

# PLAY IDEAS BANK

Practical Ideas for Creative Play - A comprehensive collection for Playworkers & Playschemes everywhere

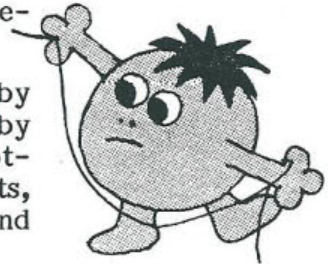
No.27



# KITES

The first kite was probably flown in China around 1000 B.C. - nearly three thousand years ago. Since then kites have spread all round the world and many cultures have evolved distinctive traditions of building and decorating kites. However it was the invention of the virtually foolproof Sled Kite in the U.S.A. in 1964 that literally enabled playscheme kite-making to take off.

This leaflet, written and drawn by Harry Shier, based on original material by Jim Morris, starts with the wonderful idiot-proof Sled Kite, and then, for enthusiasts, suggests some alternative kites from around the world for multi-cultural kite-flying.



## The Sled Kite

The Sled Kite has become the mainstay of playscheme kite-making because:

- \* It is cheap to make, from easily available materials.
- \* It is quick and easy to make. Young children can easily make their own.
- \* It is easy to fly, in almost all wind conditions, even if young kite-makers have not got the design quite perfect. It is therefore the nearest thing to a guaranteed flyer you can make.

### THIS IS WHAT YOU NEED (per kite)

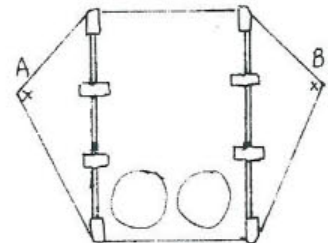
- \* A plastic bin-liner (as well as the standard black and grey, green ones are available in garden shops and lots of other colours from specialist polythene merchants).
- \* Two thin sticks about 60cm long. Green garden sticks are ideal.
- \* Selotape, or better still PVC electrical tape.
- \* String: must be light-weight but strong. Proper nylon string from a kite-shop is best, but expensive.
- \* Scissors, ruler, spirit-based felt tip (that will draw on the plastic).

Also, for a group of children, unless you want to do geometry from first principles, you should prepare a hardboard (or card) template of the kite shape, that they can quickly draw round and cut out.

### AND THIS IS HOW YOU MAKE IT

1. Slit the bin-bag and lay it flat. Draw out the kite shape on it (see over) and cut it out.

2. Place the sticks in position and stick in place with tape at ends and middle.



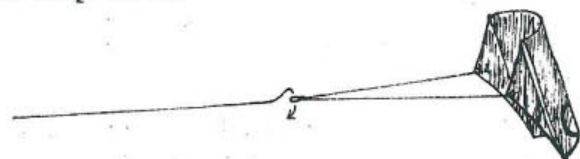
3. Reinforce the "bridle-points" (A + B) with tape and make a small hole in each.



