40 years in the game: my airgun memories
The highs and lows of collecting, by leading airgun writer John Atkins

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A detailed look at the evolution of one of Britain's best loved pistols

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JOHN ATKINS, one of the UK’s top airgun journalists and long time collector looks at some of the highlights of the past 40 years; the people, the airguns, the triumphs and mistakes, and offers his thoughts on collecting in the internet age.

From ‘old school’ to t’interweb

Gosh, how I miss those ripping days – and the times on the farm with ruddy-faced Farmer Bunbury, and his kindly, smiling wife – her eyes like currants in her soft face... the animals and the poultry, the barns and stables, the old apple-orchard and the lovely meals! Such thick cream, such honey and golden butter, such raspberries, cakes and pies – such appetites as we found there! Folly Lane was a favourite walk – it was a long lane, winding upwards for two or three miles and ending in their farmhouse, and on our shoot was a lovely little wood, where flowers grew and little sweet wild strawberries in summer and blackberries and sloes in autumn... What a load of codswallop...! It’s all too easy to look back through rose-tinted spectacles when only the good times are recalled. In reality, during my times on farms, I’ve fallen in ponds, been chased around a hen ark by a mad ram, crushed against a tree by friendly bullocks, got plastered in mud and slipped a disc – but those bad times are soon forgotten. The past is a dangerous place to dwell.

But risking the danger, let’s look back to the times when life was less complicated, slower and easier – when Mars bars, the size of loaves, were priced at four old pence and beer cost one and thruppence per pint. Airgun shooting then was a cheap hobby appealing to ‘tightwads’ like me. As the years passed, only one thought kept me going: ‘Pellets are cheap and air is free’ – but even that has changed... Inflation affects all services and items – the price of lead, water and even indirect costs for clean air – which leads me on to the actual airgun-collecting hobby.

Vintage airguns, now expensive and scarce, were often plentiful and cost a fiver-or-less each in the 1970s, as a lot of mine did. The late Dennis Commins mentioned in his Guns Review column an unnamed collector who was still picking up Webley Service Mark II air rifles for £15 each. Well, that was I. At that time, thanks to Dennis’s writings, along with Dr. Joe Gilbert’s articles about air pistols and pellets in the same magazine, interest was growing and new collectors began to seek out the more desirable items described. Inevitably, when it started to become obvious that some of these were in short supply, unfortunately prices started to rise for the less commonly seen collectable airguns.

It was a different world then, but time and economics are all relative. In 1973, £15 was an appreciable amount of cash to spend on an old airgun and I had very little spare money for buying old airguns – but all the time in the world. Nowadays, it’s ironic that I have a little more money yet no time to devote to looking for airguns to buy. I don’t think I’ve added anything to my collection since at least last week!

First Stirrings

After chancing on L. Wesley’s book Air-Guns & Air-Pistols in my local library in the early ‘70s, I was hooked – taking out the book time after time, until buying my own signed copy from the author. Harrington Gats, Diana No. 2s and Mark IVs, Webley pistols and BSA Cadets I’d grown up with, but the book showed obsolete airguns I never knew had once existed. It was a real eye opener. A photograph of the Webley Service Mk. II air rifle was included in it and I recalled little advertisements (see Figure 1) with line drawings for these rifles in some old pre-war issues of Meccano Magazine I’d been given as a boy.


Fig. 1. This advertisement in Meccano Magazine March 1934 still utilises an old printing block for the 1st Series Webley Service Mk. II. The .25 calibre version of the rifle wasn’t available until later in April 1937.

The book showed obsolete airguns I never knew had once existed. It was a real eye opener. A photograph of the Webley Service Mk. II air rifle was included in it and I recalled little advertisements (see Figure 1) with line drawings for these rifles in some old pre-war issues of Meccano Magazine I’d been given as a boy.
I liked the look of so many of the older airguns pictured and wanted to handle and learn all about them. I decided it would be interesting to actually make a collection of the ones that looked fascinating. Naively, I thought it would be a novel and unique thing to do because I had no idea anyone else was interested – so thought I could buy them cheaply if I could locate their whereabouts. True, I had always been an airgunner and had a few rifles and pellets left over from boyhood, but it was Leslie's book that made me decide to build a small collection.

I decided to place classified advertisements in my local newspapers. Running an art studio in their offices, I was ideally placed. Being on the spot, I could insert them free of charge and fill gaps on pages with my little display advertisements as well. On these, I included my drawings of a Cox Britannia air rifle and a Webley Mark 1 air pistol. Optimistic as I am, I didn't really expect loads of Britannia rifles to appear for sale but suspected readers might well mistake the Britannia sketch for an old Gem-type gun which I was also happy to buy at reasonable prices.

I got away with these little free adverts but I'm sure if I'd attempted to run full pages for my 'old airguns wanted' there would have been repercussions! There were no silly policy problems with enthusiasts placing harmless adverts for old airguns then as there are now with some newspaper groups. Meanwhile, all manner of other, highly dubious advertisements are now allowed to run in family newspapers. Truly, a world gone mad… Soon replies came in and I drove around collecting all sorts of interesting items. Still thinking I was entirely unique with my new hobby, I decided to advertise nationally, so the Exchange and Mart was chosen for my first advertising campaign.

Replies to my small classified advertisement were few but I was astonished to get written replies from other like-minded characters also keen on collecting old airguns and enquiring if I had anything to swap? Don't 'Highest Possible' letters was from Alan Hamer who, at the time, was working as an accountant for a company making paper tubes – Manchester Air Guns came later! After correspondence, I soon realised that Alan was light years ahead of me; being very knowledgeable on collectable airguns. He found me some nice items over the following years ranging from a humble Limit push-in barrel pistol to a lovely London Giffard rifle. Alan told me I needed to get W.H.B. Smith's book Gas, Air and Spring Guns of the World and gave me other useful hints and helpful advice. More and more collectors contacted me and soon we were meeting up at places like Cosford.

Cosford Championships

Cosford, near Wolverhampton, West Midlands, was a meeting place for airgun collectors because that was where the NARPA (National Air Rifle and Pistol Association) 5th and 6th National Annual Championships were staged in the massive hangar at RAF Cosford on 6th July 1975 and 11th July 1976, both of which I attended. The contests were combined with the National Bell Target Leagues Championships. It was a massive event and took months of preparatory work by Dennis Commens, the honorary administrator, and many others. Figure 2 reproduces the poster used to publicise the day in 1975.

Some collectors, like Alan Hamer and Joe Gilbart were shooters too, taking part in the Championships held there. There were thirty Rifle Divisions, both league and individual, including the 'Lincoln Jeffries', 'Boxall', 'Newcomer' and 'Spittie' Divisions, and so on. Among the nine Pistol Divisions, Dr. Gilbart of the Horschten, Shugborough club won the Individual Pistol, T. L. C. World Trading Division. I recall. I corresponded with Joe Gilbart between November 1974 and June 1981 and can say he was a really nice guy and it was so unfair that he died too early.

Webley pistol enthusiast Paul Davis would attend, as would experienced collector Alan Holmes, arriving in his NSU rotary engined Ro80. (No wonder Alan Hamer called him 'The Baron'!) The 'Two Terry's' would also be there (Terry Robb and Terry Palmer - the latter carrying the first Bonehill's 'Improved Britannia' ever saw). The duo showed us how the powerful new FWB Sport air rifle could drill .177 holes clean through the lid of a heavy-duty toolbox! We were all suitably impressed.

Alan Hamer's friend Graham Walker was carrying a good Mark I Webley air rifle. (Alan and Graham later arranged for Alan to be the air rifle collector and for Graham to stick to pistols so they didn't fall out over any future items!). Roy Valentine would be there. Alan Holmes producing his rather worn, blued Webley's 'Highest Possible' concentric pistol serial number 1055 and Ralph Denman toting a Lindner & Molo American gallery air pistol with gunmetal cylinder – who told me of his 'Highest Possible' pistols: one blued, number 59/4, and one nickelled, number 87, with the serial number curiously stamped on the flat muzzle face – one digit on either side of the bore of the original 9.15/16ths inch long barrel.

This muzzle face stamping does not appear on any other early 'Highest Possible' models I've seen, recorded or owned: such as serial number 63, or the virtually mint pistol number 109, shown with wiper rod and spanner in its original leather-lined, waterproof, green canvas-on-wood case that cost 17/6 (87.5p) in 1910, but cost me a lot more at Sotheby's, 34–36 New Bond Street, London in 1989. See Figure 3. The trade card in the lid names Mr. A. H. Gale, director of Westley Richards & Co. Ltd., 179 New Bond Street – so this pistol has come full circle to be sold again in the same street. As you can see, the case very much resembles an oversized version of the lockable cases available for Webley pistols at a much later date for 12/6d (62.5p).

Figure 4 shows (centre) a later Westley Richards & Co. Ltd. blued 'Highest Possible' serial number 770 in its dustproof, close-fitted teak case lined with blue velvet. On the velvet-lined lid is a plated pistol number 1130. Below it, another blued example is included – serial number 528 in its original cardboard carton with clearing rod.

It was at Cosford '75 that I first met Jeff Hyder, Chris Winnard and Mark Newcomer. I remember Mark was carrying a dark blue box of Lincoln Jeffries' 'Match' Pellets. He later gave me a lift back to Wolverhampton railway station and, years later – just before he returned to America, I ended up with all his pellets, including that carton of L. J. 'Match' and all the packets and tins shown on the colour front page of Guns Review April 1976, because they wouldn't have let him on the plane with all that lead. Dennis Commens

Fig. 3 Westley Richards' green canvas on wood 'Highest Possible' air pistol case housing serial number 109 (c. 1910) resembled an oversize version of the much later Webley lockable air pistol case.

Fig. 4. Nickle plated and blued Westley Richards' 'Highest Possible' air pistols - the centre example in a dustproof, close-fitted teak case lined with blue velvet.
was always in attendance but miles too busy with running the shooting championships to talk about vintage stuff on that day, of course.

**Pioneers**

Dennis Commins had written the first article I read on Webley air pistols in *Gun’s Review* magazine, February 1973 issue, which produced useful feedback from readers but little factual information from the factory about their old pistols, so he suggested that Mark (being a lecturer in prehistoric archaeology) and a professional researcher used to collecting data, might continue to record numbers and reach to apprehend now, because so many of these revelations and new discoveries are now commonplace facts among collectors today.

Later, I would visit the homes of other airgun collectors. Jeff and Chris Winnard displayed their impressive arrays of vintage air pistols on large, open sheets of wall-mounted pegboard covered in traditional green baize. Dowel pegs pushed through the wool and into the board provided the necessary support. Jeff stuck mainly to Webleys but Chris had an assortment of vintage air pistols including a blue Westley Richards’ “Highest Possible,” an early Abas Swallows although the birds do not even belong to the same family. A 43-year old Wallis & Wallis Sale catalogue in front of me, lists Lot 1685 as an ‘early .177 Eley Swift. A year earlier, a linen thread scarf…’ Results of that auction were included in the following sale catalogue No.165 and show the Kynoch rifle number 185 sold for the hammer price of £2. Years later I was to buy this rifle myself from Alan Hamer but it cost me a couple of pounds on the end by then. It was, of course, a Kynoch ‘Swift’ and into the board provided the necessary support. Jeff stuck mainly to Webleys but Chris had an assortment of vintage air pistols including a blue Westley Richards’ “Highest Possible,” an early Abas Major finished in crackle black paint, a Lincoln (he'd bought from Alec), a vertical grip Titan and many other choice pistols.

When Jeff and I visited Mark Newcomer’s house, I was startled to see Mark had a very similar large (2.75” wide butt) pegboard containing ‘KYNOCH LIMITED MARK’ radially following the lower edge. My Swifts and all others seen have a very similar large (2.75” wide butt) pegboard containing ‘KYNOCH LIMITED’ to the opposite side (LHS) 1.25” circle in crackle black paint. ‘Highest Possible’, an early Abas Major finished in crackle black paint, a Lincoln (he'd bought from Alec), a vertical grip Titan and many other choice pistols. All encouraging.

The arrival of the Internet was a mixed blessing for collectors generally. It’s advantageous if you don’t know yet whether the Swift is ‘side-adjusting through a now vacant hole in the other side of the block – as were some Lane Musketeers about this time.

The rare Kynoch Swift air rifle was patented in 1906, Patent 11557 of 1906. The patentee being George Hookham of Birmingham. A second patent – Patent 13716 of 1906 taken out by Edward Jones, Engineer and Kynoch of Lion Works, Witton, was for a variation to the arrangement of leather breech seal and a metal sealing tube on the opposite face. I don’t know if Hookham and Jones were Kynoch employees.

My Swifts and all others seen have a very similar large (2.75” wide butt) pegboard containing ‘TRADING MARKS’ radially following the lower edge. While rearsights and trigger adjustment arrangements differ, the massive breech jaws and faces of the Swifts appear identical for number 185 (top) and number 247 shown lower in Figure 7 No.247, incidentally has no hole for a frontal trigger adjuster but one on the right side of the block above the front of the trigger.

**Mixed Blessing?**

The arrival of the Internet was a mixed blessing for collectors generally. It’s advantageous if you are selling – as online catalogues allow such a wide audience for your goods – but not so good if you wish to buy items in my opinion. I didn’t need the Internet to track down old airguns and I still don’t. In a purely selfish way, I would keep quiet about any airguns I heard about coming up in country house auctions or in obscure little village hall sales, so I could drive out to bid and usually acquire them at a bargain price!
There were no fixed prices then and there are still none, as far as I am concerned, although it’s helpful to establish a rough price guide. Dennis Hiller’s ‘Collectors Guides’ to airguns over the last 40 years or so have been invaluable to those who might spot an available airgun one day.

That’s not always possible or desirable. For instance, when I covered the sale of the late Dr. Joseph S. E. Gilbert’s collection at Phillips on March 10th 1982 (see Airgun World May, 1982), I needed to record what was achieved as a price guide for readers. Catalogues for sales such as this (Fig. 8) are now collectors’ items themselves. This now collectable catalogue was expertly compiled by Nicholas McCullough for the auction and is seen here along with Joe’s. 21 early examples of Bedford’s bolt-action breech “Eureka” number 436 with thin plunger rod and barrel surround, sold for £40 hammer. Below is the reissued Westley Richards’ serial number 1081 known as the ‘concentric’ “Highest Possible” pistol because of the jacketed axial barrel allowing a reduced and streamlined design. This example, retaining all its nickel-plated finish achieved a hammer price of £220.

Figures 9 and 10 give flashbacks to that memorable auction day on March 10th 1982. Alan Hamer of Manchester Air Guns admires a fine boxed Webley Mk I number 6805, 90% blued finish held by Webley expert John McCrossen in Figure 9. A fine .22 BSA Military Pattern Long air rifle serial number 380 is held aloft by the porter during the bidding. It sold at Phillips Auction for £360 (hammer price) appearing so low now but, remember, that was 31 years ago!

Anecdotal stories

Now I can look at my collection and recall the adventures behind the acquisition of many of them and some of the unusual characters. I purchased old airguns from a French Diane ring trigger airgun reminds me of the very old gentleman owner, who gave me a cup of tea in a glass jam jar and had all his dusty paper chains and other Christmas decorations up. Puzzling, as this was the middle of August... But he wasn’t daft – as he drove a hard bargain telling me the Diane was 80 years older than it really was and I ended up paying far more than I’d wanted to, not realizing at the time it dated from around 1939 (when it was advertised in Le Chasseur Francais) or maybe a lot later – despite its archaic mixed construction of steel pressings and tubes, brass and alloy.

I also recall driving a long way to see a lady about an airgun I’d been told about, only for it to turn out to be a child’s Mondial Italian cap pistol rather than an airgun. Also the elderly man who, after selling me two boxed Webley ‘Senior’ air pistols he’d bought for his daughters, long ago (who’d never used them) suddenly produced an almost mint artillery Luger from a drawer and after waving it in my face asked me if I’d like to buy it! It turned out he had no firearms certificate and failed to even realize he needed one – so it was held illegally. On examination, I discovered it was fully loaded! He readily agreed with my proposal that I remove all the cartridges for safety. There was little else I could do but to strongly suggest I get rid of the bullets for him and that he hand his (now unloaded) Luger into the police at the first opportunity during a forthcoming Arms Amnesty – which he readily agreed to do, and hopefully did! I dropped his eight rounds over the gunwale of my fishing boat into fifteen fathoms of water the next day, when bobbing three miles off Sandgate.

I’ve discovered a few things about airguns over the last 40 years and one of them is the fact I’m never going to be able to stop some collectors calling the old German airgun maker Langenhagen “Langenhams”, a Militia-pattern argun a “Militia”, and a Return Telly a “Jelly” (because of the stylised “T”), so I’ve rather given up on that!
Eccentric concentrics

JOHN GRIFFITHS, author of the acclaimed reference book the Encyclopaedia of Spring Air Pistols, tackles a genre of air pistols distinguished by their novel cocking method. He examines British concentric air pistols from the first pattern Westley Richards and Edwin Anson’s Star to the original, but highly impractical, BSA/Norman fixed-barrel tap loader.

