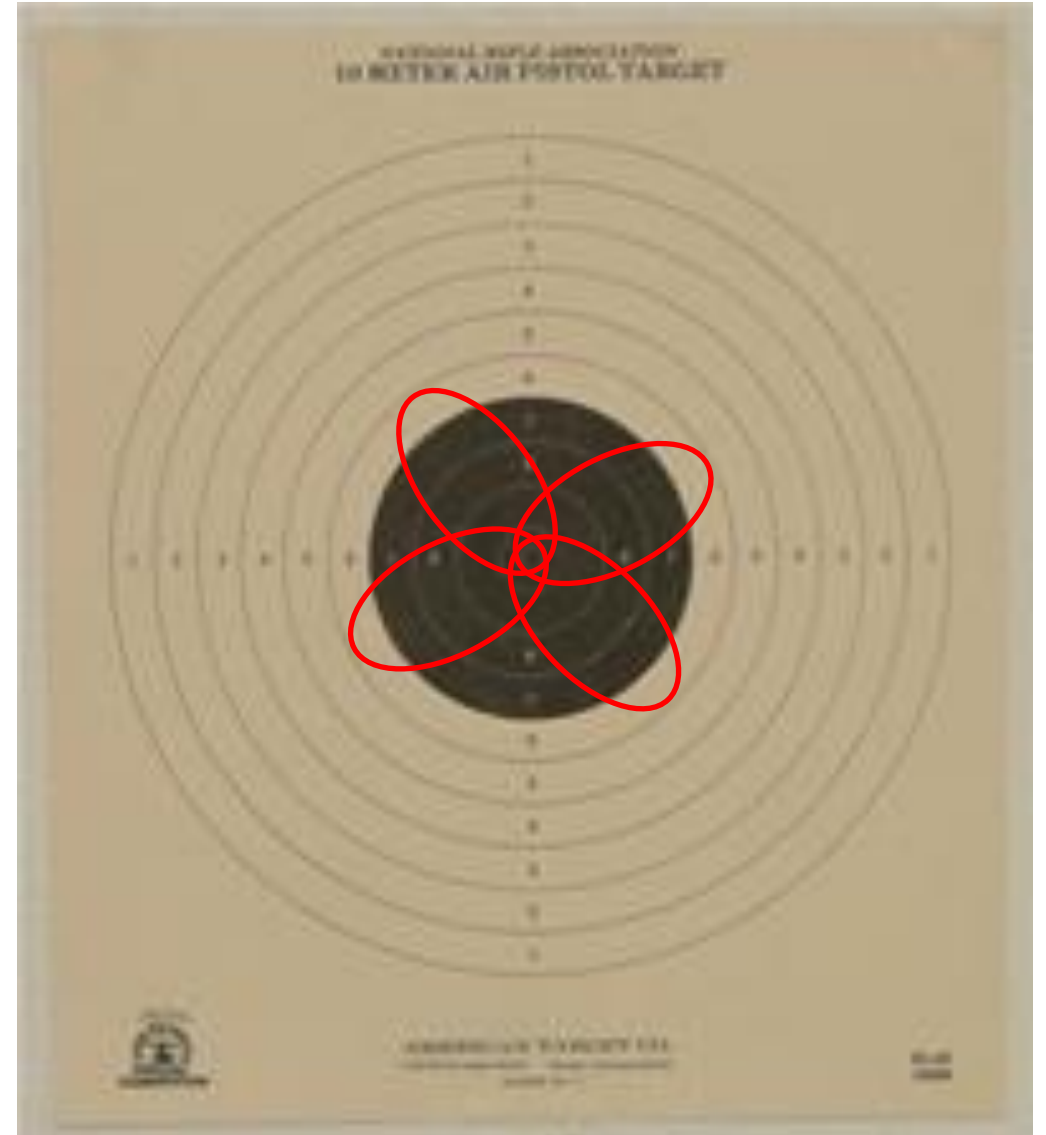
Fundamentals – Breath Control

- Breathing affects position of bone structure & muscles in upper body, breath control minimizes movement
- Hold breath maximum 6-8 seconds
- After 8 seconds, lack of oxygen will affect vision & muscles will fatigue
- Technique is to take a breath before starting sight alignment & let about $\frac{1}{2}$ of the air out of your lungs as you establish a sight picture
- If you don't complete the shot by 6-8 seconds, reject the shot & start over



