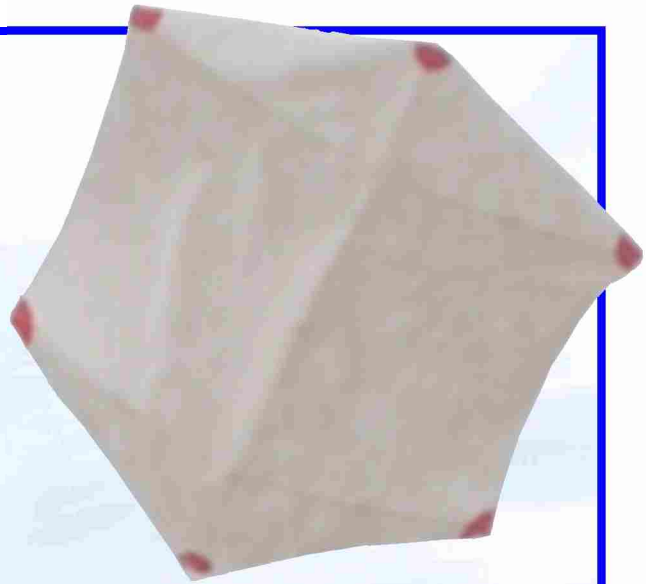


48 inch  
No-Sew Rokkaku  
Kite Kit

Easy to build,  
decorate and fly



Throughout the world there are many traditional and modernized versions of the Rokkaku kite style. Its simple design and excellent flight characteristics has made it a 'must have' kite for most kite enthusiasts.

From this kit, you will be assembling a 4' Rokkaku made of Tyvek® using a No-Sew technique we developed. Tyvek® is light-weight and strong. And, it is a material that is easy to work with.

You can decorate your kite either before or after assembly.

Permanent markers (Sanford® brand-Sharpie®), Design Master spray paints, artist's acrylics and latex paints work well on Tyvek®.

You should test for the compatibility of your art medium if you want to use a product other than what has been mentioned. We've included a piece of Tyvek® for you to practice on. Wait 24 hours to see if there is a reaction, such as puckering.

Your kite will be flown at least 50' to 100' away. Keep in mind the bolder the design, the better your kite will look in the sky. Small details will not show up.

For maximum effect, you may want to decorate both sides of your kite sail.

Have fun. Go build your kite.

Kit contents:

- (1) Pre-cut Pre-punched Tyvek® Kite Sail
- (2) Pre-cut Wood Cross Spars 1/4" x 41 13/16"
- (2) Pre-cut Wood Spine 1/4" x 47 1/4"
- (9) Plastic Zip-Ties

Pre-cut 130# Braided Dacron line for:

- (1) Top Bridle
- (1) Bottom Bridle
- (2) Cross Spar Tensioning lines
- (3) Connecting Loop lines
- (1) Flight Angle Adjustment line

- (2) Buttons for Cross Spar Tensioning lines

Adhesive-backed Dacron reinforcements:

- (7) Mid-sail dots
- (4) Nose/Tail tabs
- (4) Corner tabs "A"
- (4) Corner tabs "B"

Tools in the kit:

- (1) Plastic Spoon - Burnishing tool
- (1) Light Wire Loop - For threading bridle lines

Additional items you will need:

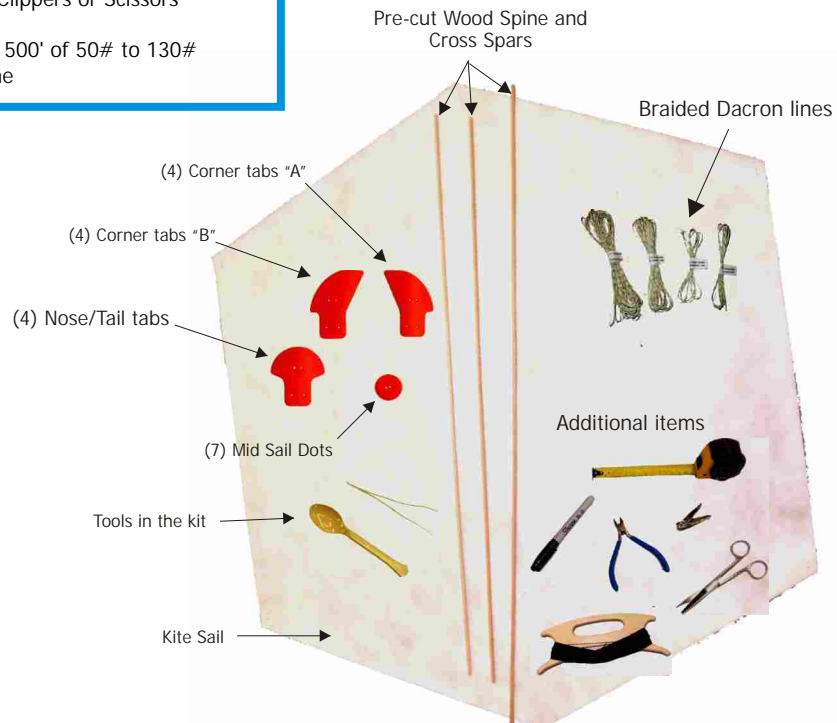
- Ruler or Tape Measure
- Permanent marker, Sharpie®
- Wire Cutters, Nail Clippers or Scissors
- Flying line handle
- Flying line, 200' to 500' of 50# to 130# Braided Dacron line

Before you start building your Kite, please look over the instructions and examine the contents of your Kit to familiarize yourself with the parts and descriptions.

