











#8



<u>Materials</u>

- 2 epoxy tube spars FL 248 (16¹/₄" each)
- 7 internal ferrules .248" F.G.
- 61/2 epoxy tube spars E 40 (6 @ 32.5" and 1 @ 16.25")
- 22 vinyl end caps .250" diameter
- 6 yards bungi shock cord 3/32" diameter
- 1 yard 3.9 oz. Black Dacron 4" wide
- 2 Ripstop tape w/adhesive backing (2" wide X 8 yd. rolls)
- 8 ³/₄" wide ³/₄ oz. Ripstop strips
- 4 end caps arrow knocks w/.248" I.D. hole
- 3 1" pieces shrink tube 1" diameter
- 4 ¾ oz. Ripstop nylon (kite requires 1 yd. per color)
- 2¹⁄₄ yds. ¹⁄₄" grosgrain ribbon (black)
- 6" 1/8" vinyl tubing

bridle material - 150# test

Template Layout

- 1. Draw 2 parallel lines 8.5" apart as shown
- 2. Draw 3 arcs A @ 21.75"R - B @ 25.75"R - C @ 29.25"R
- 3. Draw quadrant lines as shown (15" apart)
- 4. Draw intersecting lines to form individual panels

5. *Cut out sail panels. Draw entire sail on one piece of material then cut out all 11 pieces. Precision is important. Make template for 8 triangle cell panels. Select your color graphics. Place templates on fabric with grain aligned with quadrant lines.

Construction Details

- Make templates (Illus. # 1)
- Make ³/8" tape strips 60" long
- Make reinforcements (Illus.# 2)
- Cut out all panels (see grain direction) (Illus. # 1 & # 4)
- Attach re-enforcements on both sides of panels
- # 2,4,6,8,10 & four cell panels.
- Join panels # 2,4,6,8,10 (butt edges) using 3/8" RSN adhesive tape
- Join panels # 1,3,5,7,9,11 (overlap 3/16") using 3/8" RSN adhesive tape
- Turn sail over and apply tape to opposite side
- Attach grosgrain loops on all tips accept 1,11 (Illus. # 2)
- Sew all tape with two straight stitch lines at edges
- Lay sewn panel flat, trim inner edge straight
- Repeat above process for other half of kite
- Edge bind triangular panels on short sides with $\frac{3}{4}$ oz. RSN
- Attach 4 triangular panels to main sail (start at end, overlap in center)
- (Use DS tape or hot tacking) Cover joint with RSN tape and sew (Illus. # 3)
- Repeat on other main sail
- Attach both main sails with grosgrain at tips of triangular panels (Illus. #5)
- Attach grosgrain loops on tips of panels 1,11
- Prepare spars 6 full length with internal ferrules 1 @ 16.25" with ferrule 2 @ 16.25" X FL 248
- Prepare Bungi cord 22 pieces @ 12" lengths
- Assemble hoop frame
- Using Bungi (22 pieces) attach sail to frame use equal tension at all points (Illus.# 6)

• Remove sail, trim Bungi - rotate knot into grosgrain loop cover with vinyl cap (Illus.# 7) Install vinyl sleeve on 1, 11 Bungi loops (Illus.# 8)

• Make bridle attachment and tail pigtails (Prussik knots covered with heat shrink tubing). Mount bridle @ 10 and 2 o'clock - Tail @ 6 o'clock on frame (Illus.# 9)

- Make tail of choice (slight drag is important) (2 1/2" wide X 30' long)
- Make two point bridle loop 8' to Tow Point

Flying Tips

- Bridle pigtail location is approximately 10 and 2 o'clock. Slide up or down for wind conditions.
- Tail must create some drag for stable flight.
- Use 100# test line for medium wind.
- If frame becomes egg shape in heavy wind, slide bridle attachment towards top.
- Wind range 5 to 15 MPH.