

Construction Details of Bruce's 'Donna's Dog' Fighter Kite

Bow: use either 0.04", 0.05", 0.06" or 0.07" diameter carbon fiber rod, depending on the wind speed you want to fly the kite in. for indoor flying and zero wind use the 0.04" carbon, for winds 2-6mph use the 0.05" diameter carbon rod for the bow; for winds 6mph to 12mph use 0.06" and for winds 14mph and above use 0.07" diameter carbon fiber for the bow. the bow length is 22-3/8". dennis Ische is the person who computer drew the plan and mentioned that on his cad plan the dimension for the bow worked out to be 22-7/16"..... so it may vary a smidge based on the way you draw and cut out the sail. i don't believe a small variance like that will make any noticeable difference in the kite's performance.

Spine: 16-3/4" long, split bamboo. the cross sectional dimensions will vary based on the amount of durability you want in the kite, whether it is for lighter winds or strong winds, etc.

Battens: these are optional. i use either 0.03" or 0.04" diameter carbon fiber rods, depending on the kite. i have also used pieces of split bamboo, small diameter coffee stirrer straws and small diameter fiberglass rods.

Bridle points: i use either a 3 or 4 point bridle. i can't tell much difference in the two. normally i use a 3 point. i attach the ends of the upper bridle yoke to the bow 1-1/4" either side of the center of the spine. the lower bridle point is 6" up from the tail of the spine.

Sail/Skin: i normally use back orcon. but also have used white orcon and soft poly plastic films such as gift wraps. any thin light material will work, including paper! when i am using a skin material that has a ripstop grid or grain to it, i try to align the trailing edges of the kite's trailing edges parallel to the grid as close as possible. this makes the spine run along the diagonal. i think this adds some durability to the trailing edge of the kite, but this is just my theory..... not based on any science ;o)

Hems : the dimensions shown on the plan are of the finished kite. if you want hems here and there on the kite skin to hold parts in place or for reinforcing or stiffening, you will need to add them to the template you make to cut out the skin.

Glue: i use either regular contact cement, rubber cement or tandy's tanner's bond contact cement to glue all the parts together. i glue the spine along its entire length, the bow along its hem area, glue and tape the battens in place....i place small pieces of tape at the ends of the battens.

More about Glue: often i thin the glue about 10% with the specific thinner for the glue. I pour a small amount of glue into a lid or small container and dip my glue spreader/brush into it and smear the glue wherever it needs to be on the kite skin, bow, battens and spine. i use part of a slice of foam pipe insulation as a glue brush or spreader, i just cut a piece the size i need for the job..... easy and disposable.

Tape: i use orcon tape, however, what you want is a tape that will bond well to the skin material you are using, so any tape that does that is fine.

if you have any questions, please email me. kitefighter@nwinform.net

grins, bruce

18 3/4" [476]

