

'Boo Skewer Fighter Kite Spines

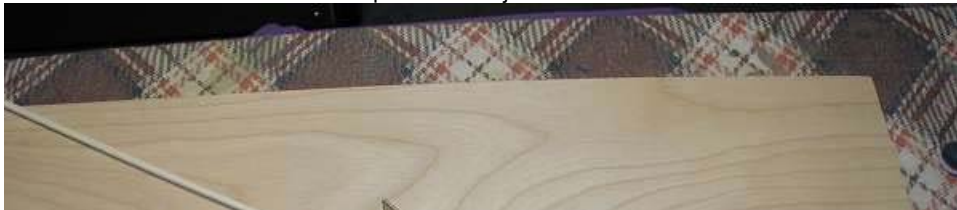
A pair of .157" diameter x 15" long bamboo skewers. 15" lengths are NOT necessary, the 12" variety is just fine - just make sure the diameter is at least around .140" - and will produce a final spine that's at least 20" or more in length ...

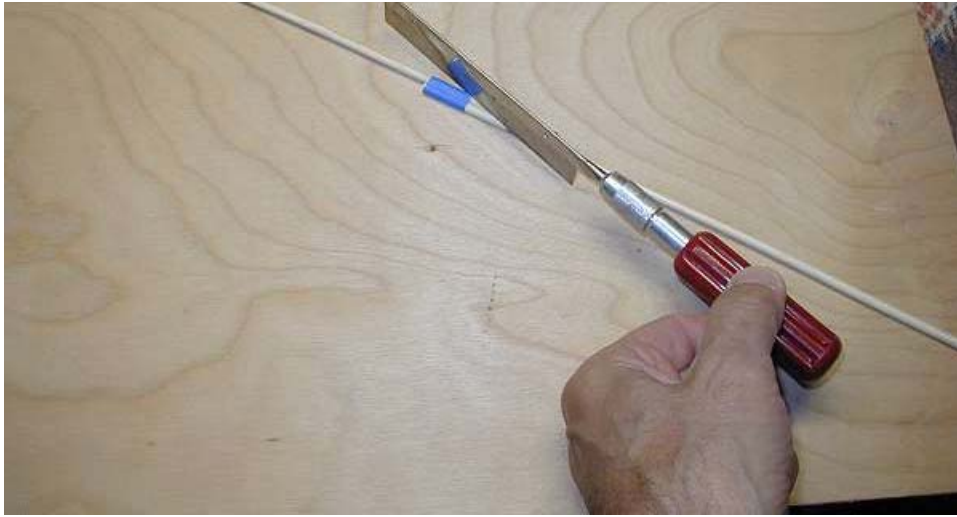


After hand straightening each skewer, tape them together and recheck the alignment ...



I use an Xacto razor saw to create a perfect scarf joint ...

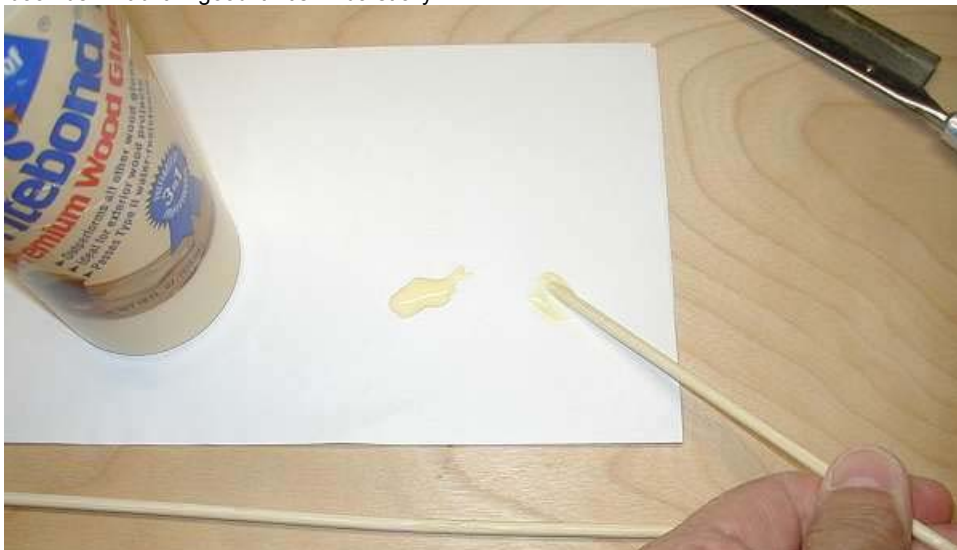




All scarfed up ...