Concentric barrelled spring air pistols make up a small and select group of interesting air pistols where the barrel is located in the centre of the air chamber, and the piston surrounds and slides over the barrel during the cocking and firing strokes. The concentrics are characterized by the piston moving rearwards on firing, so that the compressed air has to make a sharp U-turn before reaching the pellet in the barrel. This is shown in schematic form in Fig. 1.

As can be seen from Fig. 1, the Anson concentric piston design requires the piston to make a positive seal not only with the air chamber sides but also with the barrel itself, so one might wonder what advantages there could be for such a potentially inefficient design? The answer is simply one of compactness – a concentric piston can be half the length of a conventional air pistol and yet still have a similar swept air volume and an equivalent power. Such an advantage can be of great value to the pistol owner, where compactness and ease of carrying is often important. As this is of little use to rifle shooters, who are happy with full length guns, it is not surprising that manufacturers have never bothered to produce a concentric air rifle.

This article will be confined to concentric pistols utilising the Anson principle shown in Fig. 1, but it should be noted that other concentric barrel systems predate this design. Strictly speaking the first ever concentric air pistol system was invented by H.M. Quackenbush in 1876. This is the “push barrel” system, which has been copied more than any other air pistol design and is the basis of the so-called “Gat-type” or “pop-out” air pistols. The principle of the Quackenbush system is summarised in Fig. 3.

As with the Quackenbush design, the barrel acts as the piston and has a sealing washer fixed at the breech end. However in this case the barrel is fixed and does not move when the gun is fired, instead the barrel and its washer are fitted inside a sliding air chamber and under the action of the compressed mainspring it is the air chamber itself that is propelled towards the piston head on firing, so compressing the air contained within. This system has several design difficulties, the most notable being how to access the breech for loading a pellet, and the 1911 patent tackles this by using a rather intricate tap loading system. The Norman / BSA pistol is discussed in more detail at the end of this article. It should be noted that in both the Quackenbush and Norman systems the compression chamber is in line with the barrel and consequently there is no gain in overall compactness, unlike the Anson system.

Over the past 90 years or so air pistol designers have come up with many unusual and ingenious loading and cocking inventions that help to take advantage of the inherent compactness of the Anson concentric system, most of these design features have been commercialised. As you might imagine, trying to collect all of these would be a major challenge for anyone, but fortunately some are still relatively easy to find and every airgun collector should have at least one example in his collection.

Edwin Anson (1863–1936) was a Birmingham gunsmith, son of William Anson the famous shotgun maker. His first major invention was the concentric barrel-over-the-cylinder design in the form of the first model Highest Possible, which was manufactured not being found in any other type of air pistol. Table 1 lists all the different models of Anson-type concentric air pistol that have been commercialised.

### Table 1: Known commercial concentric air pistols, in approximate date order.

<table>
<thead>
<tr>
<th>Model</th>
<th>Country of origin</th>
<th>Approx. production period</th>
<th>Cocking method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Possible</td>
<td>England</td>
<td>1924–1926</td>
<td>Grip/trigger guard</td>
</tr>
<tr>
<td>Tell 2</td>
<td>Germany</td>
<td>1925–1940</td>
<td>Grip/trigger guard</td>
</tr>
<tr>
<td>Anson’s Star</td>
<td>England</td>
<td>1944–1950</td>
<td>Trigger guard</td>
</tr>
<tr>
<td>7. Excellent Mod 1910</td>
<td>Sweden</td>
<td>1946–1958</td>
<td>Overlever</td>
</tr>
<tr>
<td>9. Fly-Score models</td>
<td>USA</td>
<td>1940 to late 60s</td>
<td>Push barrel / grip</td>
</tr>
<tr>
<td>10. Westco 551</td>
<td>Czechoslovakia</td>
<td>1947–early 50s</td>
<td>Push barrel</td>
</tr>
<tr>
<td>11. East LP100 &amp; LP210</td>
<td>Germany</td>
<td>1965–1970</td>
<td>Overlever</td>
</tr>
<tr>
<td>12. Record Jumbo</td>
<td>Germany</td>
<td>1982 to 1997</td>
<td>Overlever</td>
</tr>
<tr>
<td>13. Record Champion</td>
<td>Germany</td>
<td>1987 to 1997</td>
<td>Side lever</td>
</tr>
</tbody>
</table>

Fig. 1. The basic principle of the Anson concentric design. Upper diagram, cocked position. Lower diagram after discharge.

Fig. 2. Principle of the Quackenbush push-barrel system. Upper figure shows the cocked position, lower figure after discharge.

Fig. 3. Principle of the Norman/BSA concentric system. Upper figure shown rocked position with fixed barrel inside the sliding chamber. The lower figure shows the sliding chamber propelled to the left on firing.

Fig. 4. Edwin G. Anson

Fig. 5. Blued version of the concentric Highest Possible | (Photo courtesy of Alan Harvey)
by Westley Richards & Co. over the period 1910-1915. It was in 1921 that Edwin Anson patented the first fixed barrel concentric spring air pistol, and this was based very close

THE CONCENTRIC ‘HIGHEST POSSIBLE’

The concentric Highest Possible, shown in Figures 5 and 6, is more elegant in appearance than its predecessor Highest Possible, and at about one kilo in weight is around a quarter of a kilo lighter. The patent diagrams in Fig. 7 show the basic construction of the pistol, which is almost identical to that of the non-concentric version. However, there are important differences, the most important being (a) the barrel is now located within the cylinder, (b) the barrel is shorter and is flush with the end of the cylinder, (c) the barrel is made of brass and is smoothbore rather than steel and rifled, (d) the adjustable rear sight in the first model is now fixed, (e) the breech closure lever is shortened to allow for the lowered barrel, and (f) there is a general reduction in size of the trigger guard cocking link area and the grip, the overall height of the grip being reduced by over an inch. Like its predecessor, the concentric version was furnished with black polished horn grip plates with fine chequering. These are not interchangeable between the two models. The guns were available blued or, at a premium, nickel-plated, being referred to in advertising literature as the “No. 1” and “No. 2” respectively. The nickel-plated guns are, not surprisingly, much rarer than the blued version, and from the limited number of known examples are outnumbered by the one of the rarest and most sought after of vintage British air pistols.

Serial numbers, which are located on the heel of the grip, started from 1001 and the highest number known to the author at present is 1087. The pistol was advertised as being provided in a cardboard box. However, no authenticated box is yet known to have survived and at least on a par with the concentric Highest Possible.

We do know that, in about 1945, some years after Anson’s death in 1936, the assets of his business were sold to a Messrs Curly and Keen and in his workshop was found a number of components for the Star pistol, sufficient to make about 40 complete guns. Under some mutually agreed business arrangement A.A. Brown & Sons undertook the assembly of these pistols, which were then sold off. This however is not the whole story by any means, and there are several puzzling aspects about this gun. Reports in the literature suggest that the pistol had already been on the market prior to Anson’s death, possibly as early as 1922, and examination of known examples does suggest that this is the case. The post-War assembled pistols have low serial numbers, all falling in a range below 40, which would be consistent with their being newly serial-numbered from unnumbered components by A.A. Brown & Sons.

Examples of these include numbers 14, 15, 23, 25, 28, 35, 37, 38. In contrast, presumed pre-War pistols often have higher serial numbers, known examples being 51, 64 and 94. In addition, the post-War assembled guns are stamped on the l.h.s. cocking lever with the name “ANSON’S STAR”, whereas the older guns may be stamped either “ANSON’S STAR” or more simply “THE STAR”. (See Fig. 9)

The differently marked pistols also have slightly different barrel arrangements, and those marked “Anson’s Star” have the barrel protruding slightly beyond the end of the cylinder which is retained by a small screwed bracket, whereas “The Star” pistols have the barrel flush with the end of the cylinder (see Fig. 10).

Two other intriguing features about these guns are (a) all have grip plates that were used on Frank Clarke’s last model Titan (discontinued about 1930), and (b) all use a double-start breech pin that is identical in every respect to that used on Frank Clarke’s Britannia pistol (discontinued ca. 1935).

Taking on board all these facts, a possible history for the Star pistol can be pieced together, although of course it is still largely conjecture, and will be until hard evidence turns up.

An intriguing feature of the concentration was that used on Frank Clarke’s  Britannia model Titan (discontinued about 1930), and (b) all use a double-start breech pin that is identical in every respect to that used on Frank Clarke’s Britannia pistol (discontinued ca. 1935).
It is most likely that Anson was working on his Star design around the time that his Highest Possible concentric pistol came onto the market under the ownership of Westley Richards & Co, and presumably Anson’s intention was to produce an even cheaper and cheaper rival that was more competitive. The advent of the Warrior the Star would have been abandoned altogether, so explaining the unassembled Star pistols that were found in Anson’s workshop after his demise.

What of the pistol itself? It is relatively pleasant to handle, weighing a few ounces lighter than the contemporary “straight grip” Webley Mark 1, and having a similar rake to the grip. The overall quality of manufacture is good, making extensive use of forged steel parts, but the gun is let down somewhat by the smoothbore barrel and fixed rear sight. The cocking system, though unique and mechanically very simple, is not the easiest to use, and the fact that the pellet has to be loaded into the breech by removal of the breech screw is also a disadvantage. The major drawback to this design, however, concerns the power achievable, as the cocking lever mechanism permits only a relatively short piston stroke — about 4.5 cm in comparison with about 6.5 cm for the Webley Mark 1. So although the diameter of the Star’s air chamber was significantly larger than that of the Mark 1, because of the short stroke and the additional lost volume from the cocking mechanism, the Star had a swept volume of air of only about 6.4 cm³. The Mark 1, with a swept volume some 60% larger was able to generate much more power with significantly less cocking effort. No advertising literature for the Star is available, and so we do not know how much it retailed for, but it must have sold at a significantly lower price than the Webley Mark 1.

From the collector’s viewpoint the Star or Anson’s Star is one of the rarest vintage air pistols, and the fact that we know so little about it gives it an additional air of intrigue. Uncovering any original catalogue or advertising literature relating to this pistol would also be extremely valuable, both historically and financially.

Fig. 11. The first phase Warrior (top) with rounded trigger guard and bevelled cocking lever, and the more commonly seen second phase version.

Jeffries of Birmingham England, Assignor to Lincoln Jeffries & Company of Birmingham England, and then categorically indicates in the body of the patent that the individual Lincoln Jeffries is the sole inventor. Even if it is correct that Edwin Anson was the sole inventor of the Warrior and of all its novel design features, there is no doubt that Frank Clarke played a part in its early design. Thus an early 1930s Frank Clarke catalogue depicts an artist’s drawing of the Warrior on its cover, showing the pistol with grip plates from the discontinued Model 7 Titan, a cost-saving exercise that had previously been used with the Anson Star pistol. The patent drawings for the Warrior also showed the gun to have a grip rake that accommodated these grip plates, which was no coincidence. However, by the time the Warrior came onto the market there had been a rethink and the grip rake had become more sloping and sleeker, which meant that purpose-made grip plates were then required. It seems most likely that after Anson had invented all the principal features of the Warrior he approached Clarke with a view to its commercialisation, and he sold a half share in the design to Clarke. Frank Clarke may have made various suggestions to improve aspects of the patent, including choice of grip rake to suit the Titan grips, before the patent drawings were made.

Manufacture of the Warrior in the early days was presumably undertaken by Clarke himself, or jointly in their separate workshops by both Clarke and Anson, and these first pistols, which were made over the period 1931–1933, had no serial number. Although stamped with the name “Warrior” and the British and USA patent numbers, there are no markings of any kind to indicate who made the pistol. This is consistent with a jointly owned design, and the lack of serial numbers could also be seen as consistent with the guns being made independently at two different locations. This also means that we have no idea how many of these early guns were actually made, but it is clear that they are very much rarer than the later serial numbered guns. By 1933 Anson must have sold his remaining 50% share in the patent rights over to Frank Clarke, as from then on the pistols were stamped with “F. Clarke’s Patent No. Brit. 351268, USA 538057”, with no mention of Anson’s involvement. At the same time manufacture of the pistol was handed over to the engineering company Accles & Shelvoke, presumably because sales of the pistol had taken off and Clarke was finding it difficult to keep up with demand using his own workshops. These second generation pistols carried the marking “Made by Accles & Shelvoke Ltd. Birmingham”, and were serial numbered. Apart from these markings there are other small structural differences between the early non-serial numbered pistols and the later serial numbered version, the most obvious being the changes to the end of the cocking lever in the first series (Figure 11). Other differences are to be found in the muzzle area, where the early guns had a slightly protruding barrel which was encased in a steel block, and also in the breech area, where the wrap-around cocking lever closure was simplified slightly. Serial numbers in the second series began at 1000 and about 5000 pistols were made over the period 1933-1939, the highest serial number yet recorded being 59816.

Continued on page 56.
Walther's compression brainwave

Walther was ahead of its time when in 1974 it devised the first single stroke pneumatic match rifle. It was both ground-breaking and world-beating, so good that the target size had to be reduced. LEONARD JOE reports on the evolution of this rifle over its 14 years in production, in particular the features that make it either an ‘early’ or ‘late’ model.

The Walther LGR is a very well known 10M target rifle, which was introduced in 1974 and was produced through to around 1988. The LGR quickly gained dominance in 10M rifle. At the 1980 Olympics, the LGR became the first SSP rifle to take gold in the men’s competition. With more and more shooters posting perfect scores, the governing body for 10M rifle competition of the day decided that changes were needed to reflect the precision that these new breed of match rifles were capable of, and reduced the size of the rifle target, to the size that it remains at to this day.

The LGR is a single stroke pneumatic rifle, which means that it’s full operating pressure is built up with a single cycling of the cocking lever. As the cocking lever is drawn rearward, air is drawn through the barrel and into the valve, and as the cocking lever reaches the end of it’s stroke, the valve is allowed to close, and the trigger engages the hammer sear. As the lever is now moved in the forward direction, the air in the compression chamber is compressed to a pressure of approximately 100 bar (1450 psi) within the valve. This pressure is adequate to propel an 8 grain pellet to a velocity of around 555 FPS, which results in 7.4 joules (~5.5 ft-lb) of energy – just under the 7.5 joule limit.

Upon firing, the trigger releases a hammer, that is quite light in relation to the overall weight of the gun, and the end of the hammer travel is dampened by a resilient buffer, resulting in little or no recoil felt by the shooter, and a minimal elapsed time between the squeezing of the trigger to the release of the shot. All these factors made possible an unprecedented degree of precision shooting, never realized before the advent of the LGR.

On to the study.

Over the course of several years of rebuilding and repairing dozens of LGR rifles, I have made a few observations with regard to the evolution of their design with respect to the actions, or more specifically, the parts that make up the actions. Based upon what I have noted, there were two distinct versions of the LGR action, which I have classified as the ‘early’ and ‘late’ variations.

The most obvious item of note on the early action, which will stand out far more quickly than the serial number, is the transverse key through the top of the main body tube, one of two such keys that retain the rear plug in place in the main body tube of the gun. (See Fig 1) The second key is located at the bottom of the tube, and this bottom key also serves to locate the trigger mechanism mounting unit. (See Fig 2).

On the late action, the upper key was eliminated, and replaced with a pair of shoulder screws, located centrally within the dovetails for the rear sight. (See Fig 03). This change resulted in a greater flexibility in where the rear diopter sight could be mounted, allowing it to be mounted further back on the rail. The late action retained the lower key exactly as was used on the early action.

While the trigger mechanism mounting units remained the same, there were numerous differences in the hammer and sear assembly between the early and late actions. On the early gun, the sear portion of the hammer assembly is a silhouette type arrangement, made from a flat stamping, which was then fastened into a slot in the hammer rod by two rivets. The retaining bracket was a simple, angled piece, which mates to the trigger mechanism mounting unit. An adjustment screw is used to set the sear engagement, and the setting is held in place by contact with the trigger mechanism mounting unit. (See Fig 4).

On the late action, the sear portion has been changed to a much more robust appearing unit, that has a half-round section stamped into it, where the hammer rod fastens. The hammer rod is now spot-welded to the sear portion. The adjustment screw on the retaining bracket has been eliminated, and the bracket has a transverse ridge formed into it to set the height of the sear. (See Fig 5).

The hammer “head”, or the actual portion of the hammer that acts to open the valve, is in effect, a sliding bar, with a ramp at it’s forward tip, which raises a lever, which in turn, opens the valve. The lever is equipped with rollers at both ends to reduce friction, one roller acting on the hammer head, the other roller acting on the end of the valve stem. On the early action, the hammer head is a very narrow affair, of rectangular cross section, only 2.2 mm wide, and
I re-discovered my childhood love of airguns in the mid-1980s. Like many of us, as a newbie I began with some over-powered, under-refined spring-piston rifles! Then I chanced upon Ladd Fanta’s famous article on the Diana 27, in the 1977 issue of “Gun Digest.” His practical background as an airgun dealer and shooter—rare in the US in those days—and unbiased writing style, not only put my overall airgunning interests on a new path, but ignited a particular fascination with this historic Mayer & Grammelspacher “Diana” model.

The Diana 27 nameplate existed for the better part of a century. It began as a simple quarter-stocked barrel-cocker in the first decade of the 20th century. In the 1930’s, it evolved into a quite different rifle with full-length stock, and was again re-designed when M&G re-started production after WW2. But “27” was always worn by a light, medium-powered rifle that shared advanced features with Diana’s larger top-of-the-line models, providing top quality and good value.