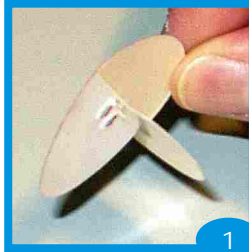
Set up your work area. We suggest you use a large table with a smooth surface. If there is any texture to the surface it will transfer through the sail when you burnish the Adhesive-backed Dacron parts.

It is easier to put the Kite together if you don't have to fix mistakes.

Leave all of the parts in their packages until they are needed.



In the following steps you will be Placing the seven Mid-Sail Reinforcing Dots on the back side of the Sail. The back of the Sail is marked with a black dot at the nose. Place the Sail on a flat work surface with the BLACK DOT UP.

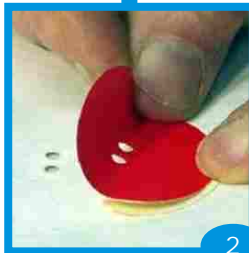


Peel back the paper-backing halfway to expose the sticky surface.

Fold the paper-backing just past the pre-punched holes and crease.

Leave the paper-backing attached to the Dot.

1

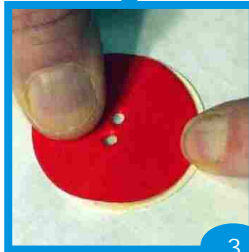


Place the part of the Dot with the paper-backing next to the Sail.

Keep the sticky part off the Sail.

Slide the Dot close to one of the matching Mid-Sail pre-punched holes.

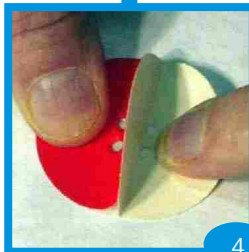
2



Align the holes in the Dot with the pre-punched holes in the Sail.

Lightly press the Dot to the Sail.

3

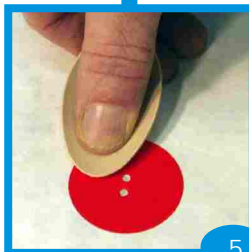


Remove the rest of the paper-backing.

Lightly rub the Dot with your finger.

Repeat steps 1 through 4 for the remaining 6 Dots.

4



Once all 7 Dots are in place, then burnish them with the round side of the plastic spoon.

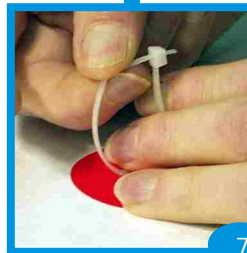
5



Place a zip tie in each of the three Dots that are down the center of the Sail. Refer to the figure at the bottom of the page. These will keep the Spine from moving side-to-side during flight.

Feed a zip tie from the back of the Sail through one hole and then up

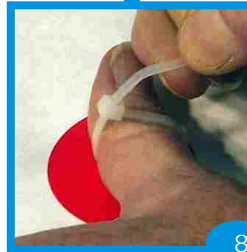
6



Insert the pointed end of the zip tie into the flat side of the square "Fastening" end.

Push until you hear one or two clicks.

7



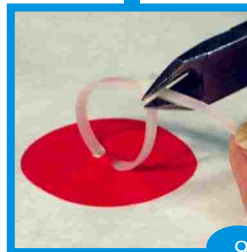
Place your thumb, just up to the knuckle, into the loop.

Pull on the pointed end until the loop barely touches your knuckle.

Note: these loops are to remain loose.

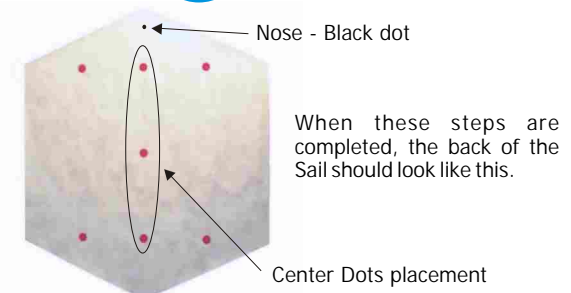
Repeat steps 6 through 8 for the other two center Dots.

8

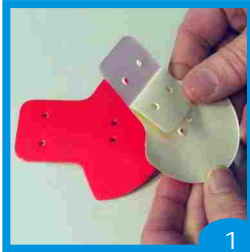


Use your wire cutters or other tool to snip off the loose ends of all three zip ties.

9



In the following steps you will be Making the Nose/Tail and Corner tab sets. Once these are made they will be applied to the Sail.



Fold back the paper-backing just as you did for the Dots.

Do this to all of the Nose/Tail and Corner tab pieces.



Starting with the Nose/Tail pieces place one on top of the other, as in the picture.