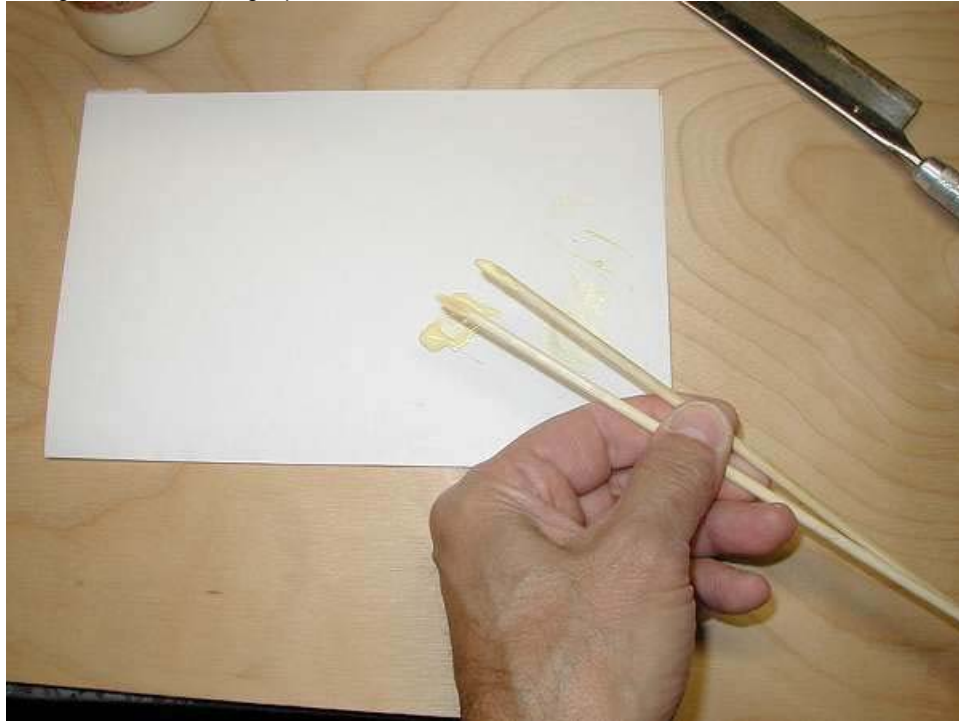


I use Titebond glue. Rub each scarfed end into the glue - this presses the glue deep into the 'boo fiber. Rub it in good 'til it's kinda sticky ...





Now gather some fresh goop on each scarf end ...

