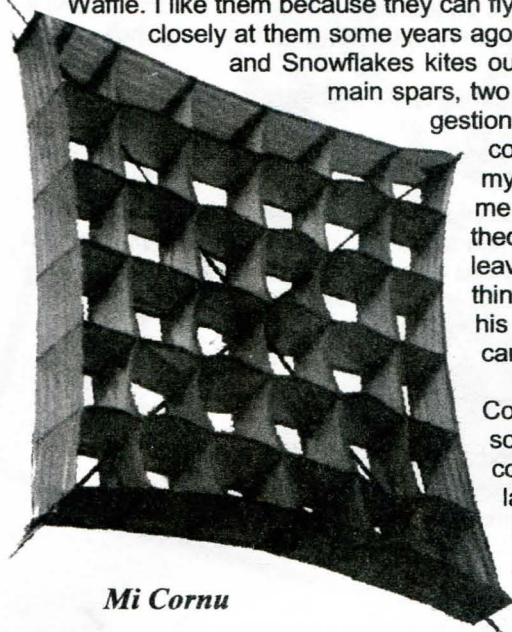


Mi Cornu - by Fred Broadhead

This is a derivation of a 'Le Cornu', more commonly known as a Wine Rack or on the other side of the pond a Waffle. I like them because they can fly well and at the same time look incongruous in the sky. I first looked closely at them some years ago on meeting Graham White of the Worcester mob who knocks them and Snowflakes kites out by the truckload. He keeps to the original concept by using four main spars, two crossed at the front and two at the back all clearly visible. My suggestion of just having two spars to improve the appearance and simplify construction was given the thumbs down by Graham and others. In my kite making I try to minimise the visual exposure of the spars, as to me they detract from my ascetic values and aims. Would St Paul's Cathedral look as it does if the builders had decided to mooch off and leave their wooden scaffolding up? Therefore I decided to do my own thing with just two central internal spars. I think Graham approves from his repeated naggings to make him one, well he can do it himself now can't he.

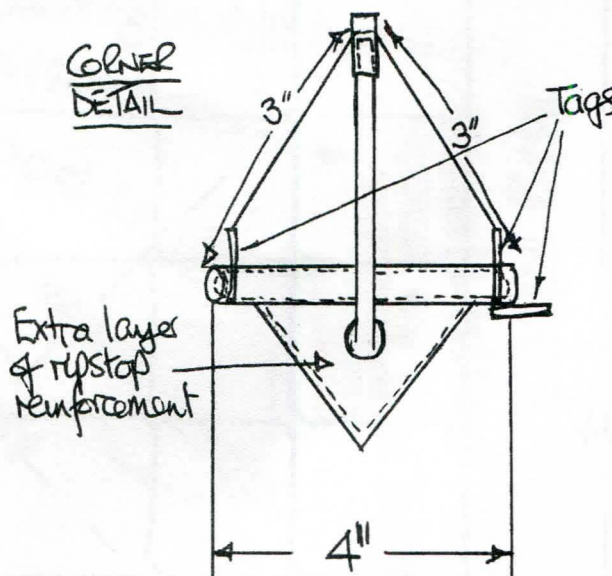
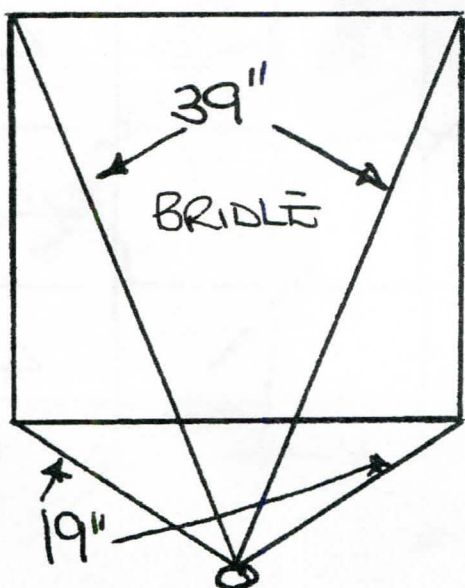


Mi Cornu

Colour. Mine is all mauve which at first may appear lacking some interest, we all like to paint the sky with brighter and assorted colours, don't we. Down at Swindon about seven years ago I saw a large Snowflake kite which was a rather dull yellow, which I thought at first was almost a waste of a kite. Then I saw it flying in the bright sunlight and was intrigued as it not only looked good but seemed to be changing shape and shades of yellow as it moved in the sky, almost like a hologram and quite subtle. That's why mine's all mauve, the effect only works well on multi-celled or faceted kites.

Construction

Sew the central area first which is basically joining a series of zigzags together to form 4" cubes. Add a bit of rip-stop reinforcement as shown on *Corner detail* and also to the four sides at the dead centre of the kite where the two cross spars will cross each other over. You now have the interior sewing completed with the five sections which will be sewn to the perimeter strip on each side flapping loose. Cut these sections to the sizes shown (same each side) having added 1/4" for sewing seam. Now mark out the perimeter strips into 4" and 3/4" sections, the total length will be $24" \times 4 = 96"$ plus $3/4" \times 4 = 3"$ for the corner spar sleeves plus say another 1" for overlap when joining together the ends giving a total length of 100". Make sure you mark the 4" and 3/4" sections on this strip with great accuracy, as the perimeter strip will be under great tension once sparred and could pull the kite out of square if not joined to the central portion exactly at the right points. Add extra reinforcement as per corner detail, one per corner on the top and bottom perimeter strips.



Sew tags as shown - three per corner - one for the flying bridle - 2 for the spar bridle. Make sure all four for the flying bridle are on the same side of the kite. Now mark the exact centres of the cells that the two spars will pass thru and burn 1/4" holes at those points and the four on the perimeter strip as per Corner Detail. You will now have burnt holes thru the stitching between some of the cells which could still hold in use, but as this kite is as tight as a drum skin I go back and re-stitch up to the burn holes to hold the stitching firmly. Connect on you four spar bridles, I've threaded onto the corner cords nylon tubing for the main spar ends to fit into, but you could use arrow knocks on the spars instead. Push in the four short 3 1/2" corner spars into the sleeves and stitch in.

Attach the bridle as shown and off you go.



Comments

You can see from the photograph the curvature on the perimeters gives some idea how tightly this kite is tensioned. I had the perimeters strip off three times to keep shortening the fins that attach to it before I got it right so that there was no flutter in the cells when flying. You may find that to get the second spar fitted you have to dish the kite like a four cornered dish and once its in it wants to stay dished, if so just give it a slap in the centre and it will spring square. I've threaded an 'O' ring on the spars where they cross to hold them more firmly together.

The corner detail has two purposes,

1) To transfer the tension from the central spars to the end of the short corner spars and thus tension the front and rear faces of the kite

2) If the kite stretches over time I can shorten the corner cords rather than have to replace the spars with longer ones.

Cut you're two cross spars a bit longer than I have stated and cut back as required for your kite.

Launching is a doodle, lay the kite flat on its back, walk away with your line as far as you like, give it a pull and up it goes. Wind wise it likes lightish steady winds and can pull surprisingly hard for a small kite if the wind picks up.

Now I've done my bit, the rest over to you.

Good Luck
Fred Broadhead

Materials:
2 x 40 1/4" 4mm Carbon Fibre Rod
4 x 3 1/2" 3/16th Wooden Dowel
Approximately 30' length of ripstop hemmed both sides to 4" width

