Due to the fact that we have had some feedback from our readers and there appears to be a demand for simple kite designs, I have started the ball rolling with my attempt at a hexagon kite

I am a firm believer in not taking everything as gospel, so this article is not the be all and end all of hexagons. Its really just a few notes to encourage people to explore the kite design.

Many people would say that I was hexagon mad, I think I probably have about ten,but for me it is an ideal kite as the tail is an ideal medium for my creative expression and the kite itself is easy to make, a good flyer in most wind speeds and most important, after spending 2 months on a complicated design on the kite you can guarantee that the kite will actually fly.

Perhaps the best size hexagon to start with is a 90cm one. Material can be paper, or plastic (both of which require a string frame around the perimeter), or material such as cotton, polyester, or even ripstop, although in some respects ripstop nylon is not ideal for hexagons, as they do seem happier with a less wind resistant fabric. A cotton hexagon, for example, will fly in a wind where all other kites are rapidly falling to pieces!

For a 90cm hexagon you will need one metre of 100cm wide material, and probably the pieces of material left over from cutting out the kite will be enough to make the tail. There are many ways to draw the kite onto the material, but the way I do it, is to use a set square to draw an 45cm equilateral triangle onto a stiff piece of card. This can then be used either to draw a complete hexagon or six triangles of different colours to produce a patterned kite. To ease marking and cutting it is essential that the material you are using is flat and creaseless. I usually iron and then sellotape the material around the edges to the worksurface (usually in my case the floor!) and then mark around the template with a sharp H.B pencil (although you can use biro, tailors chalk or felt tip if you wish, it just that pencil seem less messy). To cut out the material it is essential to have a sharp pair of scissors, also a large pair as this makes it easier to get a good, long, clean cut, try to use the whole length of blade when cutting. It gives a straighter cut.

If you have followed me so far you will now have either the complete hexagon shape ready for pockets etc, requiring no further seaming. Or six triangles of material, if you are making a patterned hexagon. As this is meant to be a simple plan I will concentrate on the basic hexagon, (the six triangles only need to be seamed to produce the hexagon).

The outside edge of the hexagon is subject the most to stress and therefore needs to be strengthened in some way . Cotton tape is probably the best for this (not bias binding,) but its also fairly difficult for beginners to machine on, and as this article is meant for beginners! I suggest that it is enough to double hem the perimeter edge. Your machine might have a foot that will do this for you, but it is usually difficult to use and it is easier to hem the edge once, and then fold it over again and hem again. If you want to strengthen the kite more, cotton tape can be sewn on the back of the kite where the three sticks will lay, but again this is not strictly necessary, it just depends if you are a prefectionist ! Now we come to pockets. There are six, one on each corner point, these areas need reinforcing before the pocket is sewn on. The best way of doing this is to take a piece of card and make a template up, that is the shape of the corner area (see template, bottom of page). Sew this on the six corners and then cut out the corner pieces (see template at bottom of page) then fold as indicated and sew onto the reinforcing piece of material ,make sure that the corner of the junction of the two straight egdes of the pockets are well sewn down, as it is here that most strain occurs. The pocket material can be ripstop, best. if you can find it. is heavier ripstop. anything from 2 to 4 oz is ideal or you

can use leather. I have used the leather strip that you can buy already perforated for sewing. It is for putting around sleeve edges etc but this is quite difficult to find.

Once you have sewn on the pockets , the dowells need to be inserted. The best way to do this, is to lay the kite on a flat surface and insert one end of a length of 6mm dowell into a pocket and then gently stretch out the kite, (with a slight pull of the material) to where the wood just meets the end of the opposite pocket. This length will be aprrox 89 to 91.5 cm depending on how accurate your sewing etc was. Cut another two lengths and insert into the pockets. The surface of the kite should be evenly taut with no pulling in any one direction. The woods should lie flat on the back of the kite with no bowing (dont forget to file and sand the ends of the wood, you can even use a pencil sharpener to give a blunt point to them if you wish, this makes it slightly easier to insert them). Next the tail, I found that for a hexagon to fly in all wind conditions you need a tail at least 5, probably, 7 times the length of the diagonal of the kite, in light winds you will probably need less.,Either make two tails or put a swivel attachment on the end of a tail so that more tail can be added, if necessary. The tail can be a length of cotton tape with strips of ripstop, 4 inches wide and about 12 inches long, which has been fringed along the edges . At the end of the tail put a cotton loop and attach a split ring.

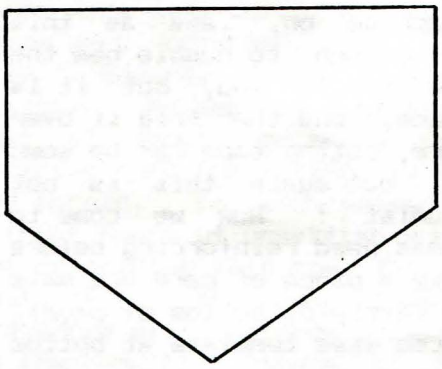
Next, bridling , in the four corners, top and bottom of the kite, put an eyelet either side of the pocket. Then put an eyelet in the exact centre of the kite, this should be where the woods intersect. It is best to put a small piece of reinforcing material here too.The bridle lines run from the two top pockets and the centre of the kite. The two top bridles should be equal in length to the sides of the equilateral triangle.(ie 45cm each) and the bridle line from the centre should be four fifths of that length, ie 36cm . These should all be joined together with a towing ring. The tail towing lines are the same as the top bridles, ie 45 cm each and at the exact centre a ring is attached, and the split ring of the tail attached.

The kite should now be ready for launch. Hexagons are best launched with some line out and the tail laid out in front of the kite. If the wind is right the kite should lift easily and any erratic behaviour should quickly pass, as it is pulled up into more stable winds. If the kite goes round and round in frantic circles, it means that it needs more tail.

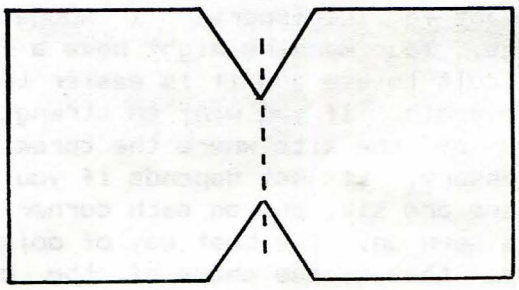
Now you have mastered a small hexagon. I hope you will feel inspired and go on to build bigger ones. My largest is eight foot and has a 160x3 foot wide tail and it pulls!.

Gill Bloom

REINFORCING PIECE



POCKET FOLD ALONG DOTTED LINE



BOTH TEMPLATES ACTUAL SIZE