I was surfing the internet and found a few pictures of a ‘Beer Crate Box Kite’ one was a German site the other Chinese. I studied the pictures and decided to make myself one.

It’s construction is quite simple very similar to Lecornu’s “Waffle” or “Winerack” design.

To make this kite cut out pieces of Ripstop as listed below.

Constructing the kite
Hem all pieces of fabric first then start with the inner cells see the diagram below on how the pieces are joined.

Once the inner cells are sewn then start to sew them to the outer box. Start with the longest side from the bottom and work from left to right. I found it much easier to add the sides one at a time rather than sewing the outer box then adding the inner cells. Once this has been done to sew the last corner of the box turn the whole kite inside out and sew, then right side in to sew the overlap. Once the main kite is sewn then add 2 inch sleeves at the corners (3 for each corner). At the top at bottom of the kite I have sewn tabs to take the location joint for the longerons. Arrow nocks and split rings can be used but I have used plastic tubing with the rings passing through them.

The 4 longerons measure approximately 27in and made of ¼ inch hardwood ramin dowel.

The cross spars are approx 39 to 40 inches in length and although the picture shows them made of dowel I will be changing them to carbon fibre as they won’t bow as much.

Also at the top of the kite I have used perimeter spars which I have sleeved on all 4 sides for extra taughtness and to stop the material from flapping around and causing damage to the ripstop sail.

To fly this kite use a 2 leg at the 2 top corners on the longest side as in a standard box kite flown flat. In stronger winds the bridle can be
shifted to the shorter sides for extra stability.

I gave it’s first flight back in October and it flies really well, the winds were light to fresh.

I am deciding to make another one in different colours say Blue and Red sides with the inner cells in yellow.

Happy Flying