While we are focusing here on model 27’s built in Germany after World War 2, it’s useful to compare these with their ancestors. Here (Fig 1) is a quarter-stocked model 27 from 1926.

And here (Fig 2) is a DRP (Deutsches Reichspatent-) marked example from the immediate pre-War years, with a 3/4-length stock and excellent but complex 2-stage trigger. Diana’s pre-War production machinery famously moved to Millard Brothers in Scotland after the War, where the old 27 provided the design foundation for many “Milbro” air rifles built up until 1980.

The first post-War guns (Figs 3 and 4) made an effort to duplicate the styling and features of the pre-War design. Below you can see that the overall lines are very similar, though with certain concessions to more economical production. The stock has a similar profile but simpler form, with a flat-sided butt and only rudimentary contouring on the grip, and executed in beech rather than walnut. The trigger is alloy instead of case-hardened steel, and stamped components have replaced the older forged ones.

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simple press-on end cap, with its
distinctive bulge to accommodate the
ball-sear mechanism, replacing the
heavy pre-War threaded one. The
screws used for the barrel and link
pivots are actually interchangeable.

FIRST GENERATION

The new post-War model 27 rifle was
introduced, per John Walter’s research,
in December 1951. The Diana-
branded rifle below is typical.

Besides the slab-sided stock with
finger-groove fore end already
illustrated, it had a solid alloy trigger
blade with two adjuster screws, a
simple fixed-post front sight, and
a stamped rear sight. The receiver
has no grooves or rail for a scope or
diopter sight. (Fig 8)

As with all model 27s, the trigger
blade is curiously close to the grip.
This is the result of its more rearward
location in the receiver tube, compared
to the pre-War rifle, combined with
the stock’s closely following the
previous grip and butt proportions.

The design of the breech also owes
much to the pre-War model 27. The
automatic detent latch is a strong
wedge design. There are no chafing
washers in the joint, though the
breech block does have a recessed
annular grease groove on each side.
The pivot bolt has one “half-moon”
recess on each side of its head, to
accommodate its keeper screw. (Fig
9).

There are variations in this first “solid
blade” trigger design. Most have a
grooved face as seen above, but earlier
ones are smooth. I have seen other
Diana models with an even earlier
variation, using differently-located
small adjuster screws — again, likely
surplus older components. As an
aside — the classic ball-sear design
has only one true
adjustment screw, which shifts the
point at which the second-
stage fulcrum point is reached.
There is no true pull-weight
adjustment. The second
screw serves only to lock
the adjuster into
place.

The simple
stamped-metal
rear sight closely
resembles the
pre-War one,
but is different
in detail. It must
be drifted in
its mounting
dovetail for lateral
adjustment, and
incorporates a
rather coarsely-
adjusting slider
for vertical
movement. It’s an efficient
enough unit, but
perhaps does not
do justice to the
gun’s accuracy,
and its light
construction is,
in my experience,
easily damaged
atop this solid
rifle. The good
news is, these
little units were
apparently stockpiled in vast numbers
— they are still available new from
German parts dealers. (Fig 10)

A favorite detail is the elegant breech
styling on these guns, which bears
some study. The top contour of the
breech block is concentric with the
barrel diameter. At the line formed
where this curved surface meets the
block’s flat sides, a perfectly-aligned,
narrow horizontal surface is cut into
the top of the breech jaws. Also note
the twin machined slots under the
front of the breech block to tightly fit
the cocking link. Finally, the front of
the block and link blend into a single
curved line in profile, which mirrors
that of the front of the stock fore end.
At a spot where most barrel-cockers
are a little agricultural, Diana gives you
art! (Figs 11 and 12)

SECOND GENERATION

A major revision to the entire
Diana airgun line took place in the
early 1960s. Older models were
discontinued, or their variants
consolidated; new ones introduced,

As an aside — the classic ball-sear design
has only one true
adjustment screw, which shifts the
point at which the second-
stage fulcrum point is reached.
There is no true pull-weight
adjustment. The second
screw serves only to lock
the adjuster into
place.
including the remarkable Giss-patent recoilless match guns; and the larger sporting rifles – including the 27 – were changed to reduce production costs.

But some of these changes were significant improvements. Besides a much more pleasing slender and rounded stock shape, the breech design was completely revised, and superior sights introduced, along with a simple dovetail scope rail. Below is a Winchester-marked rifle illustrating these alterations. (Fig 13)

The re-designed stock lines are very evident in these shots. The shape is altogether more curved and comfortable, especially in the grip area for the heel of the firing hand. The rubber button on the butt, intended to help the rifle stand more securely in a corner, is a thoughtful detail that is a signature of the model 27. (Fig 14)

The trigger blade is shaped identically to the earlier alloy one, but has transitioned to plastic. These are notoriously fragile... a poor design decision at best. Interestingly, this design omits the separate locking screw, as the friction of the adjuster screw against the plastic renders it superfluous. (Figs 15 and 16).

The following photos (actually a third generation 27) show the revised breech. Most obvious is the change from a wedge detent latch to a trapped ball bearing, which seats against a small hardened core wedge on the standing breech – very smooth in operation, and stronger than it looks, as the ball of the breech has a lipped chafing washer. Note that the breech pivot bolt’s head has ten recesses (instead of the previous two) for the retaining screw, which is somewhat smaller. This allows extremely fine adjustment of the breech tension against the Belleville washer. (Fig 17)

The rail is a simple wedge metal of the breech block (note, I’ve stuck the breech pivot bolt in ‘backwards’ here, for a better view of the notched head). This may be, bar none, the strongest and most finely adjustable breech design I’ve ever seen in a light barrel-cocking rifle – an outstanding design feature. (Fig 18)

The sights are another advance over the first-generation guns. The front has a small barleycorn blade within a fixed hood, mounted on a base that clamps to parallel longitudinal grooves, all easily removable to accommodate a scope. (Note the turned-down muzzle on this gun, is an il-advised owner modification, not factory work). (Fig 19)

The rear sight is a combination plastic and metal design, with smooth click adjustments for both lateral and vertical movement. The ingenious spring-loaded rotating notch plate provides four different sight pictures, and was ‘inherited’ from earlier Diana match sights that had been paired with a front sight featuring four rotating posts of corresponding shapes.

Variations of this sight are still in use on some Diana pistols and other models. (Fig 20)

The scope rail is a simple wedge shape, spot-welded to the receiver. It sits very low, without the “shoulder” seen on the larger model 35 and 50 sporters. The rail is designed for use with lightweight rimfire-type scopes, and its ribbed top surface also mates with the unique downward-acting mounting ‘foot’ on Diana’s match sights. It really is not suitable for heavy-duty clamp-type scope mounts. (Fig 21)

The breech area’s appearance is a revised but still remarkably clean design. Again, look at the sculptural relationships of components; the top and bottom contours of the breech block are the same radius as the receiver tube, with the previous extra cut on the breech jaws deleted. Thus the breech block ‘reads’ as a flat-sided extension of the receiver itself – simpler, but no less elegant, than the previous solution. (Fig 22)

When I first dissected a second-generation model 27, the extent of the changes from the first-generation design were surprising. While perhaps giving up some minor cosmetic touches, Diana’s ability to realize production economies while adding technical improvements was remarkable.

THIRD GENERATION

In the late 1970s, the model 27 saw further changes that, again, both simplified and refined it. These concentrated on the rear sight and trigger. (Fig 23)
The trigger blade is now stamped sheet metal. If not as elegant as the early solid alloy blade, it’s at least stronger than the preceding plastic one! The adjuster screws have smaller heads and stand proud of the day. This unit fits the same groove spacing, can be easily retrofitted, and when combined with the rear sight is wonderfully versatile and precise. (Fig 26)

The rear sight on these guns is nothing short of amazing. While generally similar to the previous mixed-construction unit, it is all steel, and consists of no fewer than 21 separate parts. Both horizontal and vertical adjustments are smooth and precise. I know of no better factory open sight ever fitted to any airgun. Another detail change in this area is the omission of the screw-and-keeper cocking link pivot, in favor of a simple riveted joint. (Figs 27 and 28)

The stock shape, while basically the same, has some minor refinements, including a slightly less raked grip angle, a more rounded form to the comb nosing, and a less abrupt curve at the fore end tip. These changes are so subtle they are hard to photograph effectively. The third-generation guns – especially for shooting with open sights – may be the best of the post-War 27s.

VARIATIONS

As mentioned above, the grouping of the blade instead of being recessed, but work precisely the same as previously. Note that the brackets attaching the blade to the receiver tube are also changed compared to the previous generation, though the operation and pivot point geometry of the components is the same. (Figs 24 and 25)

This trigger may have been introduced earlier than the sight and breech block changes. 27s with the stamped blade but otherwise second-generation details are fairly common. The basic front sight remained exactly the same, but these later 27s were sometimes offered as “deluxe” or “target” variants, with Diana’s globe target sight.

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It’s also possible that M&G discounted “non-standard” guns to individual distributors or retailers. Here is a model 27 that is a remarkable example. (Figs 29, 30, 31 and 32)

The beautiful stock has the distinctive 2nd-gen curvy shape, but retains finger grooves similar to earlier models, and omits the famous “butt button” seen on later ones. It was made by Sile in Italy, the only 27 stock so marked I’ve ever seen. It is really well-finished, and easily the most comfortable small air rifle I’ve ever hefted. The scope rail and plastic trigger are also 2nd-gen details, as is the hooded front sight. But the rear sight is the 1st-gen stamped model. Most interesting of all may be the breech, which combines the 2nd-gen washer design and ball bearing detent, with 1st-gen pivot bolt and keeper.

Whether this rifle represents a short-lived, early 2nd-generation production standard, a small batch to use up parts stocks, or something else – I can’t say. But it is representative of the many model 27 sub-variations out there for the collector.
Falke mystery now history

The German Falke underlevers have a special cachet among collectors for their quality of manufacture and rarity. DANNY GARVIN writes about the internet forum he started to share information about this elusive brand and some of the surprising new facts that emerged – including the possibility that these rifles are not quite so rare as initially believed.

I started an internet forum dedicated to 1950s Falke airguns – the Falke Forum – in 2009, in an effort to pull together the limited number of sources available on these guns into one place and in the hope of stimulating more. There wasn’t a great deal of information around, despite there clearly being quite a large number of break-barrel rifles – most of them copies of the smaller pre-War Dianas and Haenels – plus two heavy underlevers, and a single Falke-patented pistol based largely on the pre-War EM-GE Zenit.

It was the two underlevers, the models 80 and 90, that excited my curiosity. I had won a Falke 90 in a speculative bid in an online auction, knowing vaguely they were sought after, and quickly learned that there were an estimated 200 of the 90s and 400 of the 80s made. I also read that the Falke factory was in operation for just eight years or so, between 1951 and 1959, before it went bankrupt. By large there were only snippets of information in airgun textbooks, and the only real effort I could find to put together a dedicated body of information was by collector Vic Turner, who sold copies of photostats of Falke sales literature along with some of his own research.

If you examine a Falke 80 or 90 you quickly understand what the fuss is about and why the airgun writer WHB Smith, in his 1957 Encyclopedia of Gas, Air and Spring Guns, said of the model 90 that “there are no finer nor more powerful spring-air rifles made than these”. Although its underlever design was almost certainly a copy of the BSA Airsporter – which came on the market several years earlier – the quality of materials and workmanship was a cut above the BSA.

Since setting up the forum, I have been intrigued to find that Falkes – made in a former sugar factory in a small town near Hannover, capital of Lower Saxony – were sold all over the world as well as in Germany and the rest of Europe, with particularly enthusiastic markets in New Zealand and South Africa. African farmers seem to have taken to the underlevers with special fondness and there is even a press photo showing Rhodesia’s prime minister, Ian Smith, posing with a Falke 80 while joking that he would be accused of “shooting at Englishmen”.

One possibility that has emerged from data supplied by visitors to the forum – backed up by photographs – is that there were rather more examples of the models 80 and 90 made than the total 600 first thought. The figure was suggested by the Kiwi author Trevor Adams and estimated according to the highest known serial numbers at the time. Since then it has become evident that the serial number stamped on the loading tap and cylinder of each underlever rifle is not unique. A number of duplicates, and even triplicates, have appeared, suggesting the overall total may be higher. But the numbers are still relatively small so the ‘final total’, should we ever discover it, may yet prove to be in the same ballpark.

A key revelation about Falke was recently provided by an enterprising German visitor to the forum, Volker, who tracked down and interviewed the 62-year-old son of the Falke factory’s founder, Albert Föhrenbach. Volker was told that Herr Föhrenbach Senior suffered a non-fatal but debilitating heart attack about the age of 90, in 1957, and that this was the cause of the collapse of the airgun business within a year or two, leading to the company’s liquidation in 1961.

It sounds like poor management to allow a business to implode through the incapacity of one man, albeit that it was the company’s enterprising owner, a former aircraft engineer. But this was no cottage industry; the founder’s son said it employed 300 people in a town whose population was only about 4,000. The breadth of Falke’s airgun range, the number of rifles apparently made, the global reach of its export market, and the fact that it also branched into making powder-burning rifles, suggest that this was an ambitious, productive company.

Exactly where Falke fitted within Germany’s airgun industry is hard to determine with certainty. The immediate post-War period was extraordinarily fertile for airgun production, with almost all of the effort of the surviving post-War German gunmakers focused on it, while sanctions on making firearms prevented their energies going into powder-burners. This concentration on airguns led to an unprecedented leap forward in their development in the late 50s and early 60s, mostly concentrated on the popular sport of 10m target shooting.

Restrictions on airgun manufacture were lifted in around 1950. The pre-
By the mid-’50s, at Rastatt in western Germany, airgun specialists Mayer & Grammelspacher had recovered from the seizure of its machinery during the post-War reparations process, and was starting to put out an increasing range of Diana sporting air rifles – no doubt helped by the strength of its brand in Germany. Around this time, its engineers also began to focus on developing recoilless match air rifles and pistols.

Two hundred miles south of the Falke factory, Bayerische-Sportwaffenfabrik (BSF) was producing well-made rifles, including the underlever model 54. Not far away, Weihrauch was building a name for itself in the adult airgun market and, like both Falke and BSF, produced beautiful all-steel dopfer sights in an attempt to satisfy the sporting/target markets simultaneously.

Falke seems to have sold its guns at a consistently lower price than its close competitor, Diana. How it managed to sustain this with no apparent compromise in quality is not clear, although Germany in the 1950s had a surplus of skilled craftsmen grateful to have work, so wages would have been low. Meanwhile, anecdotally it is said that Diana lost much of its skilled workforce during the War, along with the loss of its machinery afterwards; so its overheads might have been high.

Herr Föhrenbach’s pre-War engineering contacts, plus (as his son recounted) at least one friendship with a senior English army officer in the British Occupied Zone in which the Falke factory was located, may have helped him with obtaining the scarce materials he needed for airgun production.

As you can see, compiling the Falke story is a jigsaw that involves a lot of speculation – and history is rarely kind to those who indulge in conjecture. What is clear from the rifles that have survived and are cherished by their owners, 60 or so years later, is that this was a company that believed in building up to a quality standard and not down to a price. The big Falke underlevers are beautiful, functional objects that give much pleasure to shooters and collectors alike.

The models 80 and 90, which were both made in 4.5mm and 5.5mm calibre, are almost identical, except that contemporary advertising indicates the 90 was sold only with a walnut match stock and the 80 with an elm sporter stock. But the numbers of each model that have emerged wearing the other’s stock – complete with the correct underlever for the stocks – a slight ‘dog-leg’ for the deeper match fore-end and straight for the sporter – suggests strongly that the customer was king in the ‘50s and if sir wanted a match stock on his model 80, that is what sir would have.

One painful matter for some modern Falke underlever owners is the question of rear sights – the painful part being that they are often missing. Both models were sold with an intricate, hand-built steel micrometer sight that could be fixed anywhere on a long ribbed rail above the cylinder, either locked into notches cut at intervals or by friction alone when there were none. The optional dopfer-sight sat on its own short rail atop the trigger block at the rear of the cylinder. Unfortunately, the designed-in ease of moving and detaching these sights has meant that quite a few rifles have become permanently separated from them.

The build quality of the sights is an example of the considerable care and attention lavished on the manufacture of the big Falkes. The elevation and windage-adjustable rear sight is a beautiful product of the gunmaker’s art, with numerous small machined parts. One skilled British machinist I know of reproduced two of these sights over about 35 hours of painstaking work. The heavy, blued steel dopfer sight is no less extravagant and has an attractive design feature in that its underbody is cut out to match the graceful curved tail of the trigger block. A further option was an adjustable iris ingeniously built into the eyepiece.

These extraordinary sights and other standard features – the minimal use of steel pressings, the six stock fixing bolts, the elaborate hand-cut chequering on the walnut match stocks, the delicate falcon (Falke) brand impressions on left stock fore-end, cylinder, and moulded buttplate; and the removable front sight elements – all add to the luxurious, no-expense spared, feel of the rifles. They may not have been intrinsically better shooting tools than the early Airports, or BSF’s model 54, but the workmanship and materials that went into the Falke underlevers must have represented excellent value for money to 1950s consumers. Set against Diana’s flagship model 50, which retailed at 20% more despite its lower power potential, beech stock, and relatively crude pressed steel sights, the two rifles are chalk and cheese.