4. Cut a piece of string 2m long and tie one end at each hole.



5. Find the middle of this bridle and tie a small loop in it.

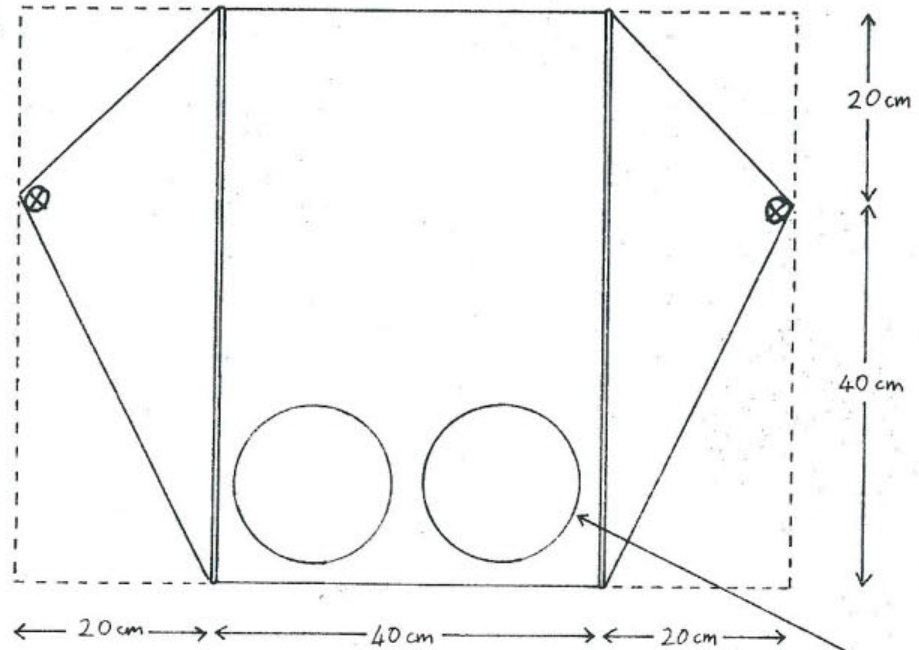


6. Tie the end of the flying line to this loop



# The Design

Here is the basic shape for your sled kite. The dimensions are based on sticks of 60cm, but in fact the kite can be any size, as long as all the measurements are changed in proportion (For example, if the sticks are 90cm long they would be 60cm apart and the overall width of the kite would be 120cm. The bridle string must also be longer - about three times the length of the sticks).

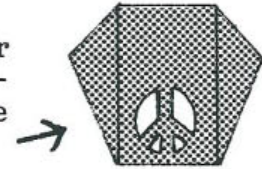


Vent holes  
(draw round  
a saucer)

The holes, or "vents" which improve stability can actually be any shape you like. This is the most scientifically efficient pattern.



But you can use your imagination and produce a personalised kite instead.



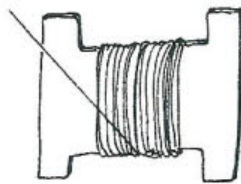
## DECORATION

Anything you attach will make the kite heavier and affect its flying power. If it is windy this doesn't matter and you can stick cut-out shapes on to make a design. The sled kite doesn't need a tail, as the vents make it stable in the air, but you can add a tail for decoration, as long as there is enough wind to lift it.

In less windy conditions you can either use your vent-holes creatively, or use white or clear plastic which you can draw on with spirit-based felt-tip markers to create all sorts of designs.

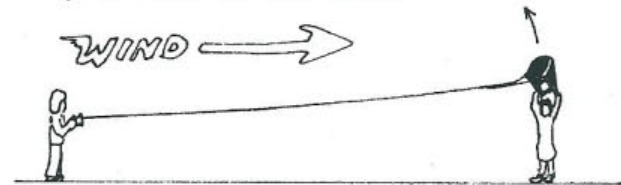
## Flying your Kite

1. It's a good idea to wind the string onto a reel made of thick card. This is better than a spool or tube as it gives you more control.



2. Get a friend to hold the kite above their head, facing the wind. You let out about

30m of string and stand facing your friend with your back to the wind.



3. As the kite fills with wind, your friend lets go and a series of gentle pulls on the string will make it soar high in the sky.

4. This kite will fly in all wind conditions except none at all. But even in a complete calm children have been known to fly their kites by cycling up and down a football field towing the kites behind them to create their own wind.

## Safety

- \* Never fly kites near overhead wires.
- \* Never fly when there is any possibility of thunder or lightning.
- \* Keep away from roads, as a falling kite could cause a crash.
- \* It is illegal to fly a kite within three miles of an airport.



# Kite Materials

The Sled Kite may be the only one you need, but if you want to try making other sorts of kites here are some ideas to get you started (It's also a good idea to get a good kite book, such as one of those listed below):

## STICKS

Split bamboo is the frame material used for most traditional kites. Splitting bamboo can be rather tricky, but dismembering an old cane blind will give you a huge supply of excellent kite-sticks. Dowelling is good for more sophisticated kite-making, but more expensive. Garden sticks will do fine for most simple designs such as those shown here. Many designs have string stretched between the ends of the sticks to support the cover and to do this you have to cut a v-shaped notch in the end of the stick.