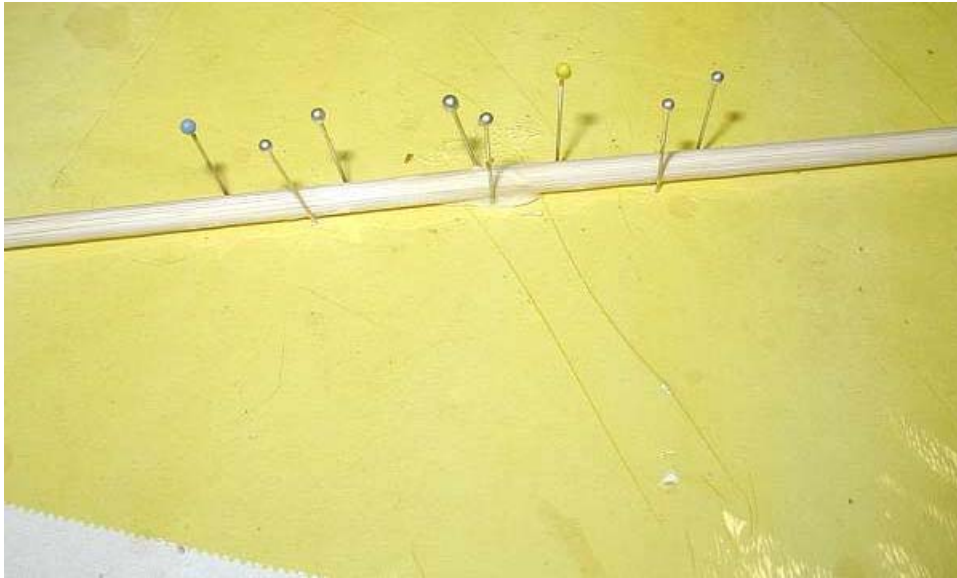


Now join the scarfed ends and pin them to a work board protected with some plastic ...



Closer look of the drying joint ...





I let this set up overnight for a solid cure, then just sand off any excess, and voila! now we have a nice 'n' long, quite stiff rod of "grass" that's ready for the next stage ...



All that's left is to cut to a working length, sand or scrape in a flat spot - laminating to other materials is optional. The entire spine making process goes amazingly fast (well, save for the glue curing time), and I can have a dozen spines glued up in less than 40 minutes without rushing. The flat on these spines can easily accept a laminate of thin cf (or other material), and so the nose area can be pre-curved and the tail area can be super stiff.

Here's the 'boo spine cut to an 18" length ...





To show ya that the glued scarf joint can take a goodly load without snapping, here it is in a fairly severe induced arc ...



7-13-05. **This is my current method of making a hybrid piggyback 'boo FK spine.** Essentially, the 'boo front end gets split, bent and reglued ala Bruce -BigGrins- Lambert. Flats are sanded onto the full bottom of the spine, then a slight flat is sanded on the top of the spine, from the rear most end for about 10". A cf rod (currently I'm using .07" diameters, but any diameter will work just fine) is cut to 10" and a slight flat is sanded on one side. The cf rod is "tent taped" tight to the top rear of the 'boo spine and thin CYA is wicked in. When cured, remove the tape and test the spine's bend/stiffness - if needed, the cf rod top can be sanded parallel or tapered to tweak the stiffness. I use cf rod simply 'cause it works and I don't need to keep an added inventory of flat cf ribbon - I like KISS stuff!

It all starts with flats sanded onto the full bottom of the spine, then a slight flat is sanded on the top of the spine, from the rear most end for about 10". The end of the spine furthest away from the scarf joint is where you'll split the 'boo. Hand straighten the 'boo spine as best you can, then insert a Very sharp device into the 'boo nose end ...





Wiggle the blade carefully and slowly to open up the 'boo to a typical 7"-8" split ...



I put a mark on the spine that's 10" up from the spine's rear. Pin the spine down on a board (I use Cellotex ceiling tile) with the front's split showing UP. Notice there are only a few pins forward of that 10" mark ...

