

CROSSBOW CRITIQUE: By Geoffrey Toye

THE SWISS CROSSBOW MAKERS TWINBOW 2

History is the provenance of the bow. In this review we will examine a bow of outstanding design driven by a passion which began in a just revolution 600 years ago, to which an entire nation acknowledges that it owes its existence and which to this day holds the image of the crossbow close to its heart.

The crossbow is an icon of Swiss independence. William Tell is the national hero, said to have lived in the canton of Uri in the late 13th and early 14th century. Famously, in a cruel game devised by the overlord Hermann Gessler, to whose hat Tell had refused to bow, won his freedom by shooting an apple off the head of his son, Jemmy. He first stood two arrows in the ground and after the successful shot, Gessler demanded to know what had been the purpose of the second arrow. Tell explained that, had he missed, the second arrow was for Gessler's heart. Tell then had to flee, escaping by boat in a storm across Lake Lucerne to Küsnacht. Gessler followed him and was shot dead by Tell, who went on to inspire and lead his fellow Swiss to freedom from the yolk of the Powerful Hapsburg Austria.

In Switzerland, the crossbow is still venerated as a definitive part of the history of that country. Now there is a company of crossbowyers in Switzerland that has applied revolutionary ingenuity to the design of the crossbow itself. The company is named simply Swiss Crossbow Makers (SCM), their logotype is the Swiss flag defaced and the bunt with the emblem of two identical bows, and the result of years of ingenious lateral thought in design is the TWINBOW 2.

The Twinbow 2 is about 34" long and 17" wide. Somehow I don't think we're in Kansas any more, Toto. This is less than *half* the width of a conventional recurve and two-thirds that of a conventional compound. It is distinctly noticeable in the handling, with significant implications in the hunting theatre; maneuverability in cramped blinds, removing the bow from a vehicle, canoe, through the cockpit of some kayaks or the hatchway of a boat. For those hunters that need or prefer a bow of trim size, it exploits an innovative compound geometry to achieve crossbow dimensions compact to a meaningful degree.

Designer Martin Dziekan was born into a family where fine engineering is a tradition. Dziekan has a long interest in exotic and historical weapons and particularly the adaptation of traditional or ancient technology in modern material. My contact is Ralph Schaub whose inexhaustible patience and courtesy over the telephone, together with his excellent command of English has for me been a real pleasure. Even at our first conversation, I found myself admiring the dignity of Ralph's professionalism and honesty. There is no unseemly criticism of other crossbowyers. He speaks well of all the fine crossbows that we both know and the craftsmen who make them, then quietly lays in front of me for my assessment the Twinbow 2, which he knows will speak eloquently for itself. And it does.

I know personally know of only three people, including our esteemed editor, who have even laid eyes on a Twinbow. All agreed that the Swiss bows were beautifully engineered and promised that I would not be disappointed. I was interested to see this exciting bow for myself. The Twinbow 2 presents as an extremely compact crossbow of radical design and straightforward construction. The first impression is of fine engineering, machined black metal, well finished and secured with the gleaming heads of stainless steel fastenings. This is nicely set off with stained ash furniture comprising a butt pad, fore-stock, pistol grip and violin type cheek piece.

In the Twinbow 2 design, there are essentially two structures, the mainframe proper, which is comprised of two identical plates of high tensile alloy secured about 7/8" apart by bolts and spacers; and a moving lever and frame section attached to a substantial riser.

The fore-stock is in two cheeks bolted to the fixed frame. A modular pistol grip of wooden scales attached to liners, this time in stainless steel, hangs from the mainframe below the integral latch housing. Behind this is the alloy upper stock tube angled down to a welded plate and wood

butt pad. The optional violin cheek piece is clamped to this tube with a metal strap, adjustable for tilt and eye-relief.

Forward of the latch housing is an alloy arrow deck through-bolted to the frame. The arrow groove is unconventional, wide for most if its length with narrow sections at each end in contact with the arrow. This semi-trackless system accounts for the necessity to use moon nocks, as well as a very high arrow speed of this bow.

The bottom horizontal tube floats clear of the butt-pad and pistol grip. It can be released by a catch and forms a long cocking lever drawing the T-shaped riser and 8" parallel center-mounted split limbs back to the latch. This evolution, closing the lever and stock tube like a large pincers with the butt-pad steadied on the thigh is not easy at first, but it is a knack, which quickly comes with practice. It is said the bow can be cocked and loaded with an arrow in three seconds; I managed five.

Once complete and certain control has been achieved, this bow can also be de-cocked. Holding the bow firmly in the control position with no arrow on the deck, the lever catch is released and with modest strain contained in the hands. The pincer lever is then opened carefully, the strain is light at first then increases and of course one must not let it run from the latch and the pincer closes. The bow should not be dry-fired, but is equipped with a dry fire inhibitor mechanism. Unconventionally, it rises from the deck and is very close to the latch.