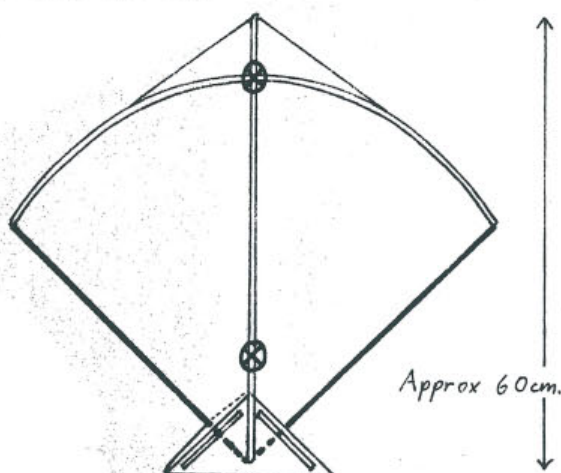
## COVERS

Many traditional kites are covered with paper, which allows them to be beautifully

# Multi-Cultural Kites

To keep the diagrams simple, sticks are shown as double lines, string as thick lines and edges without string as thin lines. Fixing points for attaching the bridle are shown ⊗.

## INDIAN FIGHTER KITE



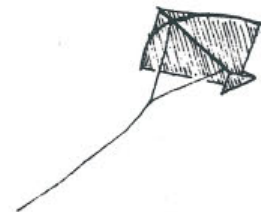
Tie the sticks together. Bend the bow-shaped stick into shape and tie with string to the back as shown. The cover is traditionally tissue paper, but polythene will do. Cut to fit the frame and glue or tape it in

painted and decorated. Coloured tissue paper is also widely used: Panels of different colours can be glued together and they look great with sunlight shining through. Although they fly well, tissue paper kites need delicate handling on the ground or they won't last. For greater durability, polythene can be substituted for paper in all these designs. Fabric covers are strongest, but harder to make. Edges are usually hemmed and sewn, but can be glued instead. Traditional silk is beyond the means of most playschemes. Ordinary cotton fabric can be used, but lets air through which reduces lifting power. Synthetic parachute fabric or "ripstop" nylon are the ideal fabric covers and, though they are expensive to buy, large off-cuts are sometimes available from Play Resource Centres.

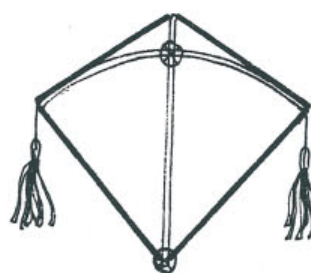
## STRING

Once you progress beyond your first experiments there is no good substitute for proper nylon kite-string. Nothing else combines the lightness and strength needed for successful flying. You will usually have to get this from a kite-shop and can either get small reels for individual kites, or large reels from which you can wind suitable lengths onto card reels before use.

position. The tail is a small square of paper folded diagonally and glued to two very thin bamboo supports as shown. Attach the bridle to two points as shown.



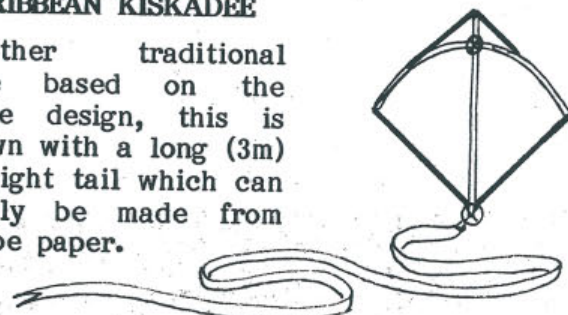
## NAGASAKI HATA



This traditional Japanese fighting kite is very similar to the Indian fighter, except that it has a string all round the edge and instead of the tail has tassels attached at each side. Also the lower bridle point is at the bottom.

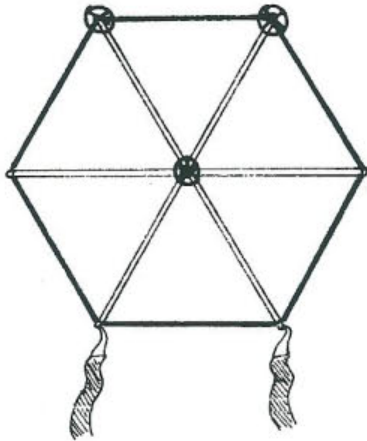
## CARIBBEAN KISKADEE

Another traditional kite based on the same design, this is flown with a long (3m) straight tail which can easily be made from crepe paper.

