

## Shooting Flight



### How to get the best From your equipment

#### Introduction.

Give a group of children a few bamboo poles and some string. What is perhaps the first thing they make? A bow and arrow. And when they have made that, what is the first thing they say? "I bet I can shoot further than you". This is flight archery at it's simplest, and is certainly something that can be practised by anyone with only the simplest of tackle. No special equipment is needed, tournaments cater for all types from longbows to compounds and even crossbows.

Once the target archer has a taste for flight, there is the constant need to go that yard extra, and with every extra yard, the next one becomes more difficult. So, what can be done to increase your distance?

Flight shooting is an important and traditional part of archery. Flight has always been a test bed for archery, and experimentation in this has benefited archery in all its forms. Flight archers were the first to use carbon arrows, now no self respecting archer would be seen at the line without at least one set in his/her quiver.

Most archers will have never tried their bow to see how far it will shoot. I believe that ALL archers, whether they shoot target, field or whatever, should know the awesome power of their bows.

But how do you shoot flight, and how do you get the best from your equipment?



### How to shoot flight.

So you have decided to have a go. Where do you start? You have found a large area you can shoot safely (remember, today's modern bows with carbon arrows can easily shoot 300 m and more).

Start by putting down a shooting line. This is important. In target archery, you stand with this running between your feet, but for flight this would be wrong.

For a right handed archer, stand with your left foot just touching the shooting line, with your feet about 45cm apart.

Next, with an arrow on the string, hold the bow arm up so the arrow is pointing up at an angle of about 45 degrees. In flight archery, you are allowed a friend, standing 1 m behind the shooting line, who can tell you when your arrow is at 45 degrees.

Finally, when you are ready, slowly draw the bow and AS SOON as full draw is reached, smoothly loose. In flight there is NO holding at full draw as this will make the bow lose energy.

That is all there is to it. Now, enjoy the walk, find your arrows, see how you have done, and try to beat it next time.

### Improving your distances.

From my experience, gained from over 30 years of flight shooting, I give you an insight into areas where you can experiment to get the best out of your equipment. The rest is up to you.

Today, there are many different string materials to buy – Dacron, Kevlar, Fastflite, Angel Dynema to name but a few. Perhaps the best I have found is Fastflite. For target shooting, a fastflite string could have anything up to 18 strands in it, a breaking strain of over 700Kg!!!

Try reducing the number of strands. This will give a much lighter, faster string. I estimate the lowest number of strands needed as being about 7 times the draw weight,

so for a bow drawing, say, 20Kg you would need a minimum of only 4 strands.  
BUT.....

Fastflite is a low stretch material, but it will stretch a little on loosing. The thinner the string, the more it will stretch, which will rob the bow of some of it's energy. Try making strings with different numbers of strands and try them. You may find that an eight, ten or twelve strand string will perform better than a fourteen, sixteen or eighteen strand.

Bracing height is another thing worth looking at. Reducing the bracing height can, in most cases, give a greater distance but there will below a certain height there will be no further improvement.

Carbon arrows are certainly an improvement over aluminium any day – lighter, slimmer and a lot faster. Try using a lighter pile on the arrow. This has two effects- to make the arrow shoot a little stiffer (so loose less energy) and to move the balance point back towards the centre of the arrow. Both will improve distances.

Try using smaller fletchings (even trimming them down with a sharp knife). Usually smaller fletchings will give improved distances.

Give your arrows a good coating of Talc (or other dry lubricant), as well as putting talc on your string, arrow rest, tab – anywhere two surfaces rub together. Cutting down on friction will give a much faster shot and improve distances.

Tab:

In 25 years of shooting, I have tried several different faces on my tab – plain leather, vectran, hair. By far the best one for me is a NEW good quality hair tab The hairs provide a smooth surface that leather alone cannot give, and provide me with a fast loose. Whatever face you choose, though you can keep friction to a minimum by giving your tab a thorough dusting with talc.

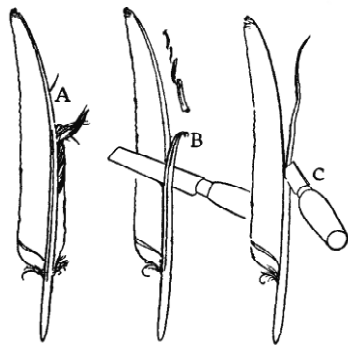
Bow angle is critical, with the best angle thought to be 45 degrees. Research done in the 1940's has shown, though, that the optimum angle (under ideal conditions) is a tad under 45, lying at about 43 degrees. When shooting into the wind, the angle needs to be slightly less, whilst with a following wind the angle raised slightly. You are allowed in flight to have a helper, someone who can tell you when you are at that angle, but they must stand 1m behind the shooting line. If you are shooting into the wind, shoot with an angle of 42 - 43 degrees, 46 – 47 degrees with a following wind.



Practise:

As with everything, practise makes perfect (but think SAFETY (indeed with the range of even the modern target bows you can quite easily reach 300, 400, even 500 yards). Try to find somewhere to practice your stance, getting the angle, drawing and loosing. You don,t need to shoot your best arrows, use an old arrow fletched with a “fru-fru”. The parachute effect of this type of fletch means distances will be kept down to a minimum.

To make a fru-fru, strip the fletchings off an old arrow. Take a full length feather (one of the long flight feathers from a goose, turkey etc) and cut the barbs away from the quill along it's entire length.



Next, glue the barbs in a spiral round the arrow shaft in place of the usual fletchings.



The completed fru-fru