Keep the sticky parts separated.



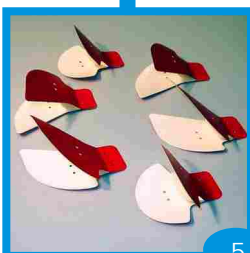
Slide the top part around to align the holes and edges.



Lightly press the narrow tab so it sticks together.

DO NOT remove the paper-backing.

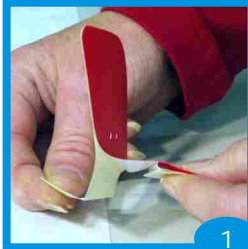
Repeat steps 1 through 4 to complete the second Nose/Tail tab Set and the four Corner tab Sets.



Your parts should look like these.

You should have 1 Nose tab set, 1 Tail tab set and 4 Corner tab sets.

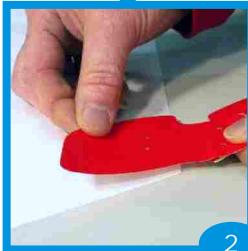
In the following steps you will be Applying the Corner and Nose/Tail tab sets to the Front of the Sail. The Sail should be placed on your work surface with the MID-SAIL DOTS FACING DOWN.



1 Start with one of the Corner tab sets. Match it to a corner of the Sail to make sure you have the correct orientation before you do the next step.

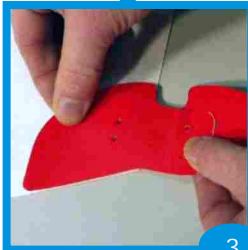
Once you are satisfied, then peel the paper-backing off of one half of the set.

Do Not remove the paper-backing from the other half of the tab set.



2 Lower the part to the sail.

Keep it from sticking to the Sail.



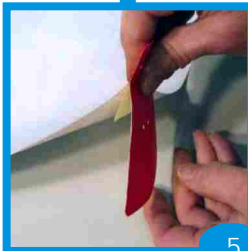
3 Align the holes and edges of the reinforcement piece with the pre-punched holes and edges of the sail.



4 Lightly press the part to the sail.

Lightly rub the entire part with your thumb.

Do Not remove the paper-backing from the other half of the tab set.



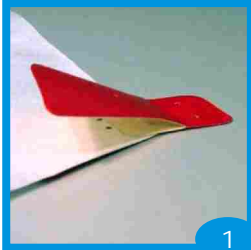
5 Your first corner should look like this.

Repeat these steps for the other three Corner tabs, then do the Nose/Tail tabs.

When these steps are completed, the front of the Sail should look like this.



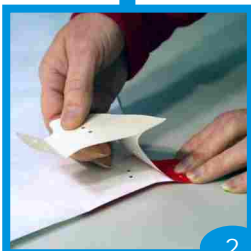
In the following steps you will Finish attaching the Corner and Nose/Tail tab sets. The Sail should be placed on your work surface with the MID-SAIL DOTS FACING UP.



Make sure that the Sail is oriented properly. See note above.

Once again, start with one of the Corner tabs.

Your Corner tab set should look like this.



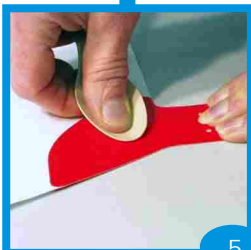
Peel off the remaining paper-backing as you hold the sticky part away from the Sail.



Carefully align the holes and edges of the Corner tab Set with the pre-punched holes and edges of the Sail.

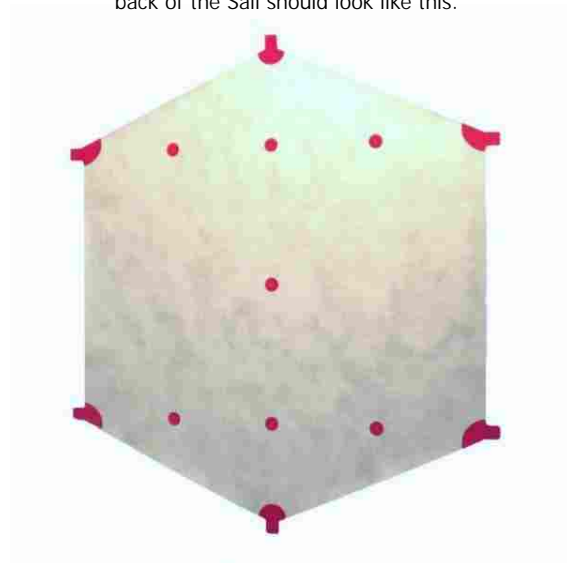


Lightly press the part to the Sail.  
Lightly rub the entire part with your thumb.  
Repeat until all Corner, Nose/Tail tab sets are in place.



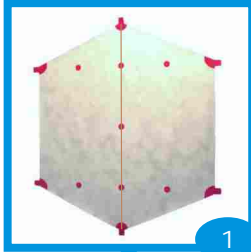
Burnish all of the Corner, Nose/Tail tabs.

When these steps are completed, the back of the Sail should look like this.