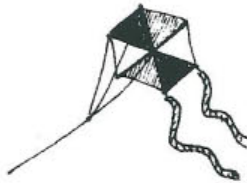




## CHINESE HEXAGON KITE

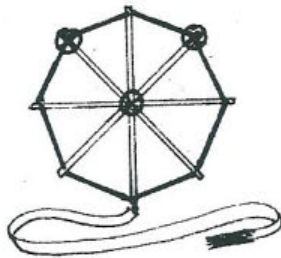


Tie three sticks together (notch ends first) and stretch string all the way round to make hexagon shape. Cover in tissue paper, either white, so it can be painted, or coloured sections glued together (or you can use polythene again). Cut the cover slightly oversize so you can fold the edges over the string and glue down. Attach three-point bridle as shown, and two long paper streamer tails.

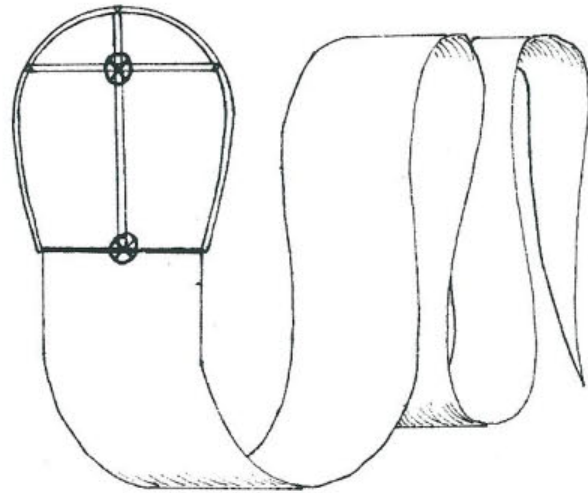


## BERMUDAN OCTAGON

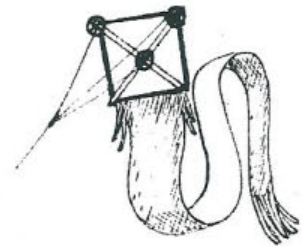
Similar to hexagon but with four sticks instead of three. Traditionally made of coloured tissue paper panels with a long streamer tail. Often some of the sticks are extended and spanned with line from which brightly-coloured paper streamers, fringes, flags and buzzers are flown. The whole thing can be very spectacular.



## THAI SERPENT KITE



This unusual, but easy-to-make kite has a small head and a long wide tail, traditionally made of silk, but plastic or crepe paper will work well. You need a thin bendy cane to make the main frame. The tail can be as long as you want, as once the kite is flying it provides extra lift as well as balance. A simple square is an easy alternative shape for the head.



There are lots more kinds of kites: Box kites, bird-kites, parafoils, stunters, multiples and, of course, the traditional diamond kite (originally from Malaysia). For more information see one of the books below.

## FLYING PROBLEMS?

- \* Try to find a flat, unobstructed flying place. Buildings, trees etc. cause air turbulence which may make launching difficult.
- \* If the kite dives to one side it is probably out of balance. Hold it by the string and let it hang down so you can check how it balances. If it tips one way you can try to adjust it, if necessary by attaching a bit of sticky tape to one side.
- \* If it still won't stay upright it probably needs a tail - or a longer tail.

## Books

- Pelham, David: *The Penguin Book of Kites* (Penguin 1976) - an essential resource book.
- Lloyd, Ambrose et al.: *Making and Flying Kites* (Beaver Books, Hamlyn 1977)
- McPhun, Malcolm: *Kites* (Whizz Kids, Macdonald)
- Downer, Marion: *Kites, How to Make and Fly Them* (Lee and Shepherd, NY)
- Hunt, Leslie: *Getting Started in Kite Flying* (Collier MacMillan)

For more Play Ideas Bank leaflets go to:

[www.grc1td.org](http://www.grc1td.org)