KITE PLAN
Jim Martin’s Playing Card Mini

Miniature della portas are a bit more complex than some minis, but offer you a very adjustable kite for a wider wind range, including being very good for flying outdoors in “real wind.” This one is based on a Bicycle brand playing card as a template most people can lay their hands on.

Materials/tools:
• Tissue paper
• Wok Brush (or other easy-splitting bamboo)
• Sewing thread
• Needle
• Glue
• Scissors
• Hobby knife
• OPTIONAL: Pens, markers, inkjet copier/scanner, tape

First, the graphics:

OPTIONAL STEP: Lay a card out on an inkjet copier/printer. Make a copy of the card onto 8½"x11” paper. DO NOT MOVE THE CARD; LEAVE IT ON THE COPIER/PRINTER UNTouched. Next, cut out a piece of tissue paper an inch or two bigger than the card on all sides. Using cellophane tape, tape the tissue onto the copy of your card, taping down all edges and corners — do not overlap the card image (figure 1).

Now, put the copy-and-sail back into the hopper and copy the card again - this will print it onto the tissue. You can use this technique to get any image onto your tissue paper sail when you make more kites. You can also print images straight from a computer.

WARNING: Do NOT use this technique with laser printers/copiers; they use heat to set the toner. Heat will do to bad things to the sticky tape inside your machine. I’ve never had any problems with this technique on ink-jets, but “The author makes no warranties, express or implied, that this technique will not damage your printer/copier. If you try it, jets of molten plastic and fire will spray all over everything and then your printer will explode, and I warned you so don’t even think about suing me.” It’s always worked for me, though...

Alternately, take one of your playing cards and trace around it onto the tissue, then use pencils/pens to trace or draw the card onto the sail. Or use colorful paper and leave it blank!

Cut out your sail carefully and set aside. There is no hem allowance!

Now, for some sticks. Get a bamboo wok brush, available in Asian markets, etc. If you don’t have one of those nearby, get a friend in the Big City to buy you one (they run under $5 locally.) If all else fails, send a SASE to Jim Martin, 713 Sebrena Pl., Charlotte, NC, 28211, and I’ll send you a couple of sticks from one of mine to get you started. For some reason this bamboo is wonderfully easy to split into very thin sticks.

Take one “stick” from the brush and start splitting it lengthwise with the hobby knife. Split it in half, then in half again, etc. (Splitting near the edge generally doesn’t work as well.) This may take a couple of tries until you get the hang of it, then it’s easy. You want thin little sticks of bamboo about as big as a mechanical pencil’s lead, or a bit under 2 mm
Now let’s put it all together. Take your sticks and run them through your finger carefully using a bit of pressure to put just a bit of curve in the stick. Not essential, but it makes the kite easier to tune and fly.

Using glue (I like Aleene’s Original Tacky Glue, available in the sewing/craft section of many stores selling such stuff: regular white glue is a bit “wet” but works too.) Put a little glue on a piece of scrap paper, and run one of the sticks through the glue to pick up a thin bead along the convex (outside) of the curve, then smear the glue thin and evenly on the stick with your finger. Quickly press the stick onto the back of the sail diagonally from corner to corner, let the glue set for a few seconds then trim off the bits of your stick that jut out past the sail. Repeat with the second stick, from the other two corners and crossing the first stick near the middle (fig. 2).

Optionally, take bits of scrap tissue and glue them over the sticks at the corners and in the middle where they cross, to reinforce the kite a bit. Trim any excess (fig. 3).

Now for the bridle.

This will be an adjustable three-legged bridle; we’ll do the forward legs first.

Thread your needle and poke through the sail from the front, next to one stick at the leading edge of your kite. From the back, poke back through the sail on the other side of the same stick then tie a knot on the front of the kite — you’ve got the thread tied around a stick near one corner.

Now do the same at the other leading edge corner, leaving a length of thread running from one corner of the leading edge to the other. Leave enough thread between the corners to reach to the middle of the kite (fig. 4).

For the rear leg, take a piece of thread about 10” long, and tie a small loop in one end. Lark’s-head the loop onto the forward portion of the bridle. Thread the other end of the line onto your needle and attach it to the point where the sticks cross at the center of the kite. Tie the thread off, leaving about 5¼” of thread between the center of the kite and the larkshead onto the forward bridle (fig. 5).

Finally, tie a small loop of thread and larkshead it onto the rear bridle — this is your tow point, and for now cinch it down about 1¾” from the forward bridle (fig. 6).

Note that the bridle is adjustable by sliding the larksheads around, just like a big kite!

Finally, attach the tails. With needle and thread, attach a length of thread to the trailing edge corners, using the same technique as we used to attach the forward bridle. Next, just like the tow point loop, attach a loop of thread to the tail line. Now take your tail material prepared earlier and glue a couple of strands onto the little tail loop (fig. 7). Crumple the tail up a bit for extra drag or you can easily tear off a bit of the tail if you seem to have too much weight and drag back there.

When you fly the kite the first time, you will probably need to adjust the larkshead on the forward bridle to correct for left or right spins, and the tow point to get the lift right. The tail should be centered, but can be adjusted to keep the kite flying straight if needed.

These kites do well outdoors in gentle-to-moderate breezes, or can be flown from a “flying stick” in the traditional mini-kite fashion.