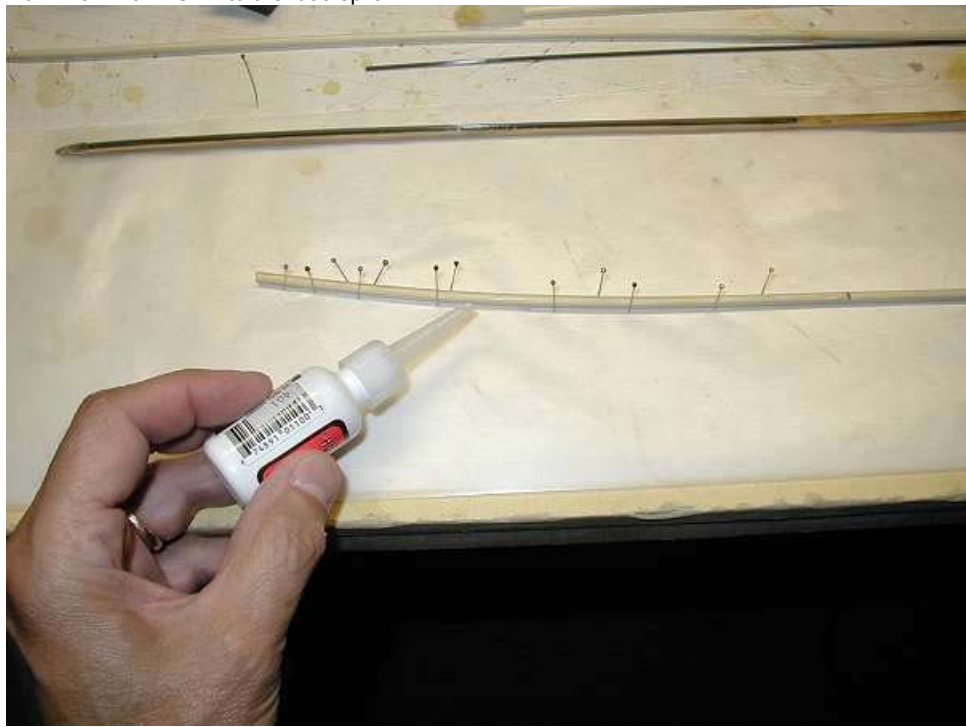




Now bend the nose of the spine to the curve of yer choice and hold it in place with pins ...

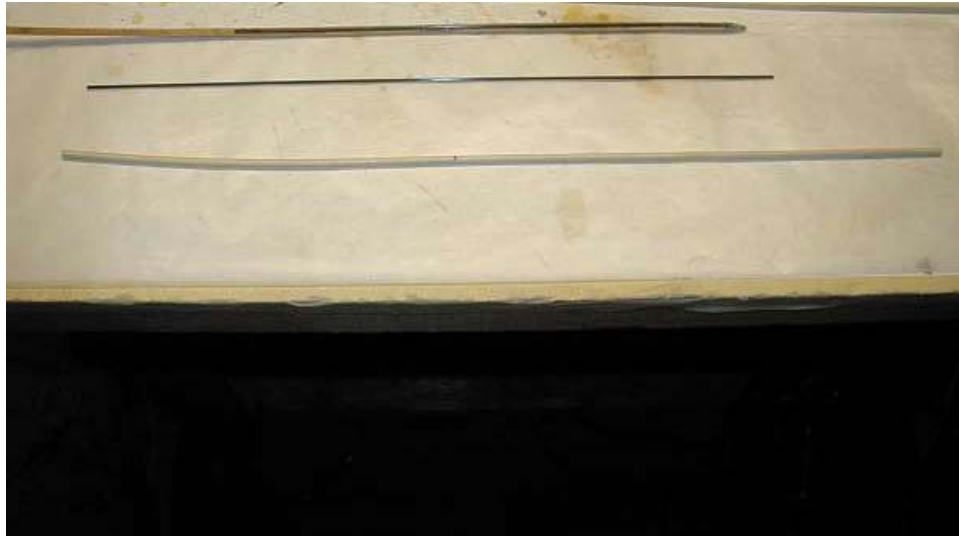


Now wick in thin CYA to the 'boo split ...