Questions that have not yet been answered about Falke’s demise include the detailed reasons for its collapse after Herr Föhrenbach’s heart attack – was it heavily in debt and was credit on loans withdrawn when bankers’ confidence fell? Did the cost of the top-of-the-line underlevers eat into profits and help to topple the company?

The answers may become clear eventually. In the meantime, Falke’s legacy to airgun collectors is the surviving examples of the superb models 80 and 90, along with some other fine guns. Their undoubted quality and the fact that Falke’s airgun production started, flourished, and disappeared all in less than a decade, will no doubt sustain collectors’ interest, even if the mystery about why the company lasted so few years appears to have in the main been solved. The Falke Forum can be found at: www.network54.com/index/198508

Falke brochures were produced in German, English and Dutch and Falke underlevers appeared in various contemporary third party sales catalogues.
Snippets from the snug

Mr D of Fife recalls an abortive rabbit hunt and the moment he first realised he had to have a gold-plated foresight fitted to his BSA Airsporter – the one with the self-opening tap.

It is a fact universally accepted that every Sporting Man deserves three quality rifles – the BSA Airsporter (with self-opening tap) in No.2 bore.

Through the pages of this organ it is my presumption to instruct the ignorant, entertain the expert, so all can improve their Sporting prowess. I shall be writing to you from the snug – a chamber off our kitchen supplied with fireplace, slippers, pipe and Tantalus.

Harmony’s university friends are probably because my prone stalking with her elbow (as is her custom) and told me, in her absurd way, that I was having a nightmare and that I should go back to sleep. This I did, but not before I wrote the dream down.

As I sat down to my morning fry the meaning of the dream came to me – as I plunged a folded rasher into an egg yolk – I realized I must get my foresight bead gold-plated. There is only one man in the Kingdom of Fife who I will allow to touch my BSA Airsporter (with self-opening tap) and that is Shuggy Biancini. I went to my writing desk and penned a brief note to him requesting an interview at the earliest opportunity.

An expense we can ill-afford, but Harmony’s university friends are in North Africa I recognized it to be an extraordinary insect. From my time in North Africa I recognized it to be an egg yolk – I realized I must get my foresight bead gold-plated. There is only one man in the Kingdom of Fife who I will allow to touch my BSA Airsporter (with self-opening tap) and that is Shuggy Biancini. I went to my writing desk and penned a brief note to him requesting an interview at the earliest opportunity.
JOHN MILEWSKI describes the impressive lineage of the Premier, a pistol which was heir to a famous heritage that went back to the 1920s. It embodied the struggle the company had to incorporate cost savings into its production, with the use of new finishes and materials.

The Premier was introduced in 1966 as a replacement for the Mark 1 and Senior air pistols and took its name from the shotgun side of the business, namely after the Premier Gun Works. Although the pistol was produced for a period of only 13 years, there are numerous variations for the discerning collector to seek out and it can be seen how a well produced almost hand made steel pistol evolved into a mass produced cheaper version of its father. As manufacturing costs and competition increased, cheaper materials were introduced and Webley experimented with a number of different finishes to produce a cost efficient product.

The new Premier combined the double jointed cocking linkage and fully adjustable sights of the Senior with the trigger adjustment facility of the Mark 1. The cocking link for the Premier was marginally shorter than the Senior’s and the two components do not interchange easily.

Assembly numbers were used instead of true serial numbers and these were stamped on the front bung, by the barrel pivot. This number was also stamped under the left stock side, near the top of the grip. Webley’s have stated the purpose of these numbers was to trace an individual assembler from his assembly number and to keep a batch of pistols together whilst being “jobbed” around the factory. There does not seem to be any chronological sequence with these numbers and factory sources suggest once four figures were reached, the numbers started again from scratch. As these numbers were not chronological, they cannot be used to date a pistol. I.e. a higher number does not necessarily mean the pistol was produced after a lower number.

A further series of numbers appear stamped under the left stock side. These are about half way down the grip and appear either side of the stock side screw hole. It seems these were date stamps. Early Premiers carry single figure numbers e.g. “4 5”. This could mean the pistol was produced in April 1965. Later versions had more complete stamps e.g. “7 71” meaning the pistol was produced in July 1971. The numbers I have encountered to-date suggest these are chronological date stamps, although it should be appreciated I have not examined factory records to substantiate this likely explanation.

The calibre was stamped on the left side of the barrel pivot, under the foresight. Inspection stamps were stamped behind the trigger guard, at the front of the grip. Webley inspectors only placed their stamp on a pistol if they were satisfied with the assemblers work. Curiously, not all pistols encountered carry this inspection stamp, suggesting inspectors looked at random samples.

In January 1965, a system of code letters was introduced as an aid to ordering spare parts. As subtle changes and modifications were made to the pistol, a new code letter was introduced. Letters used were from A to E. The suggested dates below have been supplied informally by Webley but their accuracy has been difficult to substantiate as true production records were unavailable during the preparation of this study.

A SERIES - Jan 1965

The first of the Premiers prior to and including the “A” Series used the leather piston washer from the Mark 1 air pistol, although the piston itself was a new item, unique to the Premier. The breach washer was the standard patented leather washer with brass insert. The left side of the air chamber carried the instruction “OIL ” near to the cocking slot to encourage owners to keep the leather piston washer regularly lubricated. Unusually, the A series was only available in .177 calibre.

The left side of the pistol carried the following trade stampings “THE WEBLEY PREMIER MADE IN ENGLAND” upon two lines. Trade stampings on the right side consisted of “WEBLEY & SCOTT LTD BIRMINGHAM” and “WEBLEY PATENTS”. The latter was stamped nearest the muzzle end of the air chamber on this early series of pistols only as by 1964, Webley’s original patent for the classic barrel over cylinder design had expired.

The breach screw/end plug was stamped “DO NOT REMOVE” and the lettering filled in with red paint. The whole assembly was then secured by a peg to stop owners from removing this component. The last two digits of the assembly number were stamped at the rear of the stimp catch on series A to C. On D series and subsequent versions, this stamping was omitted. These stampings remained the same on later blued pistols, only the “WEBLEY PATENTS” being omitted. As with any production line manufacturing, changes could take time to take effect, so variations and oddities which appear to be out of sequence will be encountered. The features described in this study are therefore a general guide on those one expects to find on the Premier air pistol but please keep an open mind and expect to encounter the odd pistol with unusual or out of sequence features or markings.

The bakelite stock sides were brown as on the post war Seniors with the WEBLEY trademark moulded at the top above the cheeking. The pistol had four “trigger pins”. Two secured the guard whilst the other two held the sear and trigger in place.

The barrel fulcrum or the raised block on top of the air cylinder near the muzzle, over which the long link rides during the cocking process was identical to the Senior’s on the A Series Premiers but modified to a narrower and higher type for the B series and subsequent pistols.

The breach screw was fitted with a leather washer with brass insert. The left side of the air chamber carried the instruction “OIL ” near to the cocking slot to encourage owners to keep the leather piston washer regularly lubricated. Unusually, the A series was only available in .177 calibre.

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The card cartons for the earliest Premiers were a revised version of the last of the Senior “Design Centre” labelled boxes. The lid featured a picture of a three-pin Senior but the word “SENIOR” was replaced with “PREMIER”. The sides of the box were coloured black and the whole carton was more solidly constructed than later card versions. I have been told about an early boxed Premier having a “Premier” label stuck over a “Senior” label, which reinforces the belief among collectors that Webley never threw anything away. Instructions for the use and maintenance of the pistol were pasted to the inside of the box lid and were coloured blue.

A Webley catalogue from 1964 featured an illustration of the Premier on the cover and was a revision of the 1960s company catalogue, which originally carried an illustration of a Senior air pistol shooting at a target. Unusually, the illustration was amended fully from the Senior to the Premier and not just by substituting the model name on the air pistol’s side as was the case with the box lid cover on these earliest of Premiers.

This series saw the introduction of a PTFE piston washer, making the old leather component redundant. The left side of the air chamber no longer required the instruction “OIL” as the new washer was self adjusting and did not require lubrication. Early B series pistols still carried the instruction whilst later pistols of this series did not.

Two versions of the piston washer were made. The earliest had a distance piece set behind the washer to add length to the piston stroke whilst the other had a chamfer, the purpose of which was to prevent the washer fouling the end plug’s screw thread. Some were blue in colour whilst later versions were white. The colours determined the grade of the PTFE used to make the washers, the blue being of higher grade.

Three styles of box have been noted for the B series. The earliest came in the same box as the A series. Later versions have been noted with the same Design Centre Label stuck onto a plain brown card box and the final type carried a new design, also stuck onto a plain brown card box. The label had a cream background and featured a picture of a four pin Premier pointing upwards. The four pin designation identifies the four trigger pins found on early Premiers. The appearance appears to be of a pre A series pistol and I assume this style of box was intended for the B series. The B series box I have does not carry the full postcode, quoting only B21. Other variants of this box were printed B21 BLU. The side of the lid also carried the name “PREMIER” along with the relevant calibre and stated the pistol must not be sold to anyone under the age of 17, which was the law in the UK at the time.

Box contents included a sample envelope or tin of pellets, warning sticker (telling owners to ensure the barrel is secured before firing and not to fire the pistol without a pellet in the barrel), Design Centre award label (only on the earliest version) and a dated instruction sheet. The latter details changes up to and including the B series and amendments were added to subsequent series as and when a new code letter was introduced.

C SERIES – Nov 1965 – July 1966

Although being available from November 1965, Webley sources indicate the C series was not due to be launched until March/April 1966. The delay was down to stocks of the B series pistol not being sold first. I have a boxed example which is stamped 76 on the frame, under the left stock side. If this is a date stamp, this must be one of the last C series pistols to have been produced.

A new pattern of trigger and rear were introduced for this model. Both parts were now sintered rather than blued steel. The four trigger and rear pins had by now, flat rather than rounded ends as these were easier to manufacture. A new longer trigger adjusting screw was also introduced for this series. Internal differences included a new piston (part P60) and washer (part P61) which replaced the earlier versions. The C series was otherwise identical to the previous model.

This series came in the green Design Centre labelled box. The box itself is made of the light brown card, which was standard at this time. However, the lid label is the older Design Centre version on a green background. The side label is also on a green background and in keeping with the style on the lid. It seems odd stocks of “green” labels were used up before or even alongside the newly printed ones used for the B series. A component parts list along with an exploded diagram of the piston was included in the box and this detailed all changes to pistols up to and including the C series. It is interesting to note at least two C series Premiers were bought in New Zealand at the time of their production. As this series seems to be the rarest of all Premiers, perhaps the majority were exported. Alternatively, the short production run may explain the pistols rarity today.


As previously mentioned, all series up to this point had four trigger pins. A fifth pin was introduced as a trigger stop pin with this series. It seems curious this modification was considered necessary at a time when Webley were looking at reducing production costs.

A neoprene breach washer replaced the old leather washer of previous models and could also fit all other previous Webley pistols. The tool used for replacing the old washer (M36) was no longer required as the neoprene version did not need to be punched into its housing. A new mainspring (P1032) replaced the previous Mark 1 (M7) version. The spring interchanged with all other Webley pistols apart from the junior and genuine factory replacements were tagged with the company trademark and the initials PAP (Premier Air Pistol).

The stirrup barrel catch was by now a sintered casting, another modification introduced to cut production costs and the last two digits of the assembly number were no longer stamped on the component.

Most D series pistols were supplied in the cream labelled box described previously but I do have a “green” version, which is identical to the box my C series came in. It is probable factory assemblers used whatever labels were at hand at the time.

A revised components parts list was included in the box. The sheet detailed the various differences between the premier variants to
date and recommended the use of Webley accessories. There was also a sticker explaining trigger adjustment and a label warning owners not to fire the pistol without a pellet in the barrel and to ensure the barrel is properly secured prior to firing. A sample packet of Webley pellets completed the set.

E SERIES - 18th July 1968 - 1972

Several variants of E series Premiers were manufactured with blued and enamelled finishes.

E SERIES – BLUED - 1968 – 1971

The internal depth of the piston was reduced in an attempt to increase the power of the Premier. Strangely, several of the blued E series Premiers I have encountered have been quite as powerful as earlier or later Premiers.

A new stirrup catch was fitted with a cross hatched thumb piece. Previous catches had vertical grooves to aid thumb placement. This series came in the brown box with the picture of the pistol pointing upwards. It was the last version to have this style of label, although "transitional" examples do exist and should not be considered as incorrectly boxed. At around this time, a hard foam lined lockable case was advertised by Webley & Scott as an accessory for the Premier. The case did not carry a trade label and accommodated the pistol, a tin of pellets and a cleaning brush. A craft knife could be supplied in order to cut around a template of the pistol for an individual fit.


During the early 1970’s, Webley experimented with various finishes as an alternative to bluing in order to save costs in the time and skill required to hand polish and prepare a pistol prior to bluing. The finish used on this series was Sunconite, a paint originally developed for use on aircraft. The resin was sprayed onto a pistol and then heat treated. This resulted in a non rusting hard wearing finish that was difficult to touch up if damaged. The body of the pistol was not polished prior to coating and should the sunconite ever be removed from a pistol, a rough finish will become apparent.

The left side of the air cylinder was stamped as mentioned previously but the right side did not carry any trade stampings at all as another cost saving measure. The stock sides were now black (as on the older Mark 1 pistols). A larger E (than the earlier blued version) denoting this series was almost hidden under the left stock side. Although the body of the pistol was covered in sunconite, the barrel, linkage and sights were traditionally blued. The trigger guard was fitted prior to spraying whilst the sear, trigger and their respective pins were added afterwards. This gave the impression of a three pinned action as the two trigger guard pins were coated.

A change in packaging occurred upon introduction of this version. After the supply of the previous cream coloured labelled boxes ran out, a corrugated carton which was hinged at one end and had two ears securing the lid at the other was used. The lid carried a picture of a youth with a 'Beatle' haircut shooting the Webley air pistol on an orange background. The top of the flap holding the securing ears was marked with the word "PREMIER" and also stated the calibre. A card handle at the top could be used for displaying the box on a retailers stand or for carrying the boxed pistol. The instructions were still pasted to the inside of the lid and a separate sheet was included in the box, which carried an exploded diagram of the pistol.

On later boxed sets, a separate loose sheet was included which had the component parts list on one side and instructions for use and maintenance (as pasted to the lid of previous versions) on the reverse. An example of this sheet was coded C48/74. The 74 was the year of production and the sheet belonged to a later "Transitional" model dealt with later. The exploded diagram on the components list, incidentally is of a blued "5" pinned all steel Premier. Webley presumably did not think it economical to update their printing blocks at the time and this economy can also be encountered on pre war literature.

F SERIES – BLUED - 1971 – 1973

This series seems to be a bit of an anomaly. Four pistols were examined and at least one of these dates from 1972 according to the date stamp under the brown left

Premier E series

Sources from the Birmingham gun trade indicate the F series pistols were sold at the same time as the sunconite coated E series pistols, the F stamp denoting a blued finish. The reason for the sunconite pistols was, as previously mentioned an economical one as this finish did not require polishing beforehand and file marks could be hidden under the baked on finish. However, Webley noted that some of the pistols were still suitably well finished for bluing and these were set aside by an inspector who sorted them into batches suitable for coating with sunconite and others for bluing.

Gordon Bruce suggests in his book, Webley Air Pistols that another reason for the marking of blued stock side. Another had no date stamp under its black stock side. The latter pistol was blued in the traditional manner and otherwise as the previous stamped E series. The third pistol had black stock sides and standard stampings as for previous models. I have been unable to determine whether a date was stamped under the left stock side as I noted the pistol on a dealers stall at a busy arms fair. The pistol was complete in its origonal carton, with the cream coloured label, which would suggest early seventies. The final F series Premier was advertised by Dennis Hiller in November 1998 with brown grips and a date stamp of 1973. The F, denoting this series was stamped in the usual place but smaller than previous code letters.
barrels have been noted. The earliest being identical to previous versions; whilst the later style had a barrel shroud near the muzzle, rather like the later Tempest.

The right side of the air cylinder was recessed for a sticker which read “WEBLEY & SCOTT LTD PREMIER MK2 MADE IN ENGLAND” upon three lines. Stock sides, like for the previous variant, were coloured black and the trigger guard was now part of the moulding and fixed to the frame. Three pins secured the trigger and sear, which seem to have been added after finishing as the pins were not laquered over. The stirrup catch return spring was moved from its previous location on the right side of the breach assembly to a bulbous housing on the left side of the air cylinder. The corrugated carton was identical to the previous style other than the top flap was marked PREMIER MK2 along with the calibre. All boxed Premier Mk 2 pistols examined came in orange coloured boxes, whilst contemporary Junior Mk 2 pistols have been seen in primarily green coloured boxes. A few Juliors have been encountered in orange boxes and it has been suggested the difference in colours was originally intended to signify green for .177 and orange for .22. However, the considerable number of near mint sets of Premiers encountered with orange boxes in both calibres and the existence of boxed Junior Mk 2s in both colours suggests this never happened to any great degree. A card outer sleeve slipped over the carton and carried an updated photograph of the MK2 Premier along with other information stating this was now the MK2 model. The use of this sleeve saved Webley having to redesign the Premier’s box again and it now seems to be quite rare as it is easily removed and therefore lost.

