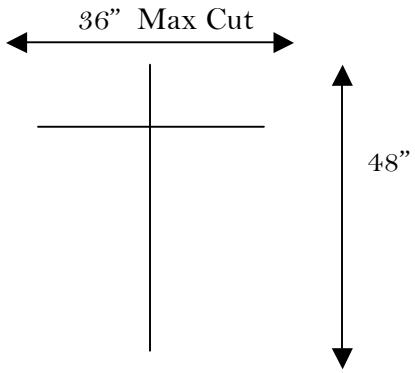
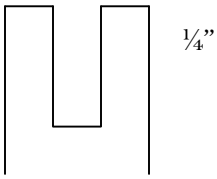
INSTRUCTION SHEET A

1. Prepare basic diamond kite by using one 36" and one 48" stick/spar.

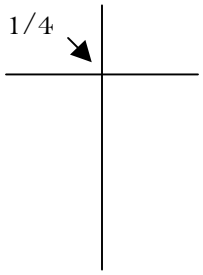
   Note: Spruce dowel rods make a good stick/spar.



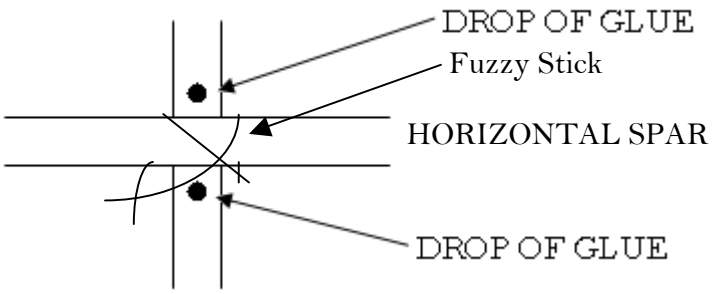
2. Notch dowels ¼" deep at each end.



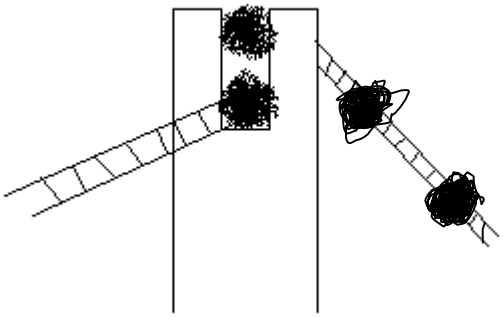
3. Tie both sticks together with bread ties or even better Fuzzy Sticks (Pipe Cleaners) ¼' down vertical stick. This should be 12 inches. Just use one Fuzzy Stick.
   Always place cross spar ¼ down the length of the vertical spar.

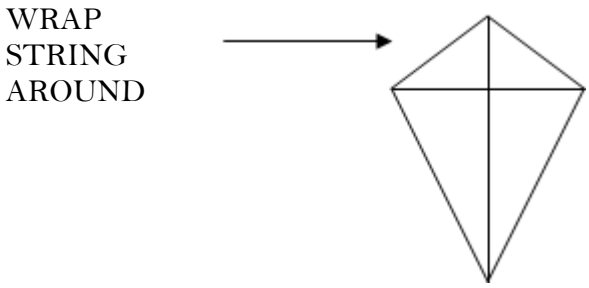


4. With a glue gun place a drop of glue just above and just below the horizontal spar to keep it from moving (caution don't glue the spars together). The Fuzzy Sticks will allow you to remove the horizontal spar for storage.

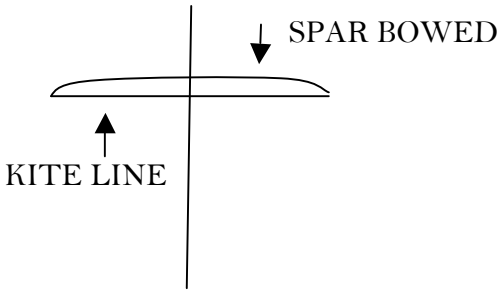


5. Now run kite string around each notch after knotting one end to the top notch and knot the other end off on the top notch too after connecting every notch. Use multiple knots in last connection just like a belt. Allows for adjustment.

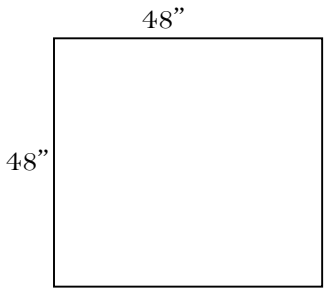




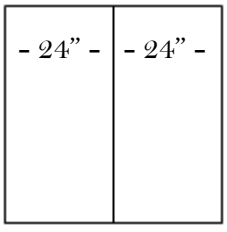
6. Bow the vertical spar like a bow and arrow bow and connect a single line knotted at both ends to hold the bow shape. See picture.



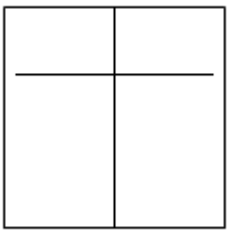
7. Roll out paper and cut to 48" by 48" to begin Kite sail. Draw out kite frame.