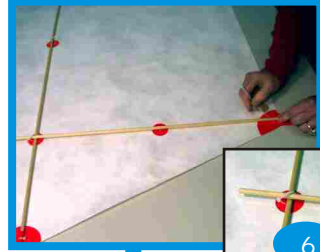


In the following steps you will Build the Tail and Nose/Corner pockets. The Sail should be placed on your work surface with the MID-SAIL DOTS FACING UP.



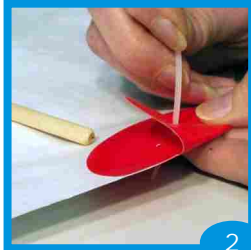
Place the Spine through the three zip tie loops.

1



Place a 1/4" x 41 13/16" Cross Spar (one of the shorter remaining dowels), across the top of the spine and through the zip tie loop. (See inserted picture)

6



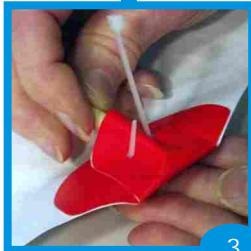
Start with the Tail of the Sail.  
Fold the Tail tab to the back side of the Sail.  
Insert the pointed end of a zip tie through one of the holes in the tab and its matching hole in the Sail.

2



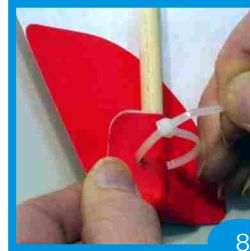
Place the end of the Cross Spar onto the Corner Pocket tab.  
Fold the tab over and insert a zip tie.  
Form a pocket as you did for the Tail and Nose.

7



Bring the zip tie back up through the remaining holes in the Sail and the tab.  
Place the 1/4" x 47 1/4" Spine, (longest dowel), into the pocket that you have formed.

3



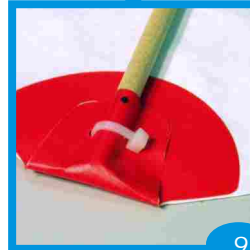
Slip the pointed end of the zip tie through the square end and slide it down to the Sail.  
Remember, not too tight!  
Repeat steps 7 and 8 to build the opposite corner pocket.

8



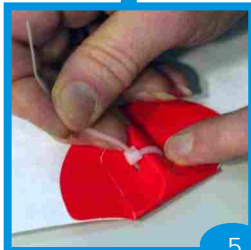
Slip the pointed end into the flat side of the square "fastening" end of the zip tie.  
Listen for the CLICKS.

4



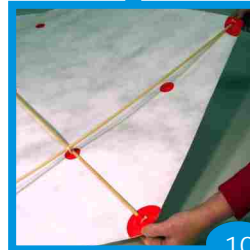
Snip all of the Pocket zip ties so they look like this.  
Note: the Center Dot zip ties are to remain loose. Refer to page 3 step 8  
Mark the Nose with your permanent marker.

9



With the Spine in the pocket, slide the square end down towards Sail. Pull the zip tie just tight enough to hold the Spine in place. But, not so tight that you can't take the Spine out.  
Rotate the Kite and repeat steps 2 through 5 to build the Nose pocket.

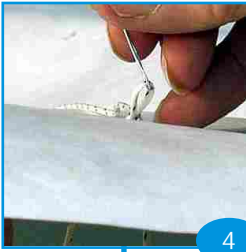
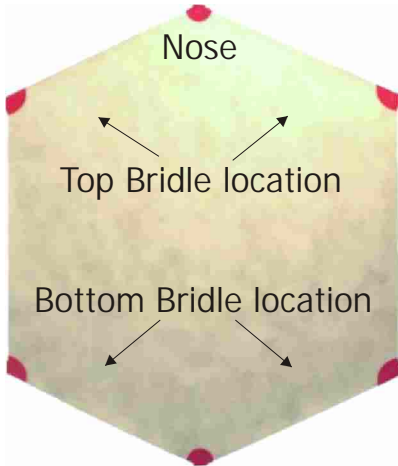
5



When these step are completed, the back of your Kite should look like this.

10

In the following steps you will Bridle your Kite. The Sail should be placed on your work surface with the MID-SAIL DOTS FACING DOWN.



Pull the Bridle line through to the front of the Sail.

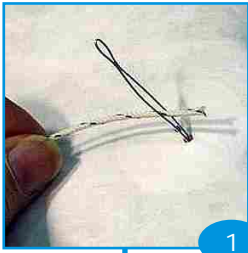
Repeat steps 1 through 4 for the other end of the Bridle line.

There should be two 12" pieces of Bridle line sticking out of the Sail.



See the "Some Useful Knots" page, to the right. Remove this sheet from the booklet to use as a handy reference guide

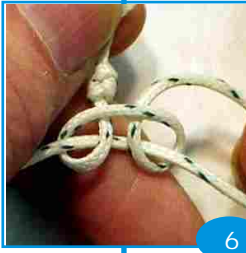
Tie a "Figure of Eight" knot at each end of the Bridle line.



Start with the Top Bridle, the shorter of the two.