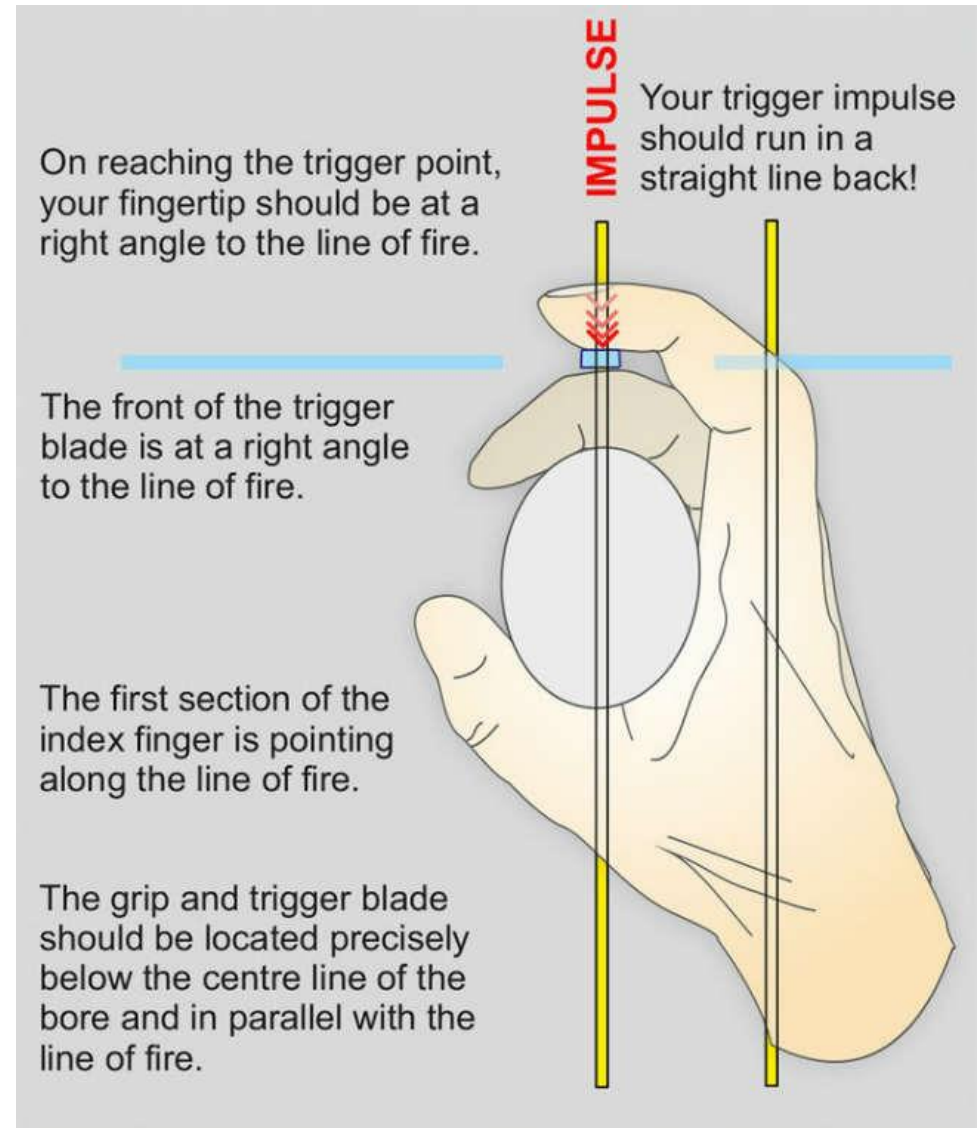
Fundamentals – Hold Control

- **Raise arm until it is slightly above the target & slowly lower sight until you establish a 6 o'clock hold**
- **You will notice sight alignment will wander around the target ... this movement is normal & the “wobble area” will get smaller as you become more proficient**
- **Do not “jerk” trigger when you see the perfect sight picture**
- **Maintain hold control & slowly squeeze the trigger until air pistol fires**