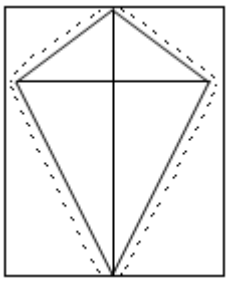
8. Measure from left to right 24" (half way of the paper) and draw a line down the middle of the paper.



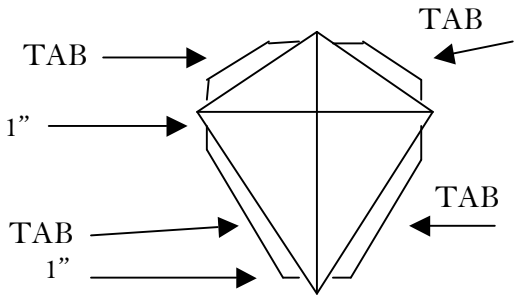
9, Measure 12" down (or 1/4 of the way down from the top of the paper) the paper and place a horizontal line at the 12" down the vertical spar and center at18" across the horizontal stick.



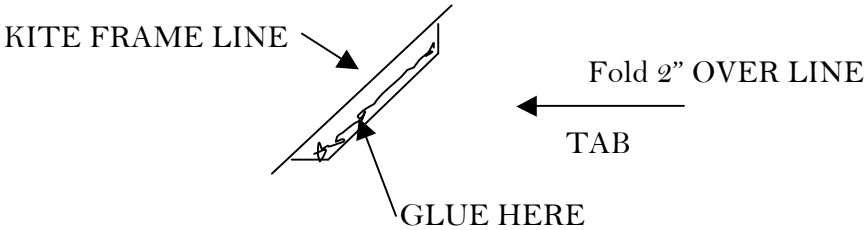
10. Now draw an outline around the kite about four inches away from your kite frame. See dash lines. You may have to rock your kite from side to side to get an accurate outline because of the bowed spar.



11. Now cut paper around each notch like the picture shows. The cut can be done one inch or so above and below the notch. This cut will create tabs that fit around the frame line.

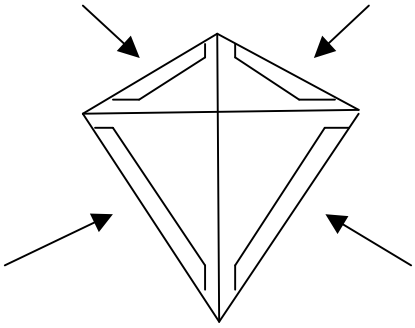


12. Cut excess paper off and leave about 4" for folding over line and tape or glue.



Note: If you use white glue be sure to glue the tab close to its edge and not glue the kite frame line. If you glue the frame line you will not be able to adjust tension on your kite frame or replace the sail easily.

TABS GLUED



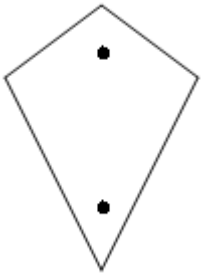
Note: Your kite sail is ready to paint. Remember to keep your drawing about two inches from all edges.
Draw, for example, your own original art representing art in America or art you have selected from the Internet.

13. Once the drawing and coloring is complete, a bridal may be added to the kite.

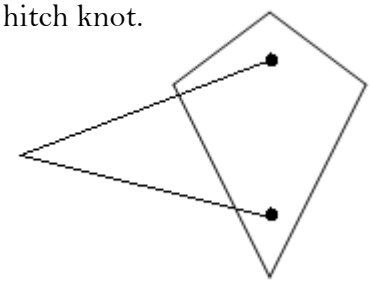
Note: Get some good 30lb test line or more for you kite bridal.

14. Place kite face down and punch a small hole in the paper about 6" from the top and a hole 10" from the bottom with a hole punch in front of the vertical spar.

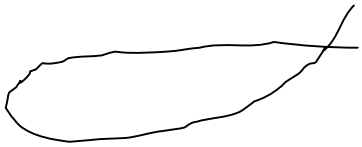
Note: After you punch your holes through the sail Place a piece of clear tape over each hole front and Back. Repunch them to protect the sail from the bridal.



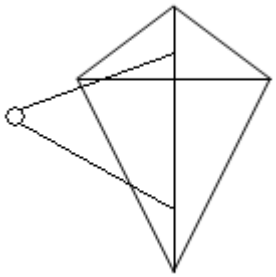
15. Cut a piece of kite line 60" for the kite bridal. Pass one end of bridal through the top hole and tie to vertical spar and the other end through the bottom hole and tie around the bottom spar. Use a two half hitch knot.



16. Important: Make a right angle out of the string and make a loop knot.



17. Hold kite straight up by top of bridal and slide your fingers down string until kite is at a 45 degree angle. Tie an overhand knot loop here to attach the kite reel line.