For the review, I fitted the Twinbow 2 with my favorite crossbow scope, the Excalibur Vari-Zone. The sight rail itself is independently adjustable from conventional hunting yardage to very long range. It can be regulated for wear allowing sufficient tolerance for smooth operation without detectable sideways play; or if preferred tightened-down semi-permanently at a chosen range sector leaving further adjustment to the sight.

Arrows require unusually low-profile vanes and this can be achieved using a simple tool provided by SCM through which a conventional moon-nock arrow, that is one not obtained from this company, can be passed and the vanes trimmed uniformly to size.

The balance of the bow at the shoulder is excellent, pointing with authority and a steady hold accessible from all conventional positions. The deep fore-stock enables the classic European standing position achieved with elbow tucked in, while sitting positions is also very steady. Fingers are well protected and still would be a pretty extraordinary anatomy, extraterrestrial even that could manage to get a digit in front of the string. No doubt, there will be some that have access to reserves of stupidity not available to the common man and will find some way of injuring themselves, but the design seems to be about as safe as can feasibly be arranged through design geometry.

The bow is ambidextrous. The trigger hand should be kept clear of the pistol grip until ready to loose and one should be aware of the fact that once gripped, the safety is released automatically, similar to the Colt .45. Taking the hand from the grip and the lever reactivates the safety. This can and should be confirmed visually.

Loosing the arrow was without drama. The trigger/latch is a joy, at a little over an ounce light to the point of hair trigger by crossbow standards, but entirely predictable. It is not in the slightest intrusive. The recoil is virtually, but not entirely, absent so the loosing cycle is by no means dead; the small parallel limbs counter each other but this is a powerful bow and one can feel in the shoulder the true arrow recoil. To complete what is a smooth and authoritative cycle, the bow I commendably quiet.

A spirit level can be attached to the sight dovetail, but as I was shooting between twenty and twenty-five yards, I did not need this. After a few shots to warm up and shoot-in the new string, a factor to which the Twinbow is sensitive, I found the level of accuracy was first class. The arrows sent with this bow were three 20" alloy and three 20" carbon. Shooting off the bench rest at 20 yards, grouping with alloy arrows was within 2"-3" at first, closing down to 1½", once I became accustomed to the bow, the rests and the arrows, one of which was a consistent flier. With the

carbon arrows, arrow damage was sustained with subsequent tests and I then continued the test repeatedly shooting a single carbon arrow which for most shots cut one ragged hole in the target. Low as the recoil is, I found that it did not excuse incorrect discipline. Support with the hand on the fore-end and pulling back lightly into the shoulder with the other at the pistol grip, and relaxing to take the shot, were critical and then excellent groups were achievable.

Maintenance of this bow is simply a matter of SCM's portable and inexpensive limb-press, a set of metric hex wrenches and a small spanner for the locking nuts. It could be stripped in the field and with no wheel timing issues and string changing is straightforward.

It has proved itself as a hunting bow and is equal to conventional bows tested in field accuracy. It is extraordinarily compact and fast. The price is commensurate with other fine quality crossbows and of course the Twinbow 2 is complete with its integral, self-centering, cocking device. Although under test conditions they recount that a bow was left cocked for 96 hours without more than three feet per second loss of velocity, SCM recommends that the limbs should not be left cocked for long periods of time, but should be cocked just prior to taking the shot. This bow is uniquely suited to this practice, indeed in the right hands it can go virtually silently from uncocked to a lethal shot in seconds, which I guess might prove useful in predator country without a firearm. And of course, it is quickly de-cockable. It is also equipped with the most efficient sound reduction device; it is quiet by design.

The Twinbow 2 does not compete; it ploughs its own furrow and should be judged like the county of its origin, independently. Like other high quality crossbows, it delivers the arrow swiftly and surely to the center of the target, but it achieves that end in its own unique, quiet, efficient and accessible way. I would not presume to judge for others, but it is worth a close look.

As for the subjective opinion of this reviewer: The Twinbow 2 represents a very high quality indeed, in a uniquely compact bow that handles and shoots superbly. I am deeply impressed and fascinated, so must I think less of my TenPoint or my Excalibur? Of course not, that is hardly the issue. The Twinbow presents another, ingenious perspective on the evolution, which interests us as archers and hunters, the precision deadly release of an arrow from a horizontal bow. I believe that its special qualities earn it its place in the ranks of the elite and that it will appeal to the true enthusiast of the crossbow. Naturally I would like to own one but this may not be feasible as I hope shortly to be placing my order for another bow, one that may be the only hunting crossbow even more finely engineered than the Twinbow 2...by which I mean of course the Twinbow 1. Unless my bank manager really is as good a shot as he insists and hits my head, not the apple, a report will follow in a year or so.

Author's Note: With thanks to Ralph Schaub at Swiss Crossbow Makes (www.swisscrossbow.ch) Bill Troubridge at Excalibur for Vari-Zone sight and my friend and model Laura Lee who generously agreed to illustrate the Twinbow Cocking mechanism.