MOCK FORM KITE

(A soft kite)

Parts List:

- Cell Backs (6)
  6 54" X 10.5" (includes front hem). Leave any excess on the trailing edge to be trimmed later.

- Front Pieces (6)
  6 48.5" X 10.5" finished length including front hem. Cut over length and leave the excess to be trimmed later.

- Risers (7)
  5 48" cut length with vent holes to be hot knifed in class (white)
  2 48" cut length with no vent holes. These are the outer walls. (color)

- Flares (4)
  4 48" X 14"

- Flat Braid
  cut one set into 4, 10" length pieces to be used as bridle points
  cut one set into 3, 5" length pieces for tow points

- Bridle Lines & Steel Ring
  48', 80# Dacron

- Edge Binding
  about 120"

A. GETTING STARTED

1. Use the templates to mark the center of the vent holes and then hot knife the holes using the metal rings. You will cut one 6" hole and three 3.5" holes in each of the 48" white risers.

2. Double hem the leading edge of all the risers by folding ¼", sew the fold, refold and sew again. Hem the outer (color) risers so that the hems will be to the inside of the canopy.

3. Set aside for later.

B. PREPARE THE FLARES

1. Fold the short cut edge ¼" once. **DO NOT** fold the short hem again.

2. Double hem the flares by folding ¼" along both front and bottom edges, sew, refold and sew again. Sew the hems so they face towards the center of the kite. Two in one direction and two in the other direction.

3. When you get about 6" from the bridle point, sew the flat braid into the hem making about a ½" loop of the braid. If you fold the flat braid "half a turn" as you sew from one edge to the next, it makes a nice looking loop.

4. At the long end, away from the bridle point, trim off the overlapping excess that protrudes beyond the non-hemmed edge.

5. Set aside for later.

C. PREPARE THE CELL BACKS

1. Square off one end of the long white strips.
2. Double hem the leading edge by folding a ¼" hem, sewing once and repeat.
3. Set aside for later.

D. PREPARE THE CELL FRONTS

1. Decide on your color patterns and make sure the cell fronts are square and then double hem the leading edge.
2. Option 1: leave the vent in the two center cells. This is the easier option as it saves several sewing steps.
   Option 2: leave a 2.5" vent in each cell at the trailing edge.

Both look nice, but option 1 is just easier.

E. ASSEMBLING THE KITE now the fun begins 

Always sew from the leading edge of the kite, this way if there are any mistakes they can be adjusted during the finishing steps.

1. Starting at the center of the kite and working outwards, make a sandwich with a riser, a cell front, another cell front. Line up the front edge at the ¼" sewing line, hot tack or use several clips and sew. Stop about 3" from the trailing edge as this will facilitate binding off the trailing edge.
   - sewing order: RISER, CELL FRONT, CELL FRONT
     Don't worry, the riser will not reach the trailing edge.
2. Back stitch where the flair ends and at the trailing edge.
3. Open up what you just worked on with the flair up and sew on the next cell front, flair and riser. Repeat with the other side. **DO NOT** sew on a flair at this step.
   - sewing order: CELL FRONT, FLAIR, CELL FRONT, RISER

Sewing Order:

cell 4/3, cell, cell, riser
cell 4/5 cell, flair, cell, riser
cell 3/2 cell, flair, cell, riser
cell 2/1 or 5/6 (it doesn't matter), cell, cell, riser. Repeat with the other side.

Now attach the outer riser and flair to the numbers 1 and 6 cells. #1 is riser, flair cell or reverse for #6 cell.

Make sure all 6 panels are the same length, as close to the 48" as possible (we have wider binding tape). Sew the binding tape to the end of each panel, 6 panels.
Finish off the trailing edge using Option 1 or 2, binding off the edge with tape.

Looking at the front of the kite, start sewing with the left outer riser. This will keep the cross vent holes on top of the sewing table so they don't snag. To sew the second riser, stack a riser, the first cell back and then the second cell back. Remember to work your fabric right side to right side. Also remember to stop sewing and back stitch about 2-4 inches from the trailing edge so you can finish off the trailing edge riser.

It's hard to hot tack along a curve and you will be sewing a straight piece of fabric to a curved piece of fabric, so just take your time and it will come out all right. You can hot tack the straight pieces together and then sew them to the curve and this will help so you don't have to fight a lot of fabric.

- cell back
- cell back
- riser

If you are making the vent in the center, at risers ¾ you should stop sewing about 4" short of the trailing edge as this will facilitate binding off the two center cell backs. You will come back in a later step and finish sewing these.

Continue across the back of the kite. A word of experience, don't miss a riser as I did once because you'll have to rip out a lot of stitches.

After sewing 5 cell back and riser sets, the tricky part comes when you have to put all of the kite into the last cell and sew the last back to the outer riser. Just bundle up the fabric and have your sewing helper guide the fabric. At no time during this project is there more than 4 layers of fabric under the sewing foot at one time.

FINISHING TOUCHES

Measure each cell front to 48", finished length and cut them.

Option 1:
At the two center cells (backs), bind off or hem the fabric to form the trailing edge and finish sewing the risers to the cell back that you left unsewn before.

Make sure that the trailing edge of the kite is the same length and trim off any excess fabric. Make sure that the front and back meet so that when you sew on the edging, it gives you a nice finish. Fold the binding in half, capture the front and back of the canopy and sew, closing off the trailing edge of the kite.

Option 2:
Another way to finish off the trailing edge of the kite is to leave a 2.5" gap in each cell. If you choose to do this, leave about 4" unsewn as you sew in the risers to the back of the canopy. Then you will trim each cell trailing edge to length, with the binding and then go back in and finish sewing the risers to the cell backs. Then sew the trailing edge closed, leaving about a 2.5" gap in each cell.