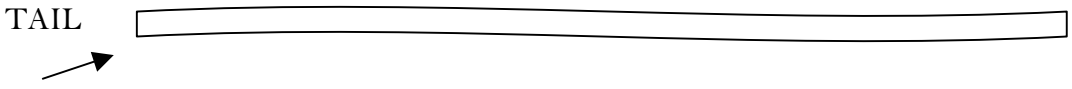


18. Take a plastic wire tie and place it around the bottom spar vertically.

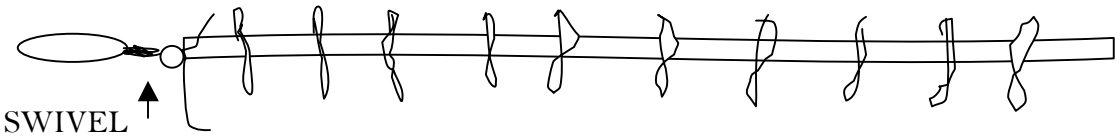
19. Place another plastic wire tie as shown vertically lock it in this position and lock the horizontal tie down. This arrangement will hold your kite tail.

NOTE: Secure horizontal tie with glue gun glue with a spot above the vertical tie and below the vertical tie. Do the same with a dab of glue above and below the two half hitch knot in case of slippage. Do the same for the bottom two half hitch knot.

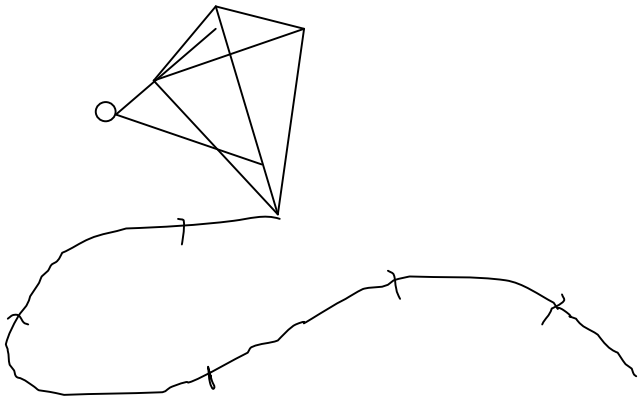
20. Cut out a long tail of newspaper, plastic tape, or cloth to about 15 to 18 feet.



21. Tie a piece of kite string to the tail and a fishing swivel size 1 to the string.



22. Clip tail onto the kite. If you do not have a fishing swivel then just tie the string on the kite tie down ties.



23. Your kite is complete. See instructions for launching your kite and kite flying tips.

Instructions and Flying Tips for Flying your Kite

Single line kites are the simplest form of kite flying. Just because it is relatively easy to fly a single line kite doesn't mean everyone can be successful especially the first time flight. Actually it takes practice to fly a kite whether it is on a single line or multiple lines. The FAA (Federal Aviation Administration) has made a proclamation that all kite flyers are pilots and should obey all rules associated with kite flying. Thus, if you take a kite up and bring it down successfully I think it would be safe to call you a kite pilot recognized by the FAA. Congratulations……

Single Line Kites:

First, check the wind. You may want to call your local airport for current weather conditions including wind speed. Most airports have a weather number you can call without talking to anyone so find out what it is and put it in your phone. It is very disappointing and frustrating to take a kite out to fly and there is not enough wind. I will share this with you. They do make kites that fly in almost no wind. They're expensive to say the least but if you really like your kite flying or you don't want to explain to the kids or onlookers why your kite won't fly then you may want to make the purchase. Once on the field make sure you're not too close to power lines or anything your kite might fly into and get stuck. Those kite eating trees should be taken seriously while flying your kite. Determine where the wind is coming from; for example, is the wind coming from the north? If so, then face south and allow the wind to catch your kite and slowly reel out the kite line with the wind picking the kite up. Once your kite is in the air you can detect the pull from the kite and then let it out to your desired altitude.

You may notice when the wind blows strong against your kite it will want to dive. To recover walk towards your kite to take the tension off the line. If your kite sinks or drops down tail first you need to pull back on the line and gain some altitude. Do this while you're flying your kite. You'll not only have a better flight but you'll look like you know what you are doing and be a good representative of kite flyers.

In this particular project we are flying Diamond or Eddy style kites. Balance is everything with your kite. Our kites are homemade in this project and it is imperative that your kite is balanced or in the math terms of this project, congruent. Your cross stick must be mounted ¼ the distance of your spine stick from the top or your kite may be unbalanced. Also, make sure the tail is long enough. Our kite tails are made of torn up tee shirts tied together making a rather traditional looking tail. Most of these tails need to be around eleven feet long. Each section of tail is tied on so you can add on or untie to balance your kite. How do you know if your kite is unbalanced? It will fly in a circle until you balance the tail. Check your cross stick distance too.

Next, practice, practice, practice flying your single line kite. If you happen to get stuck on a power line let go especially if your line is wet and call the power company. They will probably get it down for you. If your kite gets caught in a tree call the fire department. They really do come out and get things out of trees. Both departments have done this free for our projects and they are wonderful.