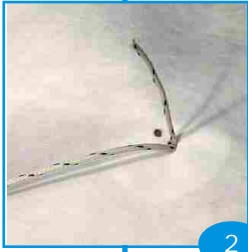
Push the Wire Loop, from the back of the Sail, through the top hole.

Thread one end of the Bridle line through the Wire Loop.



Next, tie a "Lark's Head Hitch".

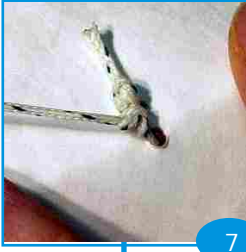
This creates a sliding knot.



Pull the Wire Loop and the end of the Bridle line through to the back of the Sail.

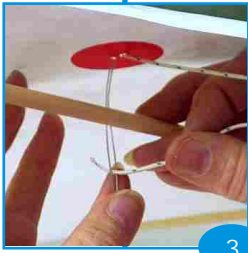
Pull out about 12" of line.

Remove the Wire Loop from the end of the Bridle line.



Tighten up the "Lark's Head Hitch" and slide it down tight to the Sail.

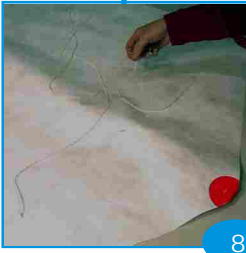
Repeat this at the other end of the Bridle line.



Push the Wire Loop through the second hole from the front of the Sail.

Thread the Bridle line through the loop.

Make sure that the Bridle line goes around the back of the Cross Spar.

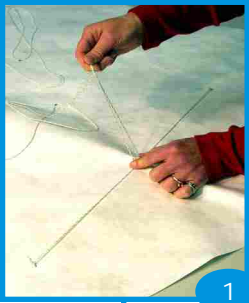


Your Top Bridle should look like this.

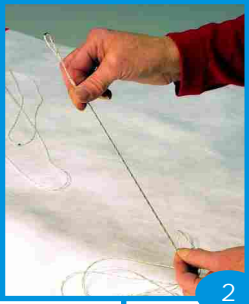
Repeat steps 1 through 7 for the Bottom Bridle.



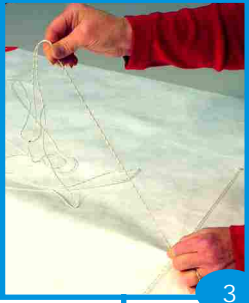
In the following steps you will Find The Center of the Top and Bottom Bridle lines and, make three Connecting Loops and one Flight Angle Adjustment line. The Sail should be placed on your work surface with the MID-SAIL DOTS FACING DOWN.



Use one hand to hold the top Bridle line away from the Sail as you use your other hand to bring the lines to the center at the Spine.



Pinch the line and hold it against the Spine as you slide your other hand along the line to get to the center of the Bridle line.



If the Bridle line is longer than you can reach, you might have to work each hand along the line to reach the center.

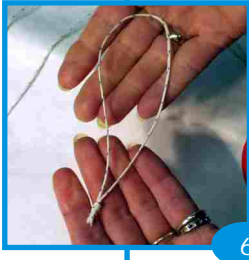


Use a permanent marker to mark the center of the Bridle line.

Repeat steps 1 through 4 for the bottom Bridle line.

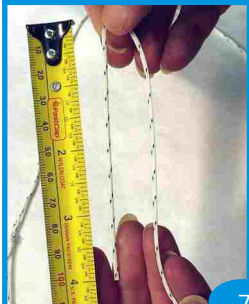


Fold a Connecting Loop line in half. Tie an overhand knot near the loose ends to form a loop.



Repeat step 6 to form two more Connecting Loops.

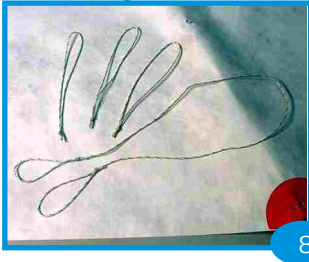
You should have a total of three Connecting Loops.



Fold one end of the Flight Angle Adjustment line at least 4" back.

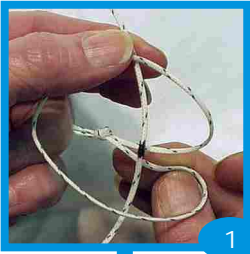
Tie an overhand knot to form a loop.

Repeat this step to form a loop at the other end of the Flight Angle Adjustment line.



You should have three Connecting Loops and one Flight Angle Adjustment line with loops on both ends.

In the following steps you will Attach the Connecting Loops and the Flight Angle Adjustment line to your Kite. The Sail should be placed on your work surface with the MID-SAIL DOTS FACING DOWN.

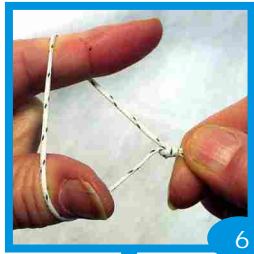


NOTE: Steps 1 through 4 apply to the Top and Bottom Bridle lines.

Place one of the Connecting Loops across the center mark of each of the Bridle lines.

Start wrapping the knotted end around the Bridle line.