An instruction and spares list coloured green and white was included in the box along with a sample envelope of Webley pellets in the correct calibre for the pistol, a guarantee card, sample Webley card target and sticker warning owners not to fire the pistol without a pellet in the barrel and to make sure the barrel is properly secured prior to firing. The following table lists the stampings found on pistols examined during the course of this work and is provided as an example and not a definitive chronological list:

<table>
<thead>
<tr>
<th>Calibre</th>
<th>Colour</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.177</td>
<td>Green</td>
<td>Green box</td>
</tr>
<tr>
<td>.22</td>
<td>Orange</td>
<td>Orange box</td>
</tr>
</tbody>
</table>

**VITAL STATISTICS AND PERFORMANCE**

A Parker Hale catalogue dated September 1966 quotes a price for a Premier as £10 13/3. Post decimalisation, a July 1971 Webley catalogue gives a price of £13.86 + £2.55 purchase tax whilst a Webley advert for the Premier MK2 in the July 1976 issue of Guns Review magazine quotes £22.77 including VAT.

Webley catalogues and leaflets of the late 1960s and early 1970s quote the following statistics:

- **Weight:** 3.7oz
- **Length Overall:** 8 ½”
- **Length of barrel:** 6 ½”
- **Velocity figures were advertised as 350 FPS for the .177 and 310 FPS for the .22 pistols during the same period. Accuracy was advertised as being capable of grouping within 1 inch at 30 feet. Accuracy tests were carried out by myself on a randomly selected Premier from my collection (F series) and a 5 shot group at 6 Yards measured just under an inch, centre to centre. The shots were...
things we take for granted now, like the modern lubes we use in our vintage guns were once exotic imports brought in by those who had the foresight to anticipate their potential. DAVID HUGHES was one such visionary, as well as being the author of the airgun guides with the blue covers, familiar to many shooters who have investigated how their HW35 or FWB Sport can be serviced at home.

I grew up during the 1940s and ‘50s and, like most youngsters, wanted an air rifle. There wasn’t much choice at the time and what was available was in toy shops [deservedly so in many cases]. I knew about the Webley Mk3, of course, and the BSA Club and Airsport but these were beyond my reach, even if I knew where to buy one. I also knew about the fairground air rifles (mostly pre-war Diana 27’s and Haenel/Schmeisser bolt actions from the same era). Eventually it was settled on an Original model 16, made by Diana, it was rather small, had a brass inset smooth bore barrel, and fed ‘Cat’ slugs. For what it’s worth, the only other available ammunition was expensive Webley & Scott and the IMI ‘Wasp’ pellets, and of course, darts. With hindsight, I guess the BSA Cadet and Cadet-Major were around but I never saw one for sale and I hunted high and low for my first air rifle.

A few years later I managed to save enough for a BSA ‘Meteor’ and one of those scopes with the cross hairs that moved up and down and side to side. I had a lot of fun with it and ‘Wasp’ pellets—which I could now afford. Much later on, I was in the City and saw a Walther LP53 for sale, second-hand and in its case with the wooden cocking aid with the metal insert for the barrel end and a barrel weight. I had a lot of fun with that pistol and wish I had one these days. Sadly, the few I’ve seen for sale were in a poor state but affordable or vice versa.

I couldn’t see the point of the barrel weight and so wrote to Carl Walther in Germany. Due to a slight misunderstanding, they wrote back and said that it was for one pound including postage to me in England. It started me thinking as I’d been told it cost a lot more.

Like most of us in those days I’d found and read Wesley’s book and Smith’s book but wondered where I could get some of these marvellous air weapons Smith wrote about. So I started digging.
By 1968 we were selling RWS, H&N, Bimoco, the Japanese diabolo and Lion jet pellets, and Wasp ammo in all grades and calibres from the small 4.4mm ball-shot to quarter inch darts. Since all these were new to the country I went to a bit of trouble and tried to make the catalogue a serious one, quoting weights, sizes and so on, with the variations from the norm quantified as a percentage. In those days, a tin of 500 diabolo .25 pellets would cost you £1-15 (£1.75). H&N’s Match grade pellets in the foam trays were 10/8 per refill pack £1.50. The refill packs were in a cardboard box and fitted into the posher tin H&N used for the individually packed ammo.

This seemed to pay off; word must have got around and by August 1968 we’d expanded a lot and were publishing a bigger catalogue with Anschutz, the Feinwerkbau model 190 rifle and 65 pistol in it, the Original range, the HW 55s, and so on. (The HW 55T was pennies under £40 in those days). Alas, the usual financial crisis then burst on us in late ‘68 and no end of import restriction hit us, although I can still remember our first brush with the Customs people in London when they very kindly smiled and made a silly mistake and let some rifles through unhampered by a 50% deposit needed. As we were importing them in half dozens it saved us for a while and new plans were then made for the 1969 season.

We survived this as the bigger agents in the UK were very helpful and we got one of two special deals when, for example, old stock had to be cleared. Needless to say, it didn’t last long as the rules defining ‘Dangerous Air Weapons’ came into effect in May 1969. The good news was that the makers then started publishing performance figures for the air guns, saving me a lot of work. So we went back at square one again, but now had a lot of clubs interested in the more serious target air rifles and pistols and that side of the firm expanded.

We also started selling the more up-to-date lubricants that were gradually being mentioned in American magazines and so on. Even though we were a small, unknown firm in a foreign country we got a lot of cooperation from the makers of Dr Slide in America and started selling it here.

(We wouldn’t be able to these days because of the postal regulations.) I also spoke to Dow Canning in the UK and got a lot of information from them about silicone oils and making unique formulations up. A specialised lubricant maker, Rocot, was a great help to us, recommending a high performance molybdenum disulphide grease that was exactly what was wanted and, more important from my point of view, came in a handy 2oz or 50g tube.”

So in the late ’60s we were able to offer a wide range of modern lubricants: silicone oils and greases, and molybdenum disulphide greases and a fine base. It seems to have inspired others to follow us...

Because of all the messing around caused by the import restrictions, I had to write a short supplement to the mail order catalogue saying what was happening and soften the blow with a bit of good news like the new Feinwerkbau 300 arming and so on. I sold the last FW300T for £103. I expanded the idea a month or two later and we then published a regular supplement to the catalogue with all the news and so on in it.

We even offered a subscription to it and I was amazed by the response. It started me thinking and I expanded the catalogue into a serious sort of year book and charged 10/- for it (50p), which was unheard of in those days. We softened the blow again, by giving a 50p voucher with the catalogue that could be used with the first order. In other words, people who collected catalogues (there’s lots of them about) paid for them and customers didn’t. Until you run a shop you’ve no idea how many time wasters these are in this world. Anyway, this seemed the fairest solution to the problem and it seemed we were right.

By then the range included almost every serious air rifle that Weihrauch made, from the HW25 to the HW5T, with all the stock variations, even left handed ones. We sold and recommended but could never get enough of the East German Haenel 302 at just under ten pounds. And the full range of BSFs, Feinwerkbau, Walther, Anschutz (target and fairground ones), and Original air rifles and pistols. Even oddities like the Original 25D, that had the ball bearing trigger fitted and was very popular with the members of the Prep. Schools Rifle Association. (The PSRA were also useful to me because I’d get freebies in small quantities and could pass them on to them, without having to ration them.)

Some of you may have seen and used the 25D at the NARPA meetings at Hinckley in the ’70s as it was a popular rifle. Because we were on good terms with most of the wholesalers and factories in Germany we often got things soon after they were announced, even pre-production models, and so we were able to check them over and put them in the catalogue quickly, a good example being the Walther LP3 which we were selling first, long before everyone else. We even had the wooden grips for most air pistols in stock most of the time, even left handed ones — not that we sold many. And then there was the Bushnell 4 x 20 telescope sight, the full range of Nikko ones and the special mounts made for individual air rifles, ballistic pendulums and so on.

And that led to what most people remember this old git for, because
in 1971 or 1972 I started to think seriously about writing a handbook for the more popular air rifles starting with the Weihrauch HW 35 series. I spent five months over the summer of 1972, writing and rewriting and, to my amazement, by late ’72 we had to publish the second edition. I followed it with a handbook in 1973 for the Original series of sporting air rifles; the models 27, 35 and 50. This involved designing and publishing instructions for making a spring compressor from easily available components (a sash clamp modified with a part from a ‘G’ clamp and a ball race).)

In 1974 I started writing a smaller handbook for the Haenel 303s, which were a very pleasant and well-made, if slightly over-hyped rifle made from East Germany. Alas, the model changed just as I’d finished the book and the company changed hands, and that was that.

That would have been the end of matters but four or five years later I was asked by Optima Leisure if I could produce a version of the HW35 handbook for them, and one was duly published in 1979, went into another version in 1981, and then the final version in 1984, with a extra few pages in it to cover the HW 80. In 1980 I also wrote and had printed for them the handbook for the sporting Fenwerkbaus 124 and 127.

From time to time we’d have problems with people copying and republishing what I’d written, which was a minor irritant. One so-and-so even went as far as to illustrate his book with all the pictures of ammunition from our catalogue. Those pictures had cost me a fortune to get done by a technical illustrator and there they were in someone else’s book and not a word of apology or acknowledgement. Then some years later I realised my books were being scanned and put online; so I went online to try and track them down and sort out the publishers of these pirated copies. And that was how I discovered the various airgun forums and came to contribute to them from time to time. I’d like to say I’m still shooting but I had an operation on my right hand a year or so ago and may need another soon, and it makes things difficult. So I sold the final air rifle to buy a small shop in the corner of the barber’s shop, for instance. And when the needle broke, the wicked shopkeepers were telling their customers to write

to us to get it sorted out, as if we were the suppliers. In other words, they were taking the big money and expecting us to do the after-sales work. That was one of several фирменных стрелковых патронов. I decided to close the firm down while I was winning.

I then started work on a handbook for the Haenel 303s, which were being sold in large quantities. The bigger agencies were changing hands, expanding the range of stuff they sold, and stopping us getting items direct from Germany. Worse still, they were rationalising the range in some ways and cutting back on what they sold, especially spare parts. In addition the marketing office had proposed, in a Green Paper, a ban on mail order sales, which would have the effect of shutting us down completely since local sales were few and far between.

Soon we were selling mostly the smaller items and losing out on the larger sales, which were needed to keep us going. I can remember getting my hair cut one day and seeing a small rack of air rifles in the corner of the barber’s shop, for instance. And when the needle broke, the wicked shopkeepers were telling their customers to write

but just had to abandon things as the market was changing dramatically. When we started it was great fun and hard work running the firm. We knew the people we dealt with in Germany and the UK and got a great service from them—and often even postcards when they went on holiday. So we could phone them or write to them and get almost anything we needed.

But a lot of small shops had decided to jump on the bandwagon. The bigger agencies were changing hands, expanding the range of stuff they sold, and stopping us getting items direct from Germany. Worse still, they were rationalising the range in some ways and cutting back on what they sold, especially spare parts. In addition the marketing office had proposed, in a Green Paper, a ban on mail order sales, which would have the effect of shutting us down completely since local sales were few and far between.

From time to time we’d have problems with people copying and republishing what I’d written, which was a minor irritant. One so-and-so even went as far as to illustrate his book with all the pictures of ammunition from our catalogue. Those pictures had cost me a fortune to get done by a technical illustrator and there they were in someone else’s book and not a word of apology or acknowledgement. Then some years later I realised my books were being scanned and put online; so I went online to try and track them down and sort out the publishers of these pirated copies. And that was how I discovered the various airgun forums and came to contribute to them from time to time. I’d like to say I’m still shooting but I had an operation on my right hand a year or so ago and may need another soon, and it makes things difficult. So I sold the final air rifle to buy a small shop in the corner of the barber’s shop, for instance. And when the needle broke, the wicked shopkeepers were telling their customers to write

© D R Hughes

Many airguns are sold at auction – in fact it’s one of the main ways they find their way from private individuals and collections onto the market. PHIL RUSSELL explains the best way to buy without being caught out by the many pitfalls.

Auctions can be good places to obtain collectables, there is also a certain level of excitement present at the thought of picking up an absolute gem for little money. But beware – if you are not careful your purchase may work out far more expensive than you expected. When I started visiting auctions I was a raw beginner but, as the saying goes, you learn by experience. So here are a few tips on avoiding a costly mistake.

• Examine the auction catalogue (online versions are common) and list the items you are interested in. Now find out what you can about them, including current prices, Google search or search airgun forums. A little knowledge is worth a lot. Good catalogues may give serial numbers for guns. Again, a search on the ‘net can sometimes relate these to year of manufacture and model. Do your homework.

• Wherever possible, view the items personally or get a knowledgeable person to do so for you. Viewing is usually the day before the auction and shortly before the auction starts on the actual day. Buying online without seeing your intended purchase could be dangerous, as many faults are not visible in an auction catalogue photo. Treat auctioneers’ descriptions with care as they are rarely very knowledgeable about what they sell.

• There are several ways to bid at an auction: in person in the auction room; by leaving a bid with the auctioneer giving your maximum bid (the auctioneer bids on your behalf), by telephone, and online via the internet. Not all auctions are geared up for online bidding.

Remember that you have to register with the auction house in order to bid. If you are attending in person, this involves filling in a form at the auction and being given your bidder number. There may well be an entrance fee to attend the auction, usually in the form of having to buy the catalogue. If you are a regular attendee and buyer at such an auction, ask to be put on their mailing list. You may well then receive the catalogue free.

If bidding via the internet or telephone then you also need to register. The online auction details will tell you how. If you have viewed an item at an auction and it is late in the auction, and you do not wish to hang around from the beginning, remember that some auctioneers can move at up to 180 lots an hour, although a more reasonable estimate is 120. Ask the auction staff for advice on timing.

• If you cannot collect your purchase from the auction house, check the policy on posting and packing. Some auctions can charge a lot for the service, and some will not offer the service at all. Many will only
post to an RFD, so you may need to arrange this with your local RFD and pay his fees as well (typically £25).

- Remember that on top of the sale hammer price you will usually have to pay a buyer's premium plus VAT on the premium. This can add around 20% to the hammer price. If you pay by credit card this will often cost you an extra 3%. Buying via the internet can attract a similar charge.

Remember that you cannot test fire the item at the auction so will have no idea of its performance or its internal condition. You can, however, carry out a few rudimentary checks to help you decide on its condition and hence value. This is my general check list:

- Release the barrel or cocking lever. Be prepared for the barrel or cocking arm to fall away with no resistance, indicating that either the rifle has been cocked or that the resistance, indicating that either the lever. Be prepared for the barrel or cocking arm to return to the original position without leaving evidence.

- Check for play in the breech jaws of a anti-bear trap mechanism, call a member of the auction staff and inform them. With their permission the only solution may be a dry fire with the rifle pointing down. Some say any potential harm can be avoided by pressing the muzzle firmly against a carpet and then dry firing. Indeed I have seen this done at auctions and arms fairs. Jim Tyler's articles in Airgun World indicate that dry firing may not be the 'impending disaster' we all thought, but I still prefer not to do it. Please never just replace a cocked arm in the rack or on the table; it is asking for trouble and could give a person a nasty fright if someone just picked it up and pulled the trigger. I have seen too many rifles, particularly those fitted with scopes, plucked from the rack and waved around with gay abandon by people with their trigger finger on the trigger while they peer through the scope. It worries me.

- Are all the bolts, screws, pins present? Do any look obviously wrong? Non-original bolts are not necessarily 'a stopper' as they can wear areas around the cocking slot. Non-original screws can be the absence of foresight mountings (bolt holes, dovetails, a stepped muzzle for a slip on sight) or a muzzle with no crown – just a crude cut end.

- Are the open sights present? They can be expensive to replace if indeed they are available at all.

- Check cocking linkages for wear and sloppiness. Pivot pins can usually be replaced quite cheaply but worn pin holes may necessitate new cocking linkage parts.

- Break the action (do not cock) and look into the cocking lever slot. A dry spring with signs of rust could indicate internal problems. An action swelling in oil could indicate an attempt to provide cosmetic surgery, although I have known guns from collections to be stored in such a state and it has certainly kept them rust free. On the other hand, a clean interior and a greased mainspring may indicate a well cared for rifle. Check for play in the breech jaws of a break barrel rifle. Can the barrel unit be jiggled from side to side, front and back or up and down within the jaws? Excess play side to side can usually be cured by shims, or tightening the breech jaws, particularly if they are fitted with an adjustable bolt, but up and down play, or play when you pull and push on the muzzle, could indicate wear in the pivot pin which may need replacing. For tap loaders, check the tap for looseness and play. Repairs leaky taps can be difficult and expensive.

- Look for signs of dismantling damage: wise, or mole grip, or Stilson marks on the action are not a good sign. Pins with damaged ends and damage to the action in the area of the pin head indicate careless removal or a failed attempt at removal.

- Examine the stock for damage and splits, particularly around the pistol grip area and extending into the butt. Check the underside of the stock for splits starting in the area of the cocking slot; particularly at risk in some break barrel models. Unless you feel competent in repairing stocks, replace the rifle in the rack and forget it.

- Are the open sights present? They can be expensive to replace if indeed they are available at all.