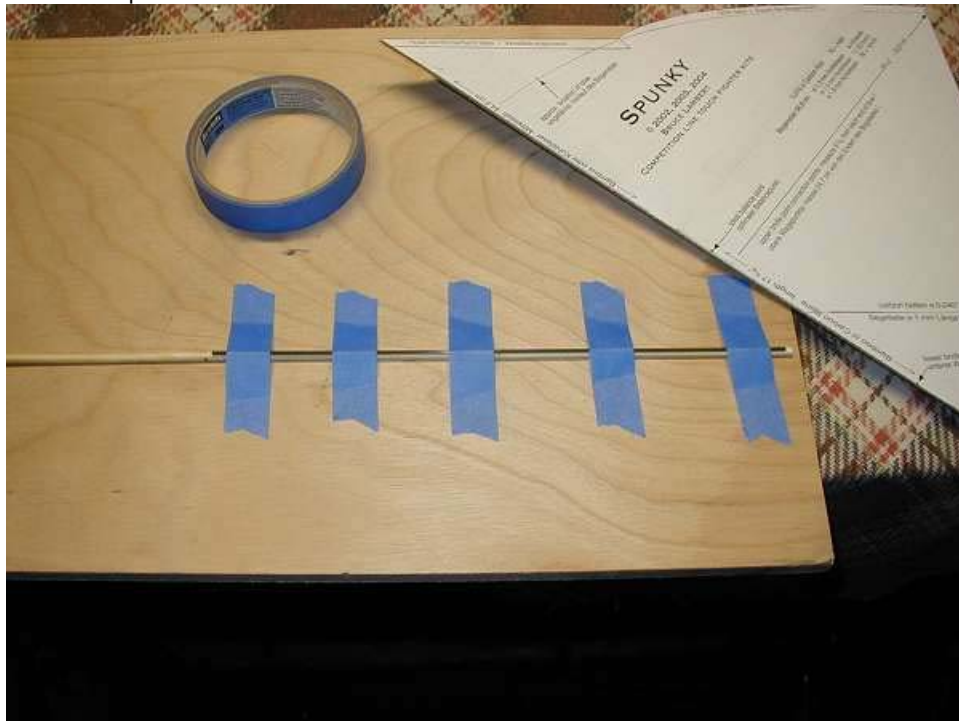


When cured, remove the pins ...

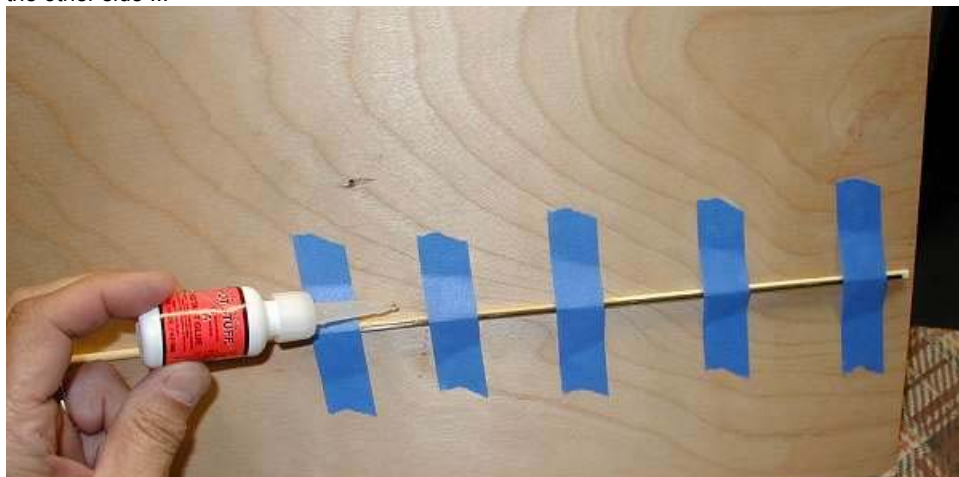




Sand a slight flat to one side of a 10" long cf rod (.05" to .07", or so) and "tent" tape it (pull the ends of the tape far away from the spine so it only touches the top of the cf rod) to the top rear of the 'boo spine ...