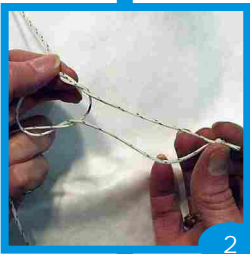
1



Follow steps 6 through 9 to attach the Flight Angle Adjustment line to the Top and Bottom Bridle line Connecting Loops

Place your thumb and forefinger into one of the loops at the end of the Flight Angle Adjustment line.

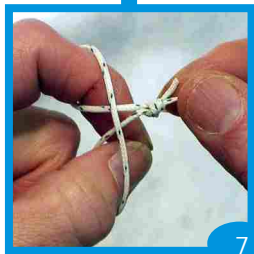
6



Wrap the knotted end around the Bridle line two times.

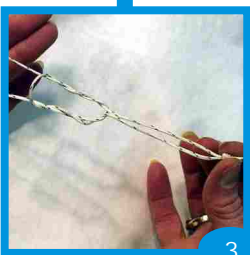
This is called a "Prussik".

2



Bring your thumb and forefinger together to create a "Lark's Head Hitch".

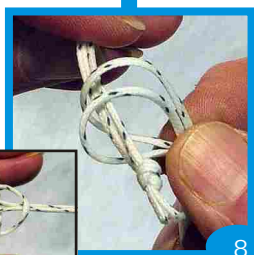
7



Lightly pull on the knotted end of the loop.

Keep the mark on the Bridle line centered in the "Prussik".

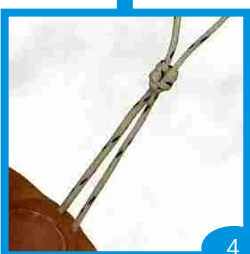
3



Hold the Hitch loops open with one hand.

With your other hand slip the knotted end of the Connecting Loop, that is attached to the Top Bridle line through the open Hitch loops.

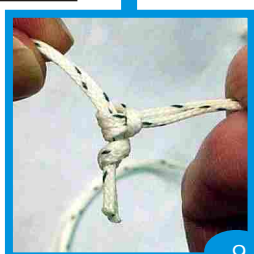
8



Continue to pull until the "Prussik" looks like this.

Repeat steps 1 through 4 to attach the last Connecting Loop to the center of the Flight Angle Adjustment line. This loop will now be called the Flight Angle Adjustment Loop.

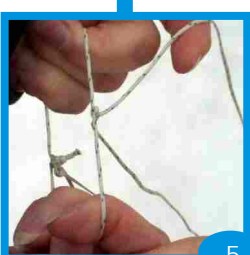
4



Slide it down next to the knot at the end of the Connecting Loop and pull snug.

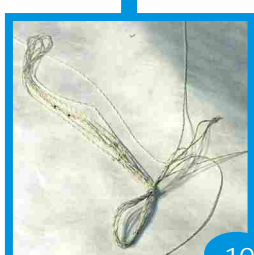
Repeat steps 6 through 9 to attach the other loop of the Flight Angle Adjustment line to the Bottom Bridle Connecting Loop.

9



To release the "Prussik" and adjust the Connecting Loops along the Bridle lines and the Flight Angle Adjustment line, simply grasp the bridle on each side of the Loop and pull. Slide the loop side-to-side and then pull on the knotted end. To set the "Prussik" place your fingers inside the loop (as pictured) and pull.

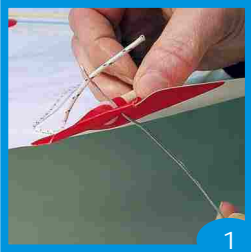
5



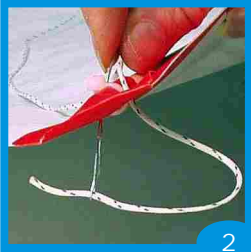
You can gather the Bridle together and tie a loose "Overhand Knot". This will keep the lines from getting in your way as you proceed to the next steps.

10

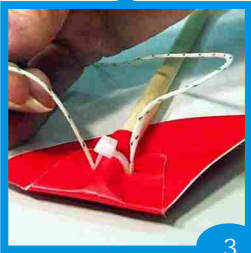
In the following steps you will Attach the Tensioning lines to your Kite. The Sail should be placed on your work surface with the MID-SAIL DOTS FACING UP.



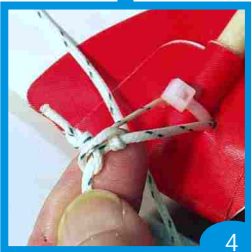
Pick one Cross Spar corner.  
Push the Wire Loop up through one of holes in the Corner Pocket.  
Thread one end of the Tensioning line through the loop and pull it to the front of the Kite.



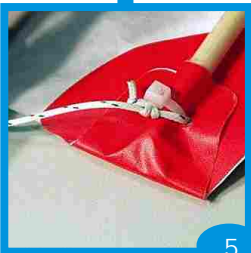
Push the Wire Loop down through the other hole to the front of the Kite.  
Thread the line through the loop and pull the end to the back of the Kite.