- Examine the barrel. By looking along the barrel from all sides with the action closed and then down the bore with the action just broken (not cocked) it can be possible to determine if the barrel is bent. If it is, walk away unless you are confident of getting it straightened. Look for a blocked or rusty barrel. Has the muzzle been tampered with? Has the barrel been shortened? If you do not know the original barrel length, tell-tale signs can be the absence of foresight mountings (bolt holes, dovetails, a stepped muzzle for a slip on sight) or a muzzle with no crown – just a crude cut end.

- Check for play in the breech jaws of a break barrel rifle. Can the barrel unit be jiggled from side to side, front and back or up and down within the jaws? Excess play side to side can usually be cured by shims, or tightening the breech jaws, particularly if they are fitted with an adjustable bolt, but up and down play, or play when you pull and push on the muzzle, could indicate wear in the pivot pin which may need replacing. For tap loaders, check the tap for looseness and play. Repairs leaky taps can be difficult and expensive.

- Check the tap for looseness and play. Noises could be from the mainspring being broken or grinding against the piston sides. Noises could also come from the cocking lever arm as it pushes the piston back; look for wear areas around the cocking slot. Beware raised grooves that could indicate worn cocking links or, worse, a damaged slot in the cylinder. Continue cocking to engage the trigger sears. Listen for them engaging with a nice ‘click’. While keeping a firm grip on the barrel/cocking lever, relax pressure a little to allow the sears to take the strain. If they fail, this could indicate a major problem or maybe the trigger is seriously out of adjustment. This is where experience of the item you are looking at is helpful. If in doubt, slowly let the barrel or cocking arm return to rest against the spring pressure and walk away. If the sears do hold, keep a firm grip on the barrel and de-cock it. Do not...
I was a keen small- and full-bore pistol shooter up until 1995 when the government imposed the breech loading pistol ban which meant having in my much cherished pistols. I continued shooting reproduction 1860s muzzle loading revolvers at our outdoor range, but tended something to shoot at the indoor range especially during the winter months. The first air pistol I acquired was an Italian FAS 604 single stroke pneumatic which satisfied my immediate precision needs, but lacked the “live” feeling experienced when shooting my firearms. Shortly afterwards, while attending the “Phoenix” Arms Fair at Bisley I was tempted to buy a 1960s Webley “Premier” air pistol which not only brought back memories of my youth but, being a Springer, might just provide something similar to firing a firearm.

This was the start of what became a very enjoyable and sometimes all consuming passion for collecting vintage and classic air pistols and air rifles. I initially confined myself to Webley and BSA products, but this soon expanded to include anything of British manufacture dating from around 1905 right up to the mid 1960s when the quality of anything marked “Made in Britain” reduced significantly.

I concentrated on pistols as they are easier to store and over a period of years established quite a nice collection of British made air pistols including examples of the major Webley variants and other contemporary models such as “The Warrior”, “Abas Major”, “Titan”, “Lincoln”; “Highest Possible” etc. There remained however, four pistols which I thought were out of my reach due to a combination of extreme rarity and consequent high prices. They were in order of scarcity, Anson’s “Star”, Westley Richards “Highest Possible Concentric”, “Parker Precision (Crank Wound) Pistol” and Cogswell & Harrison “Certus”. All of these pistols are pre-war and were made in very small numbers, less than 100 in the case of the first two pistols. The likelihood of coming across any of these pistols in reasonable condition was extremely low and the associated price tag in excess of £1,000 each, essentially ruled them out, or so I thought at the time.

Fate stepped in just two years ago when I noticed a very nice “Anson’s Star” in a cabinet during a casual visit to my local dealer. He normally only sells modern air guns but does sometimes have the odd Webley or Diana, probably taken in part exchange. I tentatively enquired about the cost of the Star and was told as it wasn’t their normal line I could have it for £350. As soon as I regained the power of speech, I eagerly agreed to purchase the pistol with a £10 discount for cash. Having found one of my desired final four pistols, I felt incentivised to set about tracking down the remaining three.

Within what seemed a very short time, I managed to buy good examples of both the “Certus” again bought at Bisley and the “Parker” which I acquired from a military antiques dealer in Derbyshire. I had to pay more realistic prices for both of these pistols, but this was offset to some extent by the bargain price of the first pistol. This left just the Westley Richards “Concentric” which was finally obtained in 2012 at auction, and my hand was already poised to indicate one more bid after his seemingly inevitable bid of £1,300. I was consequently quite well prepared and applied to compete with mounting excitement. Finally it appeared on the screen with an opening bid of £800, which I quickly rose to £1,000 which left just one other bidder apart from myself to compete for the pistol. My bid of £1,200 swiftly followed his of £1,100 and my hand was already poised to indicate one more bid after his seemingly inevitable bid of £1,300. It’s easy to see how the excitement can lead bids far in excess of originally intended limits. However, in this case the £1,300 bid never materialised and the lot was mine at the lower estimate of £1,200, well within my budget. I can only describe my feelings as similar to having just

A lot to be desired

BRIAN UPRICHARD conveys some of the nervousness and excitement of a collector whose dream airgun comes up for auction and he goes all out to acquire it. There’s just the matter of the other bidders to contend with...
I have bought collectable air guns from many sources, but the auction experience has been by far the most enjoyable, being a bit more of an adventure rather than just answering an advert or visiting a dealer etc.

I also enjoyed testing the pistol and although the “Concentric” was surprisingly nice to shoot, it’s easy to see how it was completely eclipsed by the first Webley “Mk1” which was the predecessor the “Premier” and also appeared in 1924, only slightly after the introduction of the “Concentric”.

This is an airgun story that is too good not to tell. In 1997 I read Airgun World from the UK and Tom Gaylord’s Airgun Letter from the US. AGW had prices in British pounds which I couldn’t afford even if they had been in US dollars. Tom kept us informed on where the best deals could be found in US. In the Airgun Letter I read that Battlefield Firearms and Relics in Georgia was selling Haenel 311 air rifles at ‘fire sale’ prices. I still have my Haenel and I shoot it in monthly bell target matches when the Idaho winters drive us indoors.

These guns were well used, 10 meter target rifles. They had been in storage for years, and they came with sights. I was interested because, too often, sights become separated from their rifles. On
the telephone, I spoke with Mr. Ed Puhala, a man with a sonorous voice and a southern accent you could spread on buckwheat cakes. “Yes, we still have rifles,” he said. “You know,” he said, “they’re like bottles of wine at a wedding. The best ones go first.” “How many do you have left?” I asked. “Not a lot,” he said. Well-used might be an overestimate, but the price was $74 and $12 for a set of inserts for the front sight. “I’ll take one,” I said.

When the package finally arrived, it looked like every club shooter in German Democratic Republic had had their sweaty hands on my rifle. The stock had oil stains and traces of orange varnish. The ragged orange varnish and the sweat stained wood had to go. I stripped the finish and re-stained the wood to a more wood-like color.

The Haenel 311 was made in the 1970s, but its piston and cocking arm were from the 1930s. Designed by Hugo Schmeisser for the Haenel 33, it duplicates the motions of cocking and loading a bolt action firearm. The rifle’s cocking lever extends vertically above the piston, but it is articulated and folds down out to the right side when not in use. It is not a bolt like a SMLE or a Mauser, but everyone uses that terminology.

The rifle cocks by raising the bolt. When it is straight up, the automatic safety is applied. Drawing the lever toward the rear, forces the piston back to engage the trigger. The lever pivots well below the cylinder giving the user some leverage against the piston spring. The force needed to cock this air gun is too much for many young shooters. When I demonstrate the 311 to juniors, I often have to cock the rifle so the youngsters can make it through five shots.

Besides bolt action cocking, the 311 also features tap loading and a leather pistol seal. These features are distinct from current day air rifles and give the 311 its unique personality. Tap loading air guns are uncommon in America. I have learned to leave the tap closed prior to cocking. The only pathway for air into the cylinder is down the barrel. Cocking the gun with the tap open for loading results in a strangling sound as air seeps through every gap in the rifle’s tolerances.

Loading and firing the Haenel 311 is a complex series of steps: raise the bolt to vertical, draw back the piston, open the tap, drop in a pellet nose first, and close the tap. Then return the bolt to the forward and folded down position. Now, the safety is pushed forward and the shot can be taken.

Soldiers in the American Civil War reloaded their muskets with only a few more steps. Like those muskets, the 311 produces a smoke cloud with each shot. The piston’s leather washers need frequent oiling to maintain their seal and to prevent burning the leather. You must oil it up until you see a wisp of smoke. Without the oil you risk not only damage but loss of accuracy as well.

All’s right with the 311 when there is the faint smell of combustion with each shot. The Haenel 311 teaches us what counts in a target rifle. The stock must be ample to support a heads-up offhand position. The cheek rest must align the eye with the sights. The trigger is two-stage, and like other springers in its power class the 311 is a very mild shooter. The rear sight has an adjustable aperture. These things are necessary on a good target rifle and the Haenel has them.

After refinishing my Haenel, I set it aside until the rifle found its place shooting bell target, where it has rung the bell for the last six years.
THE ABAS MAJOR

The Abas Major air pistol (Fig. 12) was developed by gunmakers A.A. Brown and Sons in the early 1940s as a short term venture to generate new business after the ravages of World War 2. As we have seen, the company had already been involved in assembling a small number of Anson Star pistols from parts left over in the estate of Edwin Anson, and no doubt it was this that gave the brothers Sidney and Albert Brown the idea of producing their own air pistol. The new pistol utilised the concentric principle of the Star, but a revolutionary new cocking system was developed which used the trigger guard as an underlever. Also, for the first time in a pistol, a tap loading system was used, giving a near perfect air seal between cylinder and breech. The pistol design (Fig. 13) was patented in 1946 and came onto the market in 1947. However, it was not successful as the Webley range, and only about 1900 pistols were produced by the time it was discontinued in about 1949. By then demand for sporting firearms had returned to its pre-war level, and A.A. Brown and Sons were able to concentrate on their speciality of humane and no doubt it was this that gave the brothers Sidney and Albert Brown the idea of producing their own air pistol. The new pistol utilised the concentric principle of the Star, but a revolutionary new cocking system was developed which used the trigger guard as an underlever. Also, for the first time in a pistol, a tap loading system was used, giving a near perfect air seal between cylinder and breech. The pistol design (Fig. 13) was patented in 1946 and came onto the market in 1947. However, it was not successful as the Webley range, and only about 1900 pistols were produced by the time it was discontinued in about 1949. By then demand for sporting firearms had returned to its pre-war level, and A.A. Brown and Sons were able to concentrate on their speciality of humane

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Airgun Collector

Fig. 16. The Ackvoke pistol

Although they are not as common as comparable Webley Seniors and Mark 1's of the same period.

THE THUNDERBOLT JUNIOR OR BIG CHIEF

The golden age of concentric air pistols was clearly the mid-1940's, yet another company felt inspired to introduce a new model onto the market in that period. Frank Clarke (Lead Products) Ltd., Birmingham. This company had evolved from Frank Clarke's gunmaking business after the 1938, and this venture back into air pistols was no doubt driven by the difficult economic times in the immediate post-war period. The designer was W. Walker, and like Acctes and Shelvoke he drew heavily on the pre-war Tell 2 period. The designer was W. Walker, and like Acctes and Shelvoke he drew heavily on the pre-war Tell 2 period.

Interestingly two brand names were used in this project. The one sold in the UK was called the "Thunderbolt junior" pistol, and the extremely rare second version was called the "Big Chief" (http://www.cinedux.com/produsit-airguns.php), which seems to have been mainly exported outside the UK. I know of only two documented examples of the Big Chief at the present time, both of which were located in New Zealand. As the trademark "Big Chief" was exclusive to Produsit it is probable that most of the Big Chief pistols were exported outside the U.K. by Produsit, leaving the "Frank Clarke (Lead Products)" Thunderbolt version to dominate the home market. Manufacture of the Thunderbolt Junior took place between 1947 and about 1949, or possibly into the very early 1950's, and approximately 8000 were made in total.

The "Thunderbolt Junior" version itself came in a cardboard box with this name on the lid, and the gun had brown plastic grips with "Thunderbolt Junior" molded into them. In contrast, the "Big Chief" had smooth wood grips with no markings on them. The Thunderbolt breech closure plate is impressed there with PROD. PAT. 137432, whereas that of the "Big Chief" is stamped with the name "BIG CHIEF" (Fig. 19). The only other difference between the two versions is that the Big Chief has a more rounded muzzle plug than the Thunderbolt Junior. No box for the Big Chief has yet been documented.

The pistol itself is reasonably well made but when compared against the Tell 2, of which it is essentially a larger copy, the extra power resulting from the increased size is disappointing. In trials by the author, the Thunderbolt Junior turned in velocities using wasted pellets averaging about 250 f.p.s. in comparison to 200 f.p.s. for the Tell 2. The most disappointing feature of the Thunderbolt Junior is the trigger which can be painful to use. The trigger shroud extends too far forward, and given the harsh pull needed to fire the gun, this can cut into the trigger finger quite uncomfortably on firing. These negative points apart, the pistol is well finished and eminently collectable as a rare 1940's British-made air pistol.

HY-SCORE SPORTER

The American Hy-Score pistols ceased production in the 1970's and the Hy-Score company itself went into liquidation in 1981. In 1989 the English businessman Richard Marriot-Smith purchased the engineering drawings, machinery and parts for the Hy-Score pistol from the long abandoned site and shipped them to the UK. The Phoenix Arms Company in Sandwich, Kent then began production of a substantially modified form of the stub-nosed, single shot Hy-Score 803 pistol, introducing the new successor in 1989 as the Hy-Score Sporter. When first introduced the gun was only available with a blued finish, and had a brown grip and had the same type of metal sight as used in the American models, adjustable for elevation only. The gun was soon modified as the "Mark II" version, (Fig. 20) then having a fully adjustable plastic rear sight, and available with a blued finish and brown grip, or chrome plated with white grip. A 6-shot repeater or "Autoloder" version was introduced September 1991 based on the original Laszlo patent magazine. Pistols were rifled and available in 0.177 and 0.22 calibre.

Structurally the guns differed mainly from the 1950's American models in their length, being much shorter than the standard Hy-Score 800 Target model, but not as short as the Models 803 and 804 (the American Hy-Scores are discussed in Part 2 of this series). In addition, the cylinder and barrel housing formed a continuous unit, with the last few inches presenting a squared profile. The barrel itself was recessed some 2cm from the muzzle end, the recess being threaded to receive a custom-made silencer. Although a relatively recent pistol, the Sporter has already achieved cult collectability status thanks to its short production run, and is now considered relatively rare. It is particularly sought after by U.S. collectors because of the American Hy-Score connection, and as it was never exported to the USA (because it lacked a safety catch) it is particularly rare in that country. Cased examples complete with silencer, spare barrel, barrel changing key and pellets are the most desirable.

AND FINALLY, THE ONE THAT NEVER WAS

It would be fitting to finish this account with a brief discussion of a unique concentric air pistol design that was patented well before Anson's first concentric pistol but which never made it into production. This was the G. Norman / B.S.A. design first patented in 1911, the principles of which were outlined at the beginning of this article. Although the system does not strictly fit into the "Anson Concentrics" theme of this article, it is quite possible, given that Anson and BSA were part of the same Birmingham airgun community in the early 1900's, that Anson was inspired by the Norman patent to make his own investigations into concentric air pistols.

The patent drawings (Fig. 21) are quite complex to follow and as no known prototype exists it was difficult to visualize how the pistol might have looked or even to decide if it was a practical design or not. However, thanks to the efforts of that highly skilled re-creator of past airgun designs, Mac Evans, we can now see a fully functioning prototype in action. He was able to create from the patent drawings three working examples, one of which (serial number 3) is pictured in Fig. 22.

Fig. 17. Patent drawings for the Thunderbolt Junior

Fig. 18. The Thunderbolt Junior

Fig. 19. Comparison of cylinder end markings on the Thunderbolt Jr and Big Chief (courtesy of Trevor Adams)

Fig. 20. The single shot Hy-Score Sporter, with plastic sight

Fig. 21. Patent drawing for the 1911 Norman/BSA air pistol
The pistol has a completely unique cocking principle, which can be understood by looking at Fig. 3 and Figs. 22-24. With the pistol in the uncocked position (Fig. 22) pressing the small button on the left-hand grip releases the grip from its locked position, and the grip can be swung almost 90° rearwards to the position shown in Fig. 23. At this point the sliding air cylinder engages with a hook on the end of a flexible steel ribbon contained within the grip. As the grip is then swung forwards to the position shown in Fig. 24, the air cylinder is pulled rearwards, the position shown in Fig. 24 the grip is then swung forwards to position where it automatically locks in place, as in Fig. 22. The gun is then fully cocked. It only then remains to insert a pellet into the barrel – a not inconsiderable problem. Norman solved this by inserting a small tap into the barrel breech – small enough for the moving air cylinder to ride over it during the cocking and firing strokes. The aperture cut into the side of the cylinder housing and also into the side of the sliding cylinder exposes the tap once the air cylinder is locked forward in the cocked position, as can be seen in Fig. 24. The tap lever can be thumbed upwards allowing a pellet to be inserted into a hole located on top of the cylinder, and closing the tap places the pellet in line with barrel. It would of course be vital to ensure that the tap was closed before firing, otherwise the cylinder moving rapidly forwards would shear off the tap handle.

