

## AIR PISTOL SHOOTING

### SHOOTING POSITION

Junior shooter Lara Stahl here demonstrates a stable "outer stance": the front and back views show how she distributes her weight and maintains a good balance. Lara's feet are about a shoulder-width apart, providing a wide base with her body's center of gravity directly above it. Her back leans slightly away from the direction of shooting to compensate for the weight of the pistol on her right arm. She holds her non-shooting (left) hand and arm at her side in a fixed but relaxed position by hooking her thumb in her pocket (alternatively using a belt). Her head is turned without straining in the direction of the target. When she lifts her shooting arm (see below for details), her right shoulder stays down. Stretching out her arm, she keeps her wrist motionless and her elbow straight but not too tight.



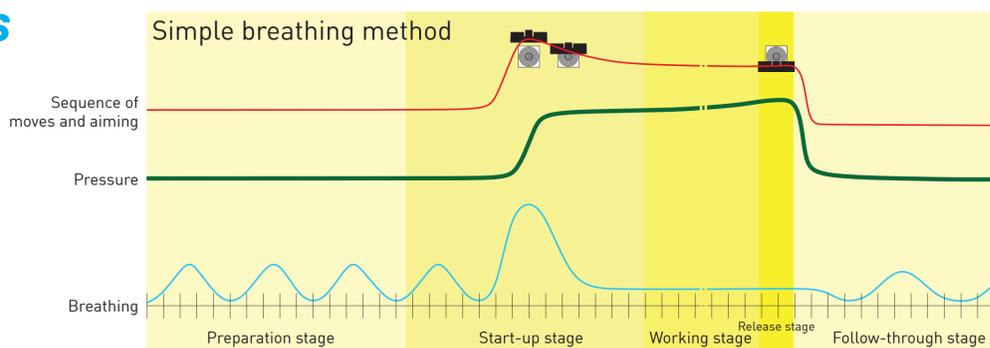
Lara's outer stance as seen along the center line of the barrel and from above: the pistol axis, arm and shoulders are on a straight line (picture at right). Her head, which she keeps up, is turned without effort into the sighting line. In this way she makes the sighting line as long as possible and avoids an arm posture with an unstable wrist and elbow. In her zero position with her head turned and eyes closed she should point right at the target. She makes sideways corrections by slightly shifting her rear foot, never by using muscular effort. Thus she controls the pistol only by moving it up and down, as shown in the next step.

### PORTRAIT

Lara Stahl (age 16) has been training twice a week with her club "Buerger-schuetzen Arnsberg" for four years. She has won a number of medals in regional championships and has already taken part in the German Championships. Lara also has musical interests and plays the flute. Shooting gives her a welcome change of pace from other activities, especially because of its calming effect.

### SEQUENCE OF MOVES

The diagram at the right stretches out events that happen almost simultaneously, making the process easier to understand. In a good shot, breathing, moving the arm and releasing the trigger are merged together. The duration of a shot, as measured from lifting the pistol to the follow-through after firing, depends (within certain limits) on the individual shooter. The horizontal axis in the diagram therefore has no time scale.



The vertical color areas in the diagram represent simultaneous actions. Lara raises her arm while breathing in and then, as she breathes out, allows the pistol to drop slowly into the aiming area from a position just above the target. The important thing is for the index finger to find the second stage as the pistol descends. In the aiming area a light pull on the trigger then releases the shot. Thus at the very end no finger movement is visible, just increasing the pressure. After firing, Lara checks the sight to see how it "jumps"; only then does she set the pistol down.

### HANDLING

The adjustable grip fits especially well for small hands (and can be quickly converted for left-handed use). The middle finger is placed under the cross member of the grip and does almost all of the lifting (photo at right: pistol with the tank removed). The little finger and ring finger are above the heel rest. The thumb rests lightly on the grip without exerting pressure. The trigger finger is free and does not touch the grip. The front segment of the finger rests on the trigger blade, and the finger pulls along the line of the pistol axis.



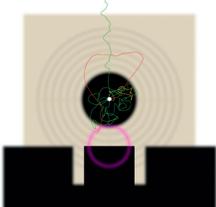
In order to take hold of the grip the same way each time, Lara uses her non-shooting (left) hand to place the AP into the V shape between her right thumb and index finger. The grip roughly bisects this angle when seen from above (picture at left). In the same way she also checks the position of her palm on the grip. Only by using both hands in this manner can she be sure that the LP is aligned with the axis of her arm.

**CAUTION:** Always point the gun towards the target!

The view from head on (with an unloaded gun!) shows that front sight, rear sight and eye form a straight line. Lara still needs some practice keeping the AP level; here she has allowed it to cant slightly to the right. When the rear sight is horizontal, it is easier for the eye and brain to aim than when the sight is canted. Any change here affects the impact point. Lara's eye is focused on the front sight; the rear sight is still fairly sharp.

### AIMING

This is how the target image should not look. If you focus on the target instead of the sights, you won't be able to detect aiming errors. In this image the light gaps to the left and right of the front sight are blurred and there is no way to judge the distance between the top edge of the front sight and the target center.



This is the way you should see it: The front sight has about the same width as the target center and the light gaps to the left and right allow you to check the lateral position. The black sights hover within the aiming area (circle) at a clear distance from the bullseye. The colored lines showing the downward path of the sight were recorded by a SCATT training system.



The Hämmerli AP20 used by Lara is a high-quality air pistol that was designed to "grow along" with beginners. The grip can be adjusted between sizes S and L and quickly converted for use by left-handers. When a shooter's condition improves, the tank can be swung under the barrel from an angled position (with the center of gravity close to the hand) to a position parallel to the barrel.



To see many additional target images relating to error correction plus technical information on the Hämmerli AP20, visit our special website at [www.carl-walther.com/training](http://www.carl-walther.com/training) or use this QR code.