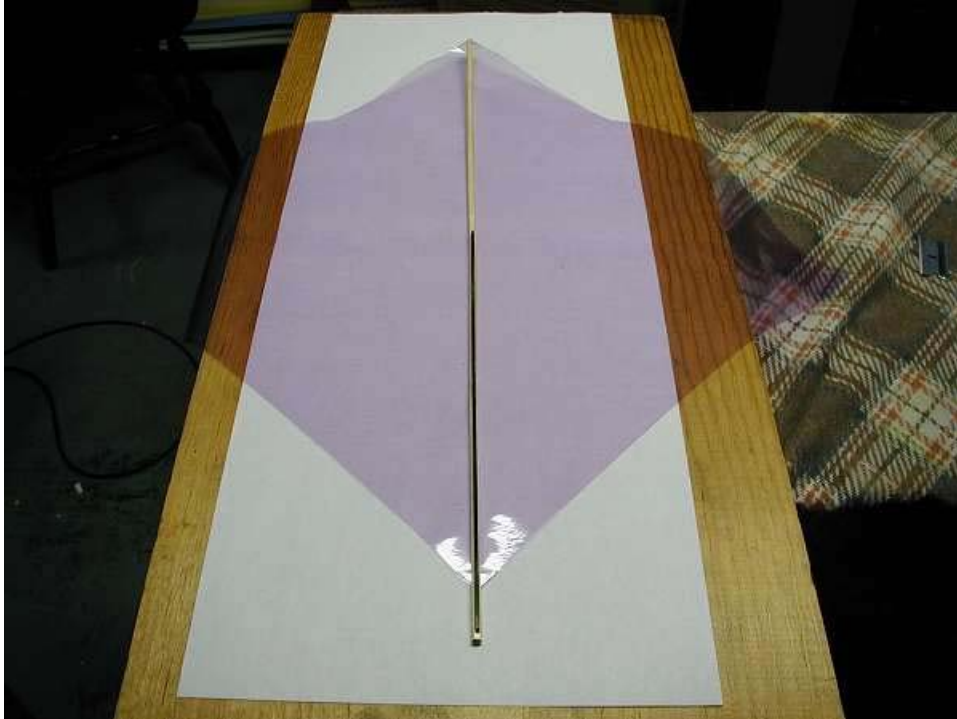
Tilt the board so that you can wick in CYA to one side of the cf rod joint, then do the same to the other side ...



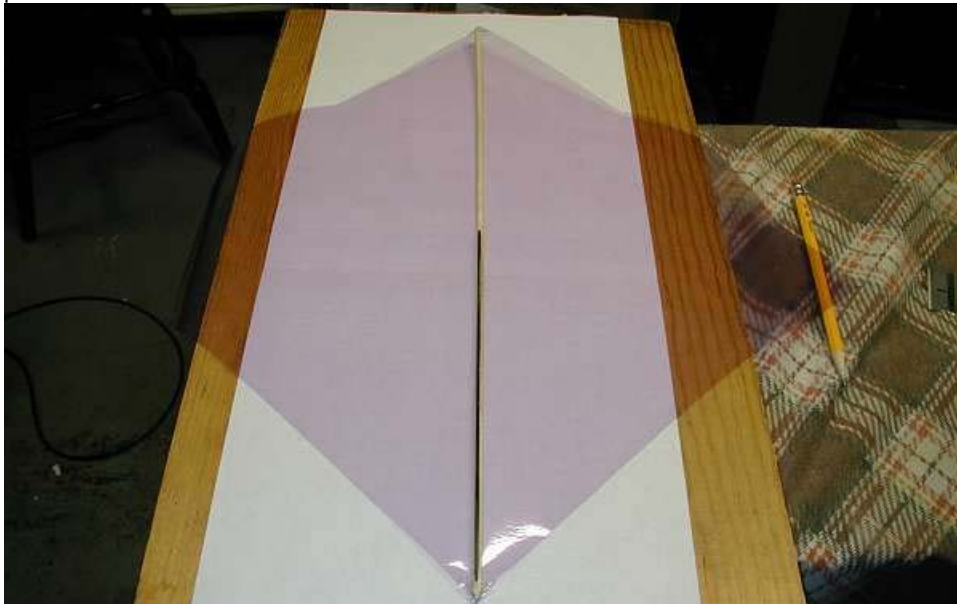


The cf rod that's piggybacked to the 'boo rear top super stiffens the 'boo where it's needed most, and the split/reglued 'boo nose adds stiffness that can be bent and controlled where the 'boo spine needs to be curved.

When cured, remove the tape and add CYA to any missed areas of the cf rod and 'boo joint. Then lay the spine out on yer pre-made sail. I use clear photo corners to hold the spine, so first I point up the nose of the spine and stick it in the nose photo corner, then make a mark where to cut off the excess of the spine's rear ...



The spine's been cut at the rear to size and its bottom has been appropriately slathered with contact cement and slid first into the rear photo corner and then bent and pushed into the nose photo corner ...





That's about it - you folks know what comes next! :-)