The design has its good points and bad points. On the positive side, the button release is extremely pleasant to use, and the large angle of swing of the grip makes cocking very easy. On the downside, the metal ribbon that has to pull against the mainspring pressure is fragile and prone to breakage, but most damming of all, for its size the power that can be developed is very low. This last disadvantage is due to the fact that compression chamber is in line with the barrel rather than surrounding it, and so the design offers none of the size reduction advantages that the Arson system does.

Replacing the steel ribbon with strong piano wire solves the breakage problem. Tests by the author strongly suggest that even if fully optimized this design would only achieve power levels on a par with a good quality push-barrel pistol.

© John Griffiths

Royal British Legion Poppy Shield, 6th October 2013

The first RBL Poppy Shield competition will be held in the grounds of the Greyhound Airgun Club, Longford near Coventry, a short distance from Junction 3 of the M6 motorway. Our main aims are to raise awareness of the Royal British Legion, the oldest military charity in the UK, and the important work it still undertakes on a daily basis for serving soldiers, ex-soldiers, and their families from conflicts going back to World War 2. We also hope to raise much needed funds to enable us to carry on the good work that gives welcome aid to war veterans - whether aged 92 or 22.

We have organised what we hope is a fairly unique team event based on the popular Hunter Field Target scenario of a 30-shot course with animal shaped string reset silhouette knock down targets from 8 - 45 yards. There will also be a 6 yard bell target range and an air pistol side shoot, both under cover, and all with trophies for the highest three scorers. The main competition will be a three-man team event with emergency service personnel, military, disabled, and ladies-only teams and of course teams from local and national airgun clubs, internet forums etc. There will be places for a maximum of 30 teams (90 shooters) and we ask anyone that would like to enter (subject to available team places) to think of a wacky name to make things a bit more fun. We already have teams entered with names such as The Screaming Abdabs, Kittens in Kombat, The Tartan Terrors, The Jackass Jackals, The Borg Collective, and many more. The main difference apart from the teams are the air rifles they will be shooting with. At least one team will be shooting vintage BSA underleverlys nearly a century old. Another team is shooting ’50s BSA Airsporter’s and yet another shooting ’70s vintage Sussex Armoury/Air Arms Jackals.

The entry fee is £10 per shooter, with all proceeds going to the Royal British Legion.

The categories are:
- Vintage unscoped;
- Vintage scoped;
- Recalling and - Recoiless.

The safety brief prior to the competition’s start will be at 11am. There will also be an A4 safety list of dos and don’ts along with hints and tips that will be handed out with each with each score card, bearing in mind a lot of the emergency services and military personnel have never shot air rifles. Safety marshalls will be dotted around the course in case any problems arise during the comp.

There is ample car parking on site, camping if needed and a very nice local pub.

In addition to the above HFT comp and side shoots there will also be a full hog roast on site, plus hot and cold drinks, food etc available. A mini assault course run by members of the Parachute Regiment. A band, and nine Normandy veterans will also honour us with their presence. We are hoping to add more things of interest prior to the day.

There will also be raffle tickets available on the day. The top prizes at time of writing are a beautiful bell target, an SAS print signed by regiment veterans, a bottle of wine from the officers mess of the French Foreign Legion and a signed Liverpool FC shirt. More prizes will be added closer to the date.

The Greyhound Gun Club Sutton Stop, Longford, CV6 6DF (Located at back of The Greyhound Pub)
From Boer War to bell target

The superiority of South African marksmen during the Boer Wars of the late nineteenth century was a wake-up call to Britain’s colonial leaders. With their encouragement, ordinary working men took up the sport of bell target shooting in pubs and clubs across the land, most often using Lincoln Jeffries or BSA rifles like the one below. Soon there were thousands of bell target clubs, with the greatest concentration around Birmingham and the Black Country. EDWARD MARRIAN describes the origins and evolution of this phenomenon.

The beginnings...

It is impossible to say with any certainty when, and even where, the first bell target match was held. The targets in principle have been in existence since the 1800’s or even earlier, and even the early dated patent Quackenbush target of 1890 had been made for years previously by the Haviland and Gunn company. So the first match or perhaps just a gathering of airgun enthusiasts around a bell target may well have occurred in the mid to late 1800’s, even possibly in the USA. But it was the turn of the 20th century that saw an explosion of interest in the sport in the UK.

Target shooting was already an established sport, especially for the well off and professional classes, and the Society of Working Mens Clubs also established a shooting competition as early as 1882. But the events in South Africa in 1890-1891, and especially in the second Boer War from 1899-1902, would lead to a re-assessment of the skill at arms of the British Tommy. Soon the speeches and influence of well-respected public figures, and even a hero of the British Empire, would lend their weight to a national campaign to improve the marksmanship of the nation’s menfolk.

During the Boer Wars, reports reached the highest levels of the deadly accuracy of the Boers’ rifle shooting in comparison to the average British soldier, although it must be said that our men still employed older Officer-directed fire discipline tactics under a strict command structure, and did not enjoy the free rein that the Boers had. On their return from the campaign, many high ranking and notable figures decided that they would learn from their painful experiences in the field.

The Lord mayor of London, Lord Salisbury, Lord Baden-Powell (lately the commander of the besieged Mafeking garrison), and the national hero, British commander in chief, Lord Roberts, as well as many others, pushed for better facilities and training for younger shooters especially. Lord Roberts gave impassioned speeches that appealed especially to the patriotic instincts of audiences. The result was that small bore and air rifle shooting gained a huge following in a few short years. This momentum no doubt helped in the popularity of bell shooting as well, which was already taking place in Birmingham at least.

One of the earliest recorded and documented bell matches in the form that is associated with the sport – two opposing teams from different pubs – was held in 1900. It was organized by Mr M. Hirst, and the prize was a mutton supper for the winning team, to be paid for by the losers. Apparently the match aroused great interest, and was fought out to a packed house, with word spreading quickly and the idea being taken up by others to such an extent that, within a relatively short time, there were more than 1600 air rifle clubs in Birmingham alone, and over 4000 nationwide.

However, at the start it did not go smoothly for the shooters when the Birmingham City Fathers decided they would not issue an alcohol license to any premises with airgun shooting – on the grounds of “drunkenness and gambling”. We have to remember that the sport was predominantly one and the order of society and class was very much more on the grounds of “drunkenness and gambling”. We have to remember that the sport was predominantly one and the order of society and class was very much more

A petition against the magistrates’ decision was launched, and was signed by 47,000 people, but was rejected. So the shooters’ representatives called a meeting with the mayor at the town hall and 12,000 airgunners turned up to peacefully state their case.

In light of this impressive and well-behaved protest, the resolution was dropped and shooting re-commenced. Birmingham and the Black Country was certainly an area of high concentration of clubs, as was the surrounding area. But in other areas, especially those with lots of industry, factory, social, Post Office as well and pub clubs flourished. The sport was also popular in Wales, where several clubs can trace their history back to those early days before WW1.

The rifles

The late 1800’s and the turn of the century would have seen the majority of competitors using Gem-type break barrel guns, in the main probably smoothbore, although the Belgian “Labale” Gem type of gun was rifled from as early as 1888, as were possibly others. The Milika type arrived at the turn of the century, and in the next two or three years the Lanes Muskeeter (or Greener Lane as described at the time by R.B. Townsend), and the earliest Britannia guns, as well as better versions of the many Birmingham and London “improved” guns which had been available before 1900.

A common occurrence back then was for imported guns to be modified to varying degrees and then re-sold with British markings. This could range from a simple re-branding, to an honest attempt to improve the design – with Lincoln Jeffries in particular improving barrel latching, sights and barrels, then advertising these re-worked guns as “the most accurate airgun sold”. Meanwhile, Lanes advertised that they could “rifle any smooth bored airgun”.

Shooters then were no different to now, they clamoured for the latest equipment as competition experience grew. Lincoln Jeffries, whilst still selling the imported guns, was already hard at work making a series of well-received prototypes of the rifles that would shape the air rifle scene to its foundations.

Note the winners’ medal fobs proudly displayed on their watch chains; a highly visible display to visiting teams that they would have a hard fought match.
Midlands was a hotbed of engineering, and the gun trade, apart from notable giants, was still very much dominated by small specialist workshops, each with a particular skill or trade. Obviously there was a new market in air rifle shooting to be supplied, so many manufacturers attempted to produce targets with varying degrees of success.

The earliest targets were a simple plate with a hole, and a bell behind, and provision for lighting in some cases – many advertised gas lighting options for rural areas (Flaker Hale, as late as 1958, still advertised the ‘Club’ bell target with an option for gas ’where there is no lighting service’).

The problem with these early targets was that a fragment of pellet (a ‘splitter’) may ring the bell if the shot was not dead clean, but sometimes the sound was not heard by the scorer, who would be a few feet away at a safe distance, so very soon a cocking type was introduced. These had a plunger behind the hole, which on being struck by the pellet would move backwards releasing a sprung loaded flat or round bar. This in turn would strike the bell, and in its simplest form, would expose the previously hidden uppermost end of the bar to give a visual confirmation of a possible. These ends were normally painted, and many had a number 5 marked on them as well.

Targets soon ranged from fairly simple box affairs, to 25lb cast iron behemoths, with mechanisms ranging from the simple striking bar type most encountered, to elaborate sears and lever designs, and even stacks of ball bearings fed by magazine to behind the hole, and then catapulted in turn onto the bell by the pellet’s impact. Notable makers in this period were Cox’s of Handsworth, Charles Ross of West Bromwich and John Stanton and sons. BSA themselves offered no less than 5 differing designs in their Book of the BSA air rifle, and also stated “other types are available on request”.

Lincoln Jeffries patented an extraordinarily well made target in 1908, and there are many other patents filed between 1904 and 1908 on record that show the amount of effort being expended to profit from the sport. The target face plates were covered in non drying paint, normally titanium oxide mixed with oil, to show each strike clearly, and the shooters soon found that the new diabolo pellets such as Wittons, Cox’s Wonders, Astons and Villas and of course Adders etc. left a perfect central ‘witness’ mark in the middle of the strike which made on the line decisions easy.

At the firing table or nearby would be a penny in the slot Avery, Wadkin or Howard dispensing machine to dispense a few pellets, the proceeds helping the funds of the home team. The Great war would see many bell target and other shooters caught up in the excitement of this halcyon period sadly lost, but many who heeded the call to arms back were already excellent shots before the Army received them, and no doubt gave a good account of themselves in the trenches.
How I became a collector

ANDY LAKE, who is no stranger to bell target shooting himself and is a long-time collector of BSA rifles, explains the origins of his fascination with these guns and reveals how, many years ago, he took the first steps on the road to building a collection.

I guess the seeds of my collecting passion were sown early in my life. My parents were avid collectors, and I, my brother and my sister accompanied them on their weekend trips around the antique shops and junk shops in the area. I remember sorting through piles and piles of various ‘Old Stuff’ whilst my parents looked at fine porcelain and other antiques eagerly to add to the collection. In a few of these shops there was always the odd old gun lurking in a corner, or propped up against the wall.

My very first airgun was a chrome-plated Gat pistol that came to me as part of a swap I did with a lad at school. The deal was done round his school holidays, and I received it in its plated case, but a box of .177 Markisain pellets and some paper targets to go with it.

On my next birthday, I was given a small but hefty box, which not only contained the pistol, but a box of .177 Markisain pellets and some paper targets to go with it. Compared to the short-lived Gat Pistol, the Webley was on another planet, and I soon became practised in the art of bowling over Coke cans in the back garden. I loved that gun, and without doubt, it was my most prized possession, not to mention the envy of all my mates.

On or around my 12th birthday, my dad produced a fine Webley Mk1 Air pistol from the back of a big cupboard, and after carefully unwrapping it, handed it to me. He said that it was his, and that he had enjoyed shooting it in his youth. I remember looking down at the pistol cradled in my hands, and immediately noticing the weight and the fine build quality, which later came to realise were key features of these fine pistols.

Well, thoughts of that pistol were never far from my mind over the next few months, and I never missed an opportunity of reminding my dad how much I admired the pistol.

In time the pistol eventually gave way to an air rifle. Some of my mates already had air rifles, and I was impressed with the extra range and considerable knock down power the rifles had compared to my pistol. I constantly begged my father for an upgrade to the pistol and finally he said he could stand it no longer and agreed to buy me a rifle for my next birthday. Finally the day arrived and I accompanied my dad down to the gun shop in town, to get their advice. Dad consulted with Cyril the gunsmith, and finally a selection was made. Following Cyril’s advice, dad had settled on a new ASI Sniper, bought for the princely sum of £26.50; those were the days... Well, me and the Sniper became inseparable partners in crime, and many a pinking session took place with my mates.

A few more years passed, and I was reaching the end of my compulsory schooling. I was spending every spare minute I could in the gun shop, often out back watching Cyril work on all manner of shotguns, rifles and airguns. As a lad of 16, I just loved standing in the shop soaking up all of the atmosphere. The smell of guns, the stories, and best of all, meeting other like-minded airgun enthusiasts.

I quizzed Cyril endlessly about airguns in general, but especially about my ASI Sniper air rifle, and I soon realised that he wasn’t that impressed with modern airguns, to say the least. I remember him reaching up to the gun rack and bringing down a pre WW2 BSA under lever which happened to be there, stating that ‘they don’t make ’em like this any more’ and pointed out all the great engineering and quality materials that made up the BSA. I wasn’t convinced, as I couldn’t possibly see that an old airgun could be better than a new, up to date one. I agreed.

Away from airgunning, I also studied music and was becoming an accomplished drummer. That year I had been selected to play in a local ‘am dram’ production at the local theatre. Some of the early rehearsals took place at the orchestra conductor’s house. His son, Dean, went to my school a year above me, and I was soon to learn, had similar shooting and fishing interests to my own.

Being older, he had recently made the transition to shotguns for most of his shooting but still kept ferrets in his garden, which regularly needed a steady supply of food. The family lived in a large, ramshackle farmhouse in a village just out of town with a large walled garden surrounded by large fruit trees that were the favourite haunt of pigeons and colored doves. These birds made perfect food for the ferrets and, much to my surprise, the gun he used to secure them was a fine .22 BSA Standard Air rifle, which he told me was made in the 1920s.

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My eyes were well and truly opened that day, and I marvelled at the simple design, coupled together with impressive accuracy and power. Three pigeons later, the ferrets were sorted and I was allowed to have a go myself. The muzzle heavy balance took a bit of getting used to, but in the end I was a convert and came away that day with my mind made up. I had to have one!

I started to carefully check the second hand gun rack in the shop for a likely looking candidate, but nothing showed up. Apparently, even in the 1970s they weren’t that common. Eventually, after a few months a .177 one finally did come up for sale, for £27.50, and although it was in pretty poor external condition it fired well for an air rifle of its age. Cyril took the gun apart, gave the internals the once over, and I paid for it over the next six weeks on the ‘never never’, a fiver a week until finally the day came and I picked it up.

When I got it home my father could see the rather dilapidated state of the gun, but also noticed my overflowing enthusiasm, so he sat me down and asked me to explain to him why I liked it. My father was good like that, always encouraging. He patiently listened to this 17-year-old, telling him all about the finer points of a gun made 70-odd years earlier. I talked about the walnut stock, the simplicity and the fine design of the sights – in fact everything that Cyril had told me. Patently, he waited for me to finish then without a word he got up from his chair and told me that Cyril had said it all. My mind was made up. I had to have one!
the table and disappeared upstairs. He came down a few minutes later clutching a rifle shaped parcel tied up with string, laid it down on the table in front of me, and started to untie the string. Eventually there in front of me lay a BSA Cadet Major air rifle. My face must have lit up at that point as I remember my father smiling as he picked up the gun and handed it to me, saying: “It’s yours if you want it – as long as you behave yourself and above all else are safe!” Two airguns in one day… how was that for luck?

The Cadet Major was the slightly bigger brother to the Cadet and, luckily for me, had the adjustable trigger. All in all, it was a sleek looking airgun, but definitely not as powerful as my Sniper. In those pre-chronograph days, penetration tests were the only way of comparing power and the Snipe was always spent a great deal of time near the range. I was stood in the gun shop when an elderly gentleman walked in with a gun bag under his arm and asked to see the gunsmith. He explained that his sight was failing and he wanted to see the gunsmith. He explained that his sight was failing and he wanted to see the Snipe. I finally left school in 1978 and joined the army the same year. I had one last summer as a teenager at home and joy. I still have it today, but sadly it down the club for a few shots every now and then. These days a lot of theB.B. Major, and an Acvoke, but that was not in near mint condition I bought it as the rifle that started me on the road to collecting. Despite being in near relic condition, I decided to submit it to John Knibbs for a full restoration and rebuild. I still have the gun to this day, restored to most of its former glory and still take it down the club for a few shots every now and again. These days, a lot of the joy of collecting comes from using the guns as well as if I can.

Sadly Cyril the gunsmith is no longer with us, but I feel that if he was he would be proud of my collecting and the deep passion I have for older airguns which he help to nurture all those years ago.

One day I went out to check on the gun and give it a wipe over with an oily cloth, only to find that it was rusty due to the condensation caused by the temperature changes in the car boot. I was distraught but as there was nothing I could do for a fortnight until my leave, I could only sit and hope for the best. But the rust had done its worst, and what was a thing of beauty was now heavily scarred by the rust. I learned a lesson I will never forget!