Fundamentals – Trigger Control

- Air guns have single or two stage triggers
- **Single stage triggers require slow & steady application of pressure to fire gun**
- **Two stage triggers move a short amount before they reach a second position which requires slow & steady application of pressure to fire the gun**
- **Index finger should extend along side of pistol but it should not rub the frame**
- **End of the index finger should be curved & the trigger pad should rest between the tip of the finger & the first joint**
- **Slowly pull the trigger straight back & apply pressure until the pistol fires**
- **If finger is straight, you will apply pressure to the side of the trigger which will affect where the pellet hits the target**



Fundamentals – Follow Through

- **Do not anticipate the next shot!**
- **As the air gun fires, maintain or regain the sight picture**
- **Delay a second or two before moving the air gun sights off the target**
- **This delay will ensure you concentrate on the shot you are currently taking at the target**

Basics – Shot Assessment

- **Depending on lighting conditions & vision, you may be able to see where your pellet hit the target**
- **If you did not maintain good sight alignment & sight picture or you did not control the trigger you may realize these errors as the air gun fires**
- **You can confirm your shot using a spotting scope before you take the next shot**
- **Remember not to change your body position or grip when assessing the shot**
- **If you break your position/grip, reset before taking another shot**

Shooting at Sills Air Range

- **Open range hours (chapter members & the public)**
 - Monday – 1600-2000
 - Friday – 1730-2100
 - First five visits free, then annual range fee for chapter members
 - Loaner air guns, pellets, targets & air provided
- **Monthly Air Pistol League**
 - Informal match held third Sunday of each month
 - Open to chapter members & the public
 - Youth encouraged to participate
 - Air guns limited to .177 caliber pellets
- **Range is migrating from paper targets to Megalink electronic scoring system – will be available March-April 2017**



Shooting at Home

- **SAFE environment for family & pets ... range should be in a garage or basement & away from unsuspecting traffic**
- **Ideal to have at least 10 meters length (about 32 feet), but can shoot reduced targets down to 5 meters (about 16 feet)**
- **SAFE location for target trap**
- **Eye protection for everyone ... pellets & BBs can ricochet**
- **Keep pellets out of reach of children & pets**
- **Know local laws regarding shooting air guns outdoors**
- **Use gloves & mask when cleaning target trap – change clothes & wash up afterwards**
- **Recycle used pellets at Sills Air Range**

Useful Websites – eLearning & Rules

- **AFC-IWLA Sills Range** <http://afc-iwla-sillsairrange.org/>
- **Civilian Marksmanship Program Air Gun** <http://thecmp.org/air>
- **ISSF Olympic Air Pistol**
http://www.issf-sports.org/theissf/academy/e_learning/pistol.ashx
- **Megalink** <http://www.megalink.dk/>
- **National Rifle Association Air Gun**
<http://competitions.nra.org/news-and-events/air-gun-programs.aspx>
- **Tenrings Coaching** <https://www.tenrings.co.uk/>
- **USA Shooting** <http://www.usashooting.org/11-resources/shootinginstruction/pistolshooting>

Useful Websites – Equipment

- **Champion's Choice** <http://www.champchoice.com/store/main.aspx>
- **Champion Shooters Supply** <http://www.championshooters.com>
- **Larry's Guns** <http://www.larrysguns.com/>
- **Pilk Guns** <http://www.pilkguns.com/buildrange.shtml>
- **Pyramid Air** <http://www.pyramydair.com>