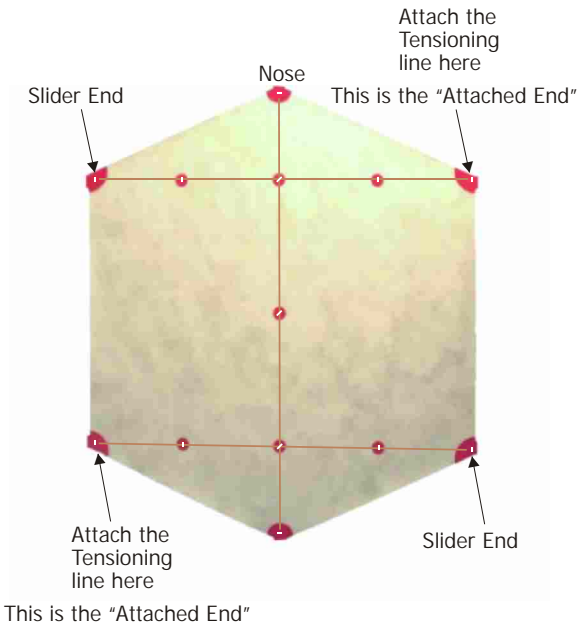
Pull about 6 inches of line through the hole.



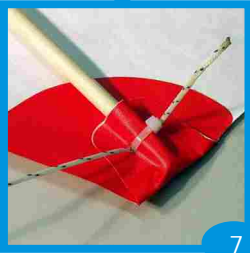
Tie a "Figure of 8" knot on the short end of the line.  
Next tie a "Lark's Head Hitch".  
Slide it down tight to the Sail.



You now have the "Attached End" of one of the Tensioning lines.  
Repeat these steps for the other Tensioning line.

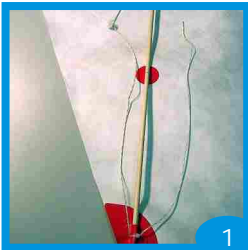


Use the Wire Loop to thread the loose end of the Tensioning line through two diagonal holes of the Button.



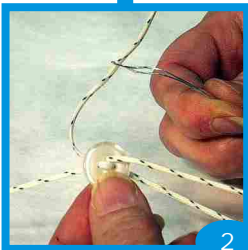
Use the Wire Loop to thread the loose end of the Tensioning line through the pocket holes of the Cross Spar slider end.  
Pull the line until most of the slack is pulled through.

In the following steps you will Complete the Sliding End of the Tensioning line. The Sail should be placed on your work surface with the MID-SAIL DOTS FACING UP.



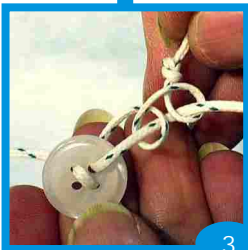
At this point, your Tensioning line should look like this.

The Button needs to be slid to where you can easily reach it with the loose end of the Tensioning line.



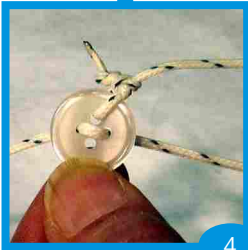
Thread the loose end through one of the remaining holes in the button.

Pull the line through and remove the Wire Loop.

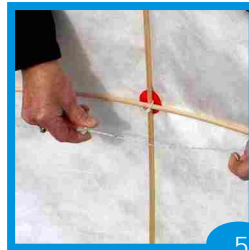


Tie a "Figure of 8" knot at the loose end of the line.

Tie a "Lark's Head Hitch".



Tighten the "Lark's Head Hitch" against the Button.

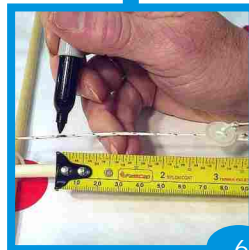


To take the slack out of the Tensioning line, grasp the line on the "Attached End" side a few inches away from the Button. Use your other hand to hold the Button and slide it towards the center of the Kite.

Tighten the line just enough to take out the slack. But, not so much that the Cross Spar is bowed.

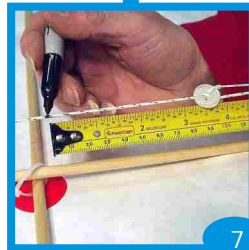
Repeat all of the previous steps on the second Tensioning line.

Make sure both Tensioning lines are tighten equally and the Kite is flat to your work surface.



Next, you will measure and mark the Tensioning lines for where you will slide the Button to when bowing the Kite for flight.

The Top Tensioning line needs a permanent mark at 3" from the Button toward the center of the Kite.



The Bottom Tensioning line is marked at 3 3/4".



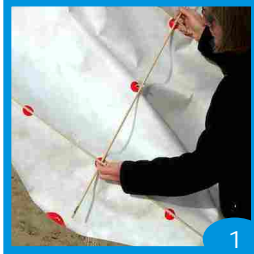
Now bow your Kite.

Slide the Buttons to their marks on the Cross Spar Tensioning lines.

Use the technique shown in the top picture.

Your Kite will look like this when the Tensioning lines are set.

Congratulations! We hope you enjoyed building your Kite. In the following steps you will insert the Spine and set up your Kite for Flight. Have Fun. Be Safe. Go Fly Your Kite.



Slide the Spine under the Top Cross Spar, through the center zip tie loop, and under the Bottom Cross Spar.

The Spine should be next to the Sail.

1



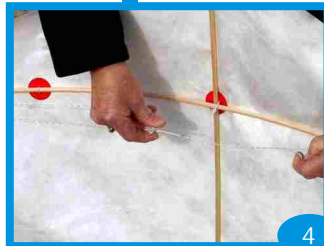
Slip the end of the Spine into the Tail Pocket.

2



Rest the Tail of the Kite on your foot. Hold onto the Nose of the Sail as you slightly bend the Spine to slip the end into the Nose Pocket.

3



Turn the Kite so the front is against your body.

Hold the Tensioning line with one hand as you slide the Button to the mark you made.

Rotate the Kite and repeat.

4



Your Kite should look like this when both Tensioning lines are set.

5



Make sure the Bridle has no twists or tangles.

Attach your flying line onto the Flight Angle Adjustment Loop using a "Lark's Head Hitch". (As pictured)

6



Test fly your Kite.

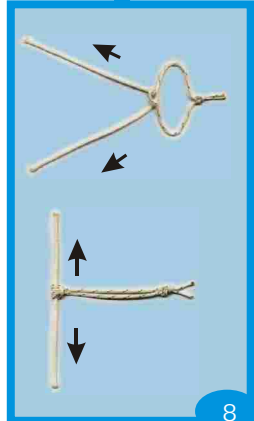
Only release about ten to fifteen feet of flying line.

If your Kite doesn't climb, then that can usually mean one of two things:

- 1 - Not enough wind
- 2 - The Flight Angle Adjustment Loop needs to be adjusted.

A slight adjustment is usually all that is needed to achieve stable flight.

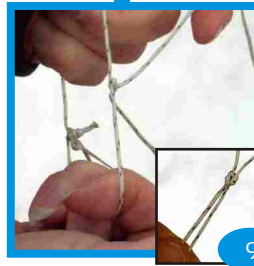
7



To release the "Prussik" and to adjust the Flight Angle Adjustment Loop, simply grasp the Flight Angle Adjustment line on both sides of the Loop. Then pull to release the "Prussik".

Slide the Loop down for light winds and up for heavier winds. Move the Loop about 1/4" at a time. Small moves make a big difference.

8



To set the Loop, place your fingers inside the Loop (as pictured) and pull.

Pull on the knotted end of the Flight Angle Adjustment Loop to finish setting the "Prussik". (See inserted picture.)

9



# COME FLY WITH US!

## IT'S AS EASY AS 1-2-3

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<u>Membership Packages</u>	<u>1yr</u>	<u>2yr</u>	<u>3yr</u>	<u>AMOUNT</u>
U. S. BASIC via 3 <sup>rd</sup> Class	35	68	101	_____
U. S. EXTRA via 1 <sup>st</sup> Class	43	83	123	_____
CANADA/MEXICO	43	83	123	_____
OVERSEAS (via Surface)	45	87	129	_____
OVERSEAS (via Air Mail)	60	116	171	_____
AKA SPONSOR	100	200	300	_____
(Sponsor includes 1 <sup>st</sup> Class or Air Mail and tax-deductible donation in the U.S.)				
Each Added Family Member	5	10	15	_____
TOTAL REMITTANCE IN U.S. DOLLARS				_____

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Signature \_\_\_\_\_ Date \_\_\_\_\_

## 1. LET US KNOW WHO YOU ARE

### MEMBERSHIP APPLICATION

Name \_\_\_\_\_ Spouse \_\_\_\_\_  
Other Family Members \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Country \_\_\_\_\_  
Phone \_\_\_\_\_ or \_\_\_\_\_  
Email Address \_\_\_\_\_  
Web Page URL \_\_\_\_\_

- NEW MEMBERSHIP       RENEWAL  
 REINSTATEMENT       ADDRESS CHANGE  
 ADDING AN ADDITIONAL MEMBER

## 3. ADDITIONAL INFORMATION AND OPTIONS

- Send me information on becoming a Member Merchant.  
 DO NOT list me in the AKA Directory.  
 DO NOT distribute my name outside the AKA.

My local club is \_\_\_\_\_

I was referred to the AKA by \_\_\_\_\_

### WAIVER AND RELEASE OF LIABILITY

I, the undersigned, by participating in any AKA sanctioned activities, agree to: engage in and promote safe, responsible flying and to adhere to all event safety rules; inspect all facilities, fields, and equipment prior to participating and to immediately share any safety concerns with event organizers; acknowledge that kiteflying may involve risk of serious injury and/or economic losses from my actions or those of others and to assume this risk; and not sue the AKA, its directors, agents, and volunteers, and event sponsors, organizers, owners and lessors of event locations, and participants, for losses or damages due to property damage or injury.

I have read this waiver and release, understand that I give up substantial rights by signing it, and sign it voluntarily.

Signature \_\_\_\_\_ Date \_\_\_\_\_