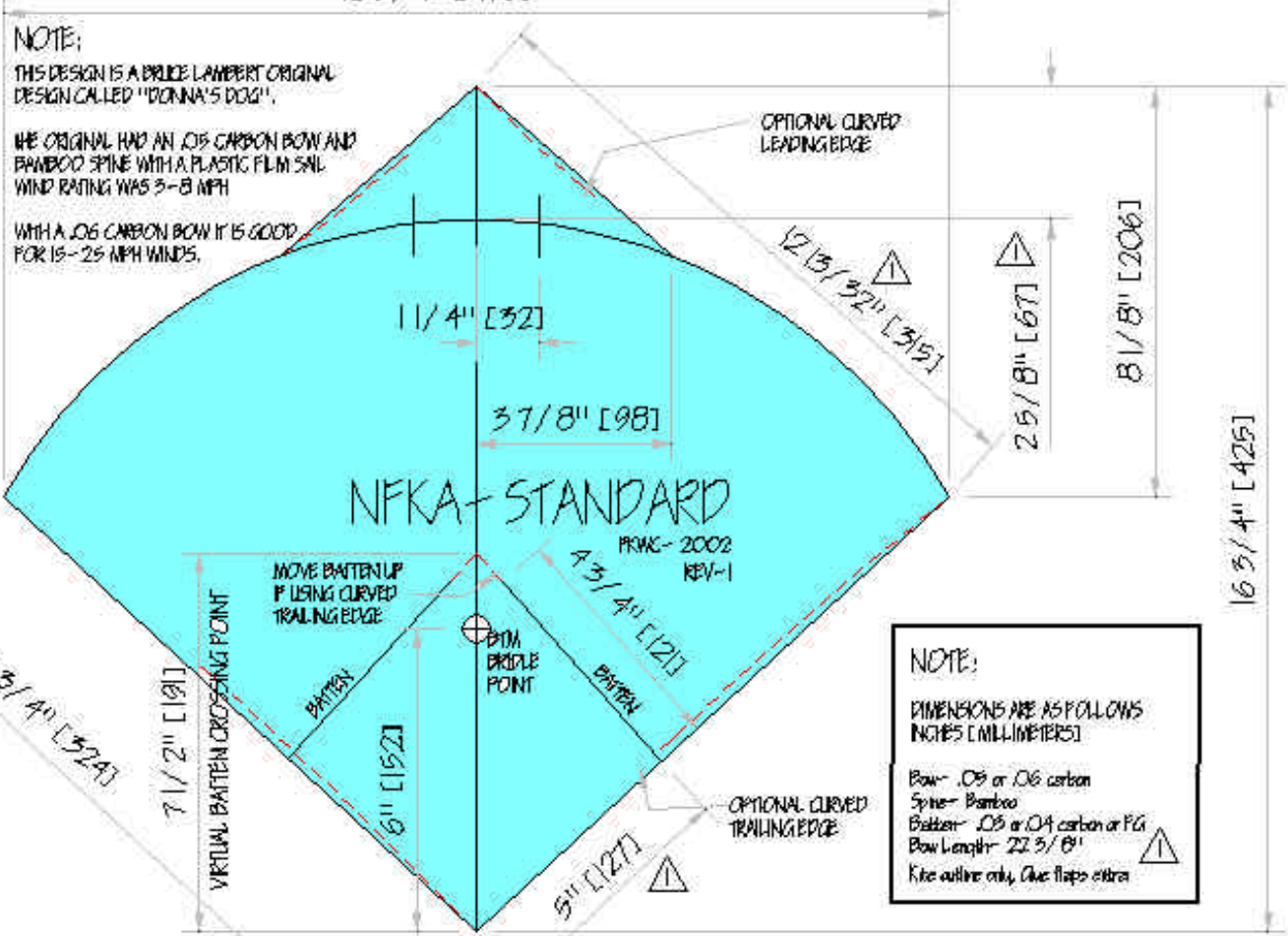
NOTE:

THIS DESIGN IS A BRUCE LAMBERT ORIGINAL DESIGN CALLED "DONNA'S DOG".

THE ORIGINAL HAD AN .05 CARBON BOW AND BAMBOO SPINE WITH A PLASTIC FILM SAIL. WIND RATING WAS 3-8 MPH.

WITH A .06 CARBON BOW IT IS GOOD FOR 15-25 MPH WINDS.

OPTIONAL CURVED LEADING EDGE



1 1/4" [32]

3 7/8" [98]

NFKA-STANDARD

PRWG-2002
REV-1

MOVE BATTEN UP
IF USING CURVED
TRAILING EDGE

DATA
ORIGIN
POINT

4 3/4" [121]

BATTEN

BATTEN

VIRTUAL BATTEN
CROSSING POINT

7 1/2" [191]

6" [152]

OPTIONAL CURVED
TRAILING EDGE

5" [127]

12 3/4" [324]

12 13/32" [315]

2 5/8" [67]

8 1/8" [206]

16 3/4" [425]

NOTE:

DIMENSIONS ARE AS FOLLOWS INCHES [MILLIMETERS]

- Bow - .05 or .06 carbon
- Spine - Bamboo
- Battens - .05 or .04 carbon or FG
- Bow Length - 22 5/8"
- Kite outline only. Give flaps extra