Over the years, I added more guns to the collection. Despite getting a good few guns in far better condition, I always kept the first BSA underlever that I owned – as the rifle that started me on the road to collecting.

ROB MORTON outlines the background to the Hy-Score spring air pistol; a story of Anglo-American cooperation. The pistols had their origins in pre-War America and 50 years later a version of the design ended up being made by a British company known for its glossy brochures.

The history of the classic Hy-Score pistol, one of the few proper spring air pistols made in America, is one of the most unusual and interesting stories in the history of the airgun. It could be said to be a story of Anglo-American cooperation.

In 1938, in New York, there were two brothers of Hungarian descent, Steve Laczlo, and Andrew Lawrence. Andrew was an industrial designer and engineer who had anglicised his name. While Steve was a businessman, who specialised in importing sporting goods to America. His business was known as “Laczlo’s House of Imports”, and the sporting goods he sold included shotguns and revolvers made in Europe. Possibly on his trips to Europe, Steve noticed that spring airguns were popular over there, while in America, pump-up pneumatic pistols and rifles were common. Steve would certainly have known that the “Stoeger” company (who later sold Hy-Score airguns to the American public) were importing some European airguns, including the famous Webley overlever air pistols, and this could have been what gave him the idea to market a spring air pistol in America. He felt that American airgun shooters would appreciate a pistol that was cocked in one stroke rather than the ten pumps that some American air pistols needed. Andrew also understood from his engineering experience that compressing air by hand like that is very inefficient as so much effort is lost as heat as pressure is generated.

One of the pistols the brothers evaluated: the EM-GE Zenit

Steve and Andrew bought a few classic European air pistols to evaluate, including a Diana break-barrel. A Haenel that was cocked by pushing the grip towards the back of the pistol, an Em-Ge Zenit overlever, and finally a Webley Senior. Later, the brothers also owned an Abas Major, and an Arcyoke, but that was not until after they had designed the Hy-Score.

Andrew used his engineering knowledge to appraise the pistols. He did not like the fact that the first three had short barrels, due to the barrels being in front of the cylinders. He felt that the Diana was not powerful enough. He considered the Haenel too hard to cock and

One of the pistols the brothers evaluated: the EM-GE Zenit
The 1949 model 6-shot repeater didn’t like the way that the cocking linkage was in compression during cocking rather than in tension as in the Webley. The Zenot design was discounted because, although it was easy to cock, he felt that the short barrel limited power. Of the four airguns, the Webley was his favourite, so he was obviously a man of good taste! However, he even criticised that feeling that the trigger pull was too heavy. That was the Hy-Score’s first British connection.

He felt that the people that had designed these guns were people raised in the traditions of classical gunsmithing and gunmaking, rather than modern engineering practices. This was evident in the use of forged and cast parts, which required expensive forging and hand finishing operations to complete them. He decided that by using stampings and drawn steel tube it would be possible to make a strong, long-lasting air pistol that would be very competitive with the European airguns.

They settled on a set of criteria for their design. It was to be comparatively easy to cock, yet more powerful than the pistols they had evaluated. It was to have as few parts that would require replacement as possible, so they decided to not employ leather washers like those used in all of the evaluation pistols except the Webley. Hy-Score intended a light, crisp trigger pull, proper rifled barrels and be available in both calibres. It was to have the appearance of, and the balance in the hand of a standard firearm. Finally, it was to be cheaper to manufacture than the European airguns. This would be achieved by using stampings, parts that could be made on automated machine tools, and modern materials such as plastics and synthetic seals.

To make it powerful, it needed a strong spring, and a long barrel, so Andrew designed it with a concentric barrel that was almost the full length of the pistol. To make it easy to cock, even with the powerful spring, they needed a long lever moving through a large angle. He decided to use the whole action of the pistol as the cocking lever. To make the most of the power, he designed a breech that gave a perfect seal despite having no wearable rubber or leather seals. The breech design is unusual on these pistols, with some saying that it is reminiscent of a camera shutter. It is an excellent design, it works well, it is convenient and easy. When the breech is open, you can see right down the barrel, and know for certain that the pistol is unloaded and safe.

To make it accurate, as well as a rifled barrel, it has what Andrew described as a “servo” trigger, designed to lighten the pull. Basically, fully opening the pistol cocks the main spring, while closing the pistol cocks a hammer (part ‘C’ below) which, when released by the trigger, strikes the sear. The powerful spring in these pistols makes the sear quite hard to move, which would be bad for accuracy if the shooter had to move the sear manually, so the energy that moves the sear is contained within spring ‘D’, rather than coming from the shooter’s trigger finger, which only has to react to slight friction and the relatively light pressure of the trigger spring. This also means that if you want to practise dry-firing the pistol, you can just open it an inch or so, and close it to set the hammer alone.

In the prototype pistols, a metal piston ring was discarded, but was found too brittle to cope with the shock. The metal piston ring was discarded in favour of a modern neoprene synthetic rubber O-ring which proved reliable, efficient and much cheaper than the metal ring. They also experimented with pistons that had a seal between the inside of the piston and the barrel, however, provided the pistol was reasonably well lubricated, the gains in power and efficiency were so small they felt this unnecessary.

The transfer port design was also extensively researched. They eventually came up with a port design that allowed optimal power transfer to the pellet while still creating enough of a cushion to prevent the pistol damaging itself if fired without a pellet. Andrew also constructed a chronograph machine to measure the muzzle velocity, which consisted of two paper discs set twelve inches apart on a shaft that spun at a set rate, enabling him to calculate the speed of the pellet from the angle of the two holes in relation to each other. By testing the pistols on this machine they deduced that they were rather powerful. Later, the pistols were actually advertised as “The World’s Most Powerful Air Pistol”.

All of this research and development was continuing as America entered the Second World War, until the brothers had to temporarily shelve development of the pistol for some time from 1942 onwards as the US Government’s War Production Board cut off supplies of raw materials that the brothers needed.

The design was almost finalised in 1946 and American patents were granted. Production of the 700 Target Model started soon afterwards but in 1947 the design was revised slightly. The 700 model had a step between the cylinder of the pistol and the barrel just ahead of the hinged point, this was a plug machined from solid steel and brazed into place. Also, on the 700, the rifled barrel actually ends in this point being a dummy for the sake of the pistol’s appearance and balance.

From 1947 onwards, Hy-Score produced the model 800. This was more true to the original idea of using pressings wherever possible rather than solid parts, with the cylinder and barrel shrouds being pressed from drawn steel tube. They should not be inferred that the use of pressings reduced the quality in any way, the pressings used are of high quality, heavy gauge steel and very strong. On this pistol, the rifled barrel does go all the way to the muzzle.

Hy-Score model 800s

When the Hy-Score model 800 pistols went on sale, they were immediately popular and commercially successful. Andrew went on to develop a ‘repeater’ version of the pistol, the model 800s, which had a six-shot magazine added to the breech of the pistol. It is an ingenious mechanism, with individual chambers for the pellets which rotate past the breech hole like a caterpillar or conveyor belt. It is well made and fun to use because it is so unusual and quirky, but in practise it is slightly fiddly. Pistols with this repeater feature went on the market in 1950 and are more sought after by collectors and so command higher prices.

The Repeater Breech: A pellet is inserted in the ‘LOAD HERE’ hole, then the lugs are used to rotate the back of the breech, which causes cams on the inside to move the seven chambers around one position. When this has been repeated six times, the first pellet drops into the breech, and the other six pellets contained in the chambers will be held until needed, visible through the other holes. Use of the repeater mechanism is in optional as, even when the mechanism contains pellets, it does not prevent other pellets being loaded directly to the breech.

In 1952 and 1953, Hy-Score introduced the model 803 and 804 ‘Sportster’ pistols. These pistols are rather different, having a shorter barrel, which can be unscrewed by hand from the muzzle end and swapped. Sportsters were sold with both .177 and .22 barrels, and I have read that a .177 smoothbore barrel magnetised at the breech end was available for shooting BBs. Some catalogue pictures from the time show the knurling on the barrel’s being colour-coded red and blue. But I’ve never seen, even in photos, a pistol showing coloured barrels.
Sportster with spare barrel

Use of the repeater mechanism is optional as, even when the mechanism contains pellets, it does not prevent other pellets being loaded directly to the breech.

The swappable barrels are a really nice feature and the compactness of this design makes the pistol very ‘pocketable’.

All of these pistols were available with different coloured grips, made of a plastic called ‘brindle’. Colours offered were walnut brown, ivory, something called ‘Petrelwood’, and onyx. There was also a whitish mottled or marble-like option which is quite rare. General Electric made the machinery and tooling for the manufacture of the grips, a fact that they were proud of and actually used in their advertising!

Another connection with British airgun industry came when Hy-Score began importing their own branded pellets, which were actually the classic British-made Eley Wasp branded pellets, which were actually made from solid steel and very finely polished and blued. Phoenix Arms also redesigned the muzzle, doing away with the long barrel of the 800 Target model and going instead with the shorter swappable barrel of the ‘Sportster’. The barrel screws into a deep recess in the muzzle which gives the pistol the appearance of a large-bore firearm. Phoenix Arms named this pistol ‘the Sporter’ which often causes it to be confused with the original ‘Sportster’. This pistol was sold in single calibres, but also with both .177 and .22 barrels, with a key to enable them to be screwed home. They were also sold in a cased set, with both barrels, the key and a simple (no baffles) moderator. The British Hy-Scores were also available with black grips which I think look better than the brown ones common on the American pistols.

The first Sporters had a simple blade foresight which was push-fit into a slot over the muzzle, similar to the foresight on the American Sporter, though eventually this was discarded in favour of a cast alloy foresight secured by a screw into a threaded hole.

The first Sporters had the old-fashioned American style rear sight but this was not liked by British buyers. Phoenix then began making the Sporter with a dovetail for rearsights and for a short time, a Weihrauch rifle rear sight was fitted. They then followed that with their own, simpler rear sight made from alloy. These rear sights can be easily disturbed by over-tightening the mounting screws. Phoenix even offered these pistols with scopes and even, amazingly, for 1990, a laser sight, it cost £295. Ouch!

Some of the early Phoenix Sporters were rumoured to have been recalled by the factory due to being too powerful and exceeding the six foot pounds legal limit. This was possibly due to Phoenix using American parts. It seems that in America, Hy-Score did offer mainsprings in ‘standard’ and ‘strong’ varieties. Possibly some of these ‘strong’ springs found their way into some Phoenix Sporters resulting in higher than usual power. It seems that the power was somewhat variable though, as one reviewer criticised the Sporter for only giving about 3.5 ft/lbs.

A friend of mine was given a tour of the factory in 1990 and told me that the build quality of these pistols was just superb. Sadly that had a downside, which was that these pistols were very expensive compared to other airguns of the time. The Sporter was selling for £75 with one barrel while the cased sets with both barrels, moderator and key were priced at £110. At the time, Webley Tempers and BSA Scorpions could be bought for around £50. Webley Vulcans and BSA Mercures also costed less than £75, so it is understandable that people found the Sporter expensive.

Although some people loved them, they were just too expensive to sell in high enough numbers, and sadly, production ceased again for good in 1991.

The last of the British Hy-Scores were sold with the six-shot repeater mechanism, probably sourced from the stocks of American parts that came with the tooling. They also lacked the unnecessary engraving on the side of the trigger housing, which I have never liked.

Having said that, it is about the only thing about these pistols that I don’t like! I’m lucky enough to own two American Hy-Score Target models, a Sporter and two Phoenix Hy-Score Sporters. The Phoenix Hy-Scores in particular are definitely among my favourite pistols. Hy-Scores in general are great fun to shoot, they are robust, long-lasting and well-made air pistols, but the British-made pistols have the edge, having all the benefits of the American models, but also a better finish. They are all quite sought after amongst collectors. The ‘Target 800’ models are much more common, with the Sporters being quite rare outside America. The short production run of the Phoenix Sporters gives them rarity value, while their reputation for high build quality and good looks also add value. A good or excellent Phoenix pistol will be worth upwards of £80 while a mint and complete cased set could well be worth more than double that.

So there you have the unusual story of the Hy-Score, an American air pistol partly inspired by a British design, sold with British pellets, and finally made in Britain. A possibly unique story in airgun history, but there is one more thing that makes the Hy-Score unusual. Andrew Lawrence wrote a detailed account of the research and development that led to the design of the Hy-Score pistol. It is recommended reading if you are interested in airgun history, design and manufacture.

The Phoenix Hy-Score box recycled the old American artwork
When collectors meet

The Melbourne Marksmen’s (Royal British Legion) Airgun Fayre in the British Midlands was held on Sunday 16th June 2013. Apart from raising a significant sum for charity, the event was a rare chance for UK collectors to meet, sell and swap airguns, as well as shoot bell and paper targets. One of the organisers reports.

Melbourne Marksmen is a bell target club that was formed three years ago by a number of air rifle collectors who were interested in the sport of six yard bell target shooting. The club has 30 members who meet weekly at the Royal British Legion (RBL) Club on Derby road at Melbourne (Derbyshire) and organise club and interclub competitions on a regular basis.

Three airguns fayres have been organised in the recent past. The first one was at Leicester and District Small Bore Rifle and Pistol Club’s ranges at Groby six years ago and then Sutton Coldfield Rifle Club ran two of these fayres more recently.

This fayre was organised by the members of Melbourne Marksmen to raise money for the RBL Poppy Appeal and to generate interest in collectable air rifles from the pre-WW2 era to the more modern rifles used today and also to provide some target shooting on the day for visitors to take part in.

Fourteen tables were purchased by airgun collectors to sell part of their collections of airguns and spares and the club also ran a 'bring and buy' stall for visitors to sell their airguns and accessories.

Shooting on the six yard range began at 11am and the fayre continued until late afternoon. In addition to the buying and selling of airguns/airgun spares, the club held air rifle competitions for young and old, in fact for ages seven to 80. The 7-12-year-olds competed outdoors using a toy type plastic rifle, shooting soft sponge missiles onto a target and the 12-18-year-olds shot low-powered air rifles adapted for use by youngsters. Prizes were awarded to all the 40+ youngsters who took part.

For the more mature shooters...
Airgun Collector

Bell target competitions were organised throughout the day on the club's six-yard indoor range with prizes kindly donated by several very generous sponsors, including Solware Ltd, T.W. Chambers, Uttings, and Pellpax. Visitors were encouraged to bring their own air rifles to compete for the many prizes on the day but club guns were made available for those without a rifle. The shooting was supervised by experienced club members and was carried out in accordance with the club's safety rules.

The bell target competitions were organised for different classes of air rifle. All rifles were .177 calibre and were fitted with open or diopter sights. There was a bell target class for pre-War spring powered air rifles, a class for classic spring powered air rifles that included the early recouling 10 metre, match German air rifles such as the Weihrauch break-barrel 55 models and the Walther LG55 variants and an 'open' competition for any air rifle. The 'open' class included the more modern match single stroke pneumatic rifles and pre-charged dedicated 10 metre target guns. These competitions proved very popular with both experienced shooters and with the general public visiting the fayre.

There were many positive comments on the day regarding just how well these competitions were organised and enjoyed and this was appreciated by those involved in managing the events. Prizes were awarded throughout the day to the shooters achieving the best scores.

The main attraction on the day was the sales section and it was the huge selection of vintage, classic and modern airguns that most people attending were interested in. The number of air rifles and pistols on display for sale exceeded all our expectations and the fayre was very busy during the day. Our experienced caterers carried out their duties providing BBQ food during the day and the whole event went very smoothly, with numerous people commenting on how they enjoyed the event.

What was obvious was the interest many people have in collecting and using the older type of airguns that perhaps some owned in their youth. The types of guns for sale included most of the popular British Webleys (including two very nice Service Mk11's), some superb examples of BSA break barrel and underlever airguns covering 100 years of production, and custom British rifles by Venom and John Bowkett. A very rare .25 cal Improved model D sold on the day and at least 2 air-canes sold, one straight and one cranked, with pump, key and ammo mould.

In addition to the takings on the day by the RBL staff, the fayre itself raised £700 for the RBL Poppy Appeal and a presentation of the cheque to the local representative was carried out at our weekly club meeting on Thursday 20th June.

The feedback from those who attended has been fantastic and demonstrates a demand for similar events in the future. Many of the visitors left the fayre with air rifles and air pistols they purchased and hopefully this will boost our club membership and increase interest in airgun target shooting. A number of enthusiasts have in fact stressed that they have never seen such a collection of airguns for sale and have requested a repeat of this fayre next year. We hope to oblige and the club would like to offer our sincere thanks to the sponsors and everyone who had a part in this event.
This has been a free production by airgun collector hobbyists, for airgun collector hobbyists. Contributors have donated their time and expertise.

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If you would like to be involved in a future issue of Airgun Collector, please email garvin233@hotmail.com giving details of the likely content and any original photos etc that you intend to submit.

The sport of airgunning is under threat from many quarters in several countries and this is likely to have an impact on collectors since it will inevitably involve restrictions on airgun ownership. The hobby will shrink and die if new collectors are unable to come on stream. Please get involved in whatever efforts are ongoing near you to protect freedoms to own and shoot airguns. It is in everybody’s interest that you do this!