SHOOTING ADVICE A BIOGF A LANDFUL

Airgun enthusiast Phil Hooper attempts to unlock the accuracy potential of the iconic Weihrauch HW45 spring-powered pistol →

HW 45 Black Sta

Phil's happy to shoot his target pistol standing, but his preferred technique with the HW45 is to adopt a sitting position

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SHOOTING Advice

s a long-standing airgun enthusiast, I deliberated over the purchase of an HW45 for a very long time – after all they've been around for several decades. However, after seeing a Black Star version with its more ergonomic grip and better proportions, I bought one in .177 from Bob at City Air Weapons in Birmingham.

The attraction of the HW45 was its reputation for power and accuracy in a compact package. I owned a BSA Scorpion air pistol years ago which had similar power, but was large and clumsy in comparison, the barrel and cylinder being in-line. The 'barrel over cylinder' configuration of the HW45 enables a much shorter length. Not a design arrangement, but one patented by Messrs Johnstone & Fearn in 1924 resulting in the pre-WW2 Webley Mk1. Weihrauch has refined and optimised the basic mechanical design and then given it the appearance of an oversized Colt .45 ACP semi-auto pistol. With the exterior being mostly blacked aluminium alloy die castings rather than blued steel, it is easier to keep corrosion-free. Personally, I don't see the need for it to look like a firearm and would have preferred a traditional finish, but these are minor points and I'm probably out of step with most purchasers.

Why did I choose .177 rather than .22 or even .20? Because it produces full power, approaching the permitted six foot pounds, even in .177, and the significantly flatter trajectory makes it easier to shoot at longer ranges, needing less holdover and offering more forgiveness if the distance is not estimated completely accurately. This gun will never be used on live targets, so that aspect didn't require consideration. On first testing in my garden range, on paper targets, I was disappointed at my awful performance with it. Coincidentally, scanning online adverts for airgun restoration projects I noticed a large number of nearly new HW45s for sale and speculated that others became disillusioned for the same reason. I set out to try to master this 'magnum' air pistol.

I decided to abandon paper targets for the time being and just plink, from a seated position, at baked bean cans. Starting at 15 yards, on the low power setting, then 20 yards, then 25 yards. When hitting the cans regularly at 25 yards I would 'graduate' to the high power option.

On the plus side, I found the fibre optic sights excellent. With less than completely sharp eyesight due to my advancing years, I found that all I needed to do was sit the red blob mid-way between the green blobs



and sit the target on top of the red blob. No need at all to concentrate on the blade or rear notch, just keep the blobs at the same height, the red exactly mid-position and hey presto! I have a 2x20 scope on one of my full-power, recoilless pistols, but I wanted to keep things simple, and the weight down, on the HW45.

The trigger was quite good, but was also a little heavy so I adjusted accordingly. Trigger-pull is where my technique had to change. Shooting at 10 metres standing with my FAS 604 target pistol, I use a standard technique: get the correct sight picture, take up the first stage, wait for the hovering sight picture to be close to perfect and release the shot. However, for whatever reason, this didn't work well with the HW45. I found a more successful technique was to hold a good sight picture and, after taking up the first stage, simply squeeze the trigger very slowly so that the exact moment of discharge came as a surprise.

I'm told that some fullbore pistol shots use a similar method. It worked for me. Holding a good sight picture is critical. With only 9" or so between front and rear sights, just ¼ mm misalignment equates to a 1" error, and potentially a miss, at 25 yards. The trigger is also adjustable for length of first-stage pull (which was actually fine as it is) and length of second stage pull (could be improved a little). Further experimentation with this latter adjustment may follow.

The 'plinking at tin cans' approach worked. It was fun even if my initial strike rate was patchy. The pistol has character and feels alive, unlike the recoilless, but easier to shoot, alternatives. This does of course mean that a very consistent and quite light grip is needed for good results.

To my surprise I found that shooting at full power was no harder than at low power. The pistol would, with greater velocity, shoot higher on high power wouldn't it? But at short to moderate distances, not so, the reason being the recoil characteristics.

The piston travels backwards on discharge, the recoil therefore dipping the muzzle down, not up as would be the case with a firearm. This is explained by Newton's third law of motion: the rearward motion of the piston causes an equal and opposite reaction – the forward recoil. More power therefore more recoil, with the muzzle dipping more before the pellet exits the barrel.

As it is no more difficult, I now almost always shoot at full power. I use H&N Field Target Trophy .177 pellets. My chrono identified that this HW45 shoots with exceptional consistency at 3.66 ft-lb on the low power setting and 5.75 ft-lb on the high power setting with these pellets. I should point out that the pistol dieseled,

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sometimes quite violently, over the first couple of tins of pellets, which won't have helped my accuracy, but later settled down with just a wisp of tell-tale smoke after some shots.

I discovered that the breech seal became quite chewed after my first 500 shots. It

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was hard to properly seat pellets in the breech without using a fingernail, which then distorted the skirt slightly. Poorly seated pellets were then abrading the seal. I suspect this would be less of an issue in .22 calibre. This difficulty was overcome by making a pellet pusher out of aluminium which I use to seat each pellet about ¼ mm into the breech. It slows down the loading process a little, but this trade-off is definitely worth it and should also benefit accuracy.

So how am I doing now? Well, my performance is still not that impressive, but I'm definitely making worthwhile progress. Once I'm in 'the zone' when shooting without a rest from a sitting

position, I can hit a standard sized bean tin every time at 25 yards. Judging by the shot grouping, I think I'm ready to move to ½ sized cans with a likely four out of five hit rate. Testament to the decent

power is that some pellets pass through both sides of the cans. Using 10 metre competition targets at 17 yards, on a good day, most shots are within the black and I've almost eliminated the occasional flier.

I've never doubted the inherent accuracy of the HW45, and being such a charismatic pistol to shoot I feel it is well worth persevering. Tighter groups and longer-range plinking successes will hopefully follow. ●

CHRONOGRAPH TEST RESULTS: H&N FIELD TARGET TROPHY .177, WEIGHT CHECKED AT 8.64 GRAIN

SHOT NO	MUZZLE VELOCITY (LOW POWER)	MUZZLE VELOCITY (HIGH POWER)
1	436	547
2	437	549
3	437	548
4	438	546
5	435	547
AVERAGE:	436.6 (3.66 ft-lb)	547.4 (5.75 ft-lb)