Skimbat sailing at Anchorage demo day November 2022

SKIMBAT USER MANUAL

Skimbat skate sails have evolved quickly since 2021 production models. This manual adresses changes.

Unfold

Assemble F tubes

Tension outhaul

Tension tip tensioners

Install battens

Tune for conditions

Nomenclature

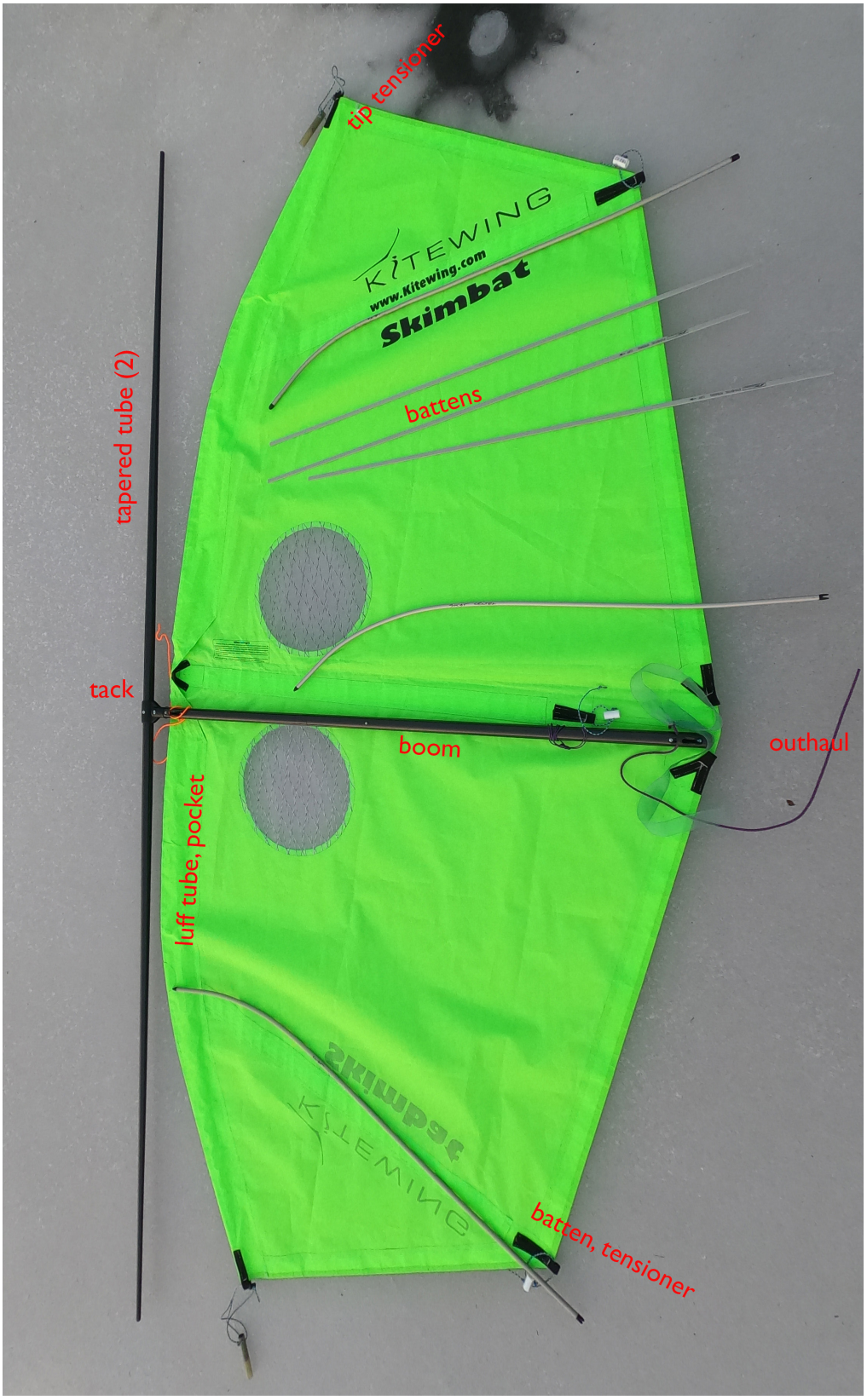
Frame is the boom, two tapered front tubes and battens.

Skimbat comes with either RBS glass battens or 7075 T6 aluminum battens or specify both with your order.

Tapered tubes are inserted within the luff tube or luff pocket of the sail.

The boom has a ferrule captive within a bracket. The ferrule at the T end of the boom is inserted to the tapered front tubes to complete front tube assembly.

Illustration shows the assembled front tube outside the luff pocket of the sail.



Skimbat Boom

Skimbat uses a standard length boom which is also used with other Kitewing rigs. There are multiple versions of the same length boom.

Skimbat can be rigged with a two part boom or a single tube.

Single part booms are lighter.

The two part booms allow for stow of RBS battens within the rear section of the boom.

Two part booms are a hold over from the SK 821 which requires the two part system.

Skimbat tapered front tubes obviate the need for the two part system as the tapered tube is longer than the boom.

Your Skimbat could have a single part or a two part boom.

Shows sail unfolded with tapered tubes, (tapered front tubes) inserted to luff tube or luff pocket of sail.

Assemble Front Tube

Unfold the sail.

Insert the tapered tubes within the luff pocket of the sail.

Slide one tapered tube and then the other to the ferrule at the end of the boom. The ferrule is the T end of the boom.

Tension outhaul
Tip tensioners

Rig and tension the outhaul.

Rig with one wrap around the boom. This makes the sail to boom fit more secure.

Tension the ouhaul before the tip tensioners.

Front tubes assembled within luff pocket to ferrule.

Tension the outhaul prior to installing tip tensioner.

1. Insert tapered tubes within luff pocket of sail. Assemble tapered tubes to the ferrule at the T end of the boom.

2. Rig and tension outhaul.

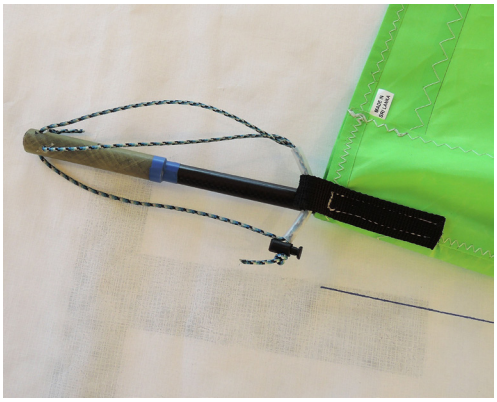
3. Tension tips

4. Install and tension battens

5. Tune the rig.

go sailing

Tip tensioner installed to tapered tube. Note tensioner tube is taped to the tapered tube. This helps to protect the tip of the tapered tube as well as to keep the purchase untangled. Once rigged correctly tip tensioners can remain taped to the tapered tube.



Tension outhaul then install and tension the tip tensioners.

Insert Battens

Skimbat can be rigged with RBS glass battens or 7075 T 6 battens.

The RBS battens work very well. They can be adjusted to a full or flat rig.

The aluminum battens are pre bent. They do not adjust through as wide a range. The aluminum battens are stiff compared to the RBS battens. Stiff battens work better in heavy air because they are less prone to distort under load and less inclined to invert.

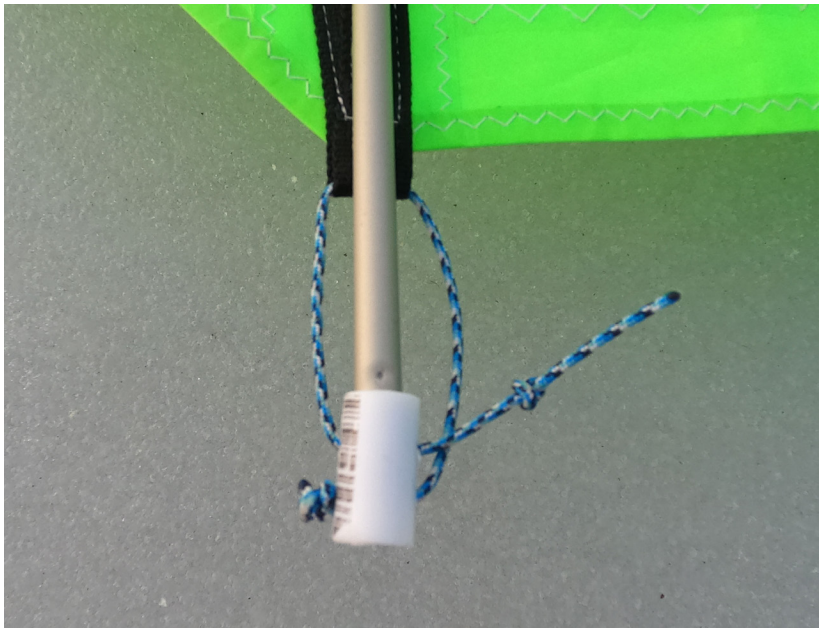
The aluminum battens are easier to use as they require less understanding.

RBS battens require understanding the camber inducer as well as tack and outhaul coordination.

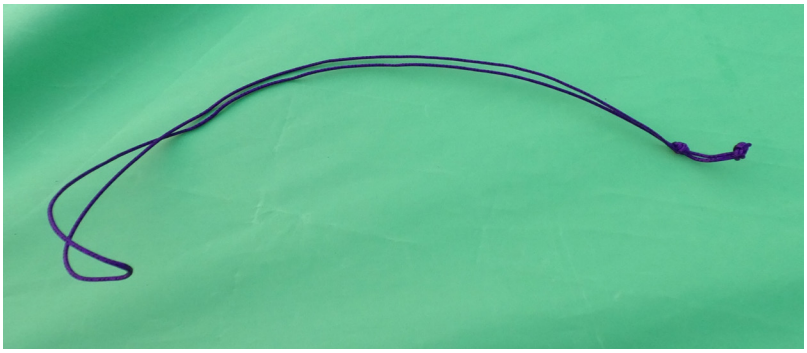
If you do not plan to sail in heavy air suggest the RBS battens are the best choice.

Illustrations show a full rig and a flat rig using RBS battens.

Aluminum batten with tensioner installed. Note the tensioner is counter inuitive. To tension the assembly pull on the inboard part of the chord which cams the tensioner tube to the arrow nock or notch in the end of the batten.



Center Batten Camber Inducer



The camber inducer is a performance upgrade. Rig the camber inducer prior to inserting the center batten.

Release some of the outhaul to get the sail away from the boom.

Rig the loop from the camber inducer through the soft eye on the sail which also retains the batten tensioner. Slip the loop to the notch or arrow nock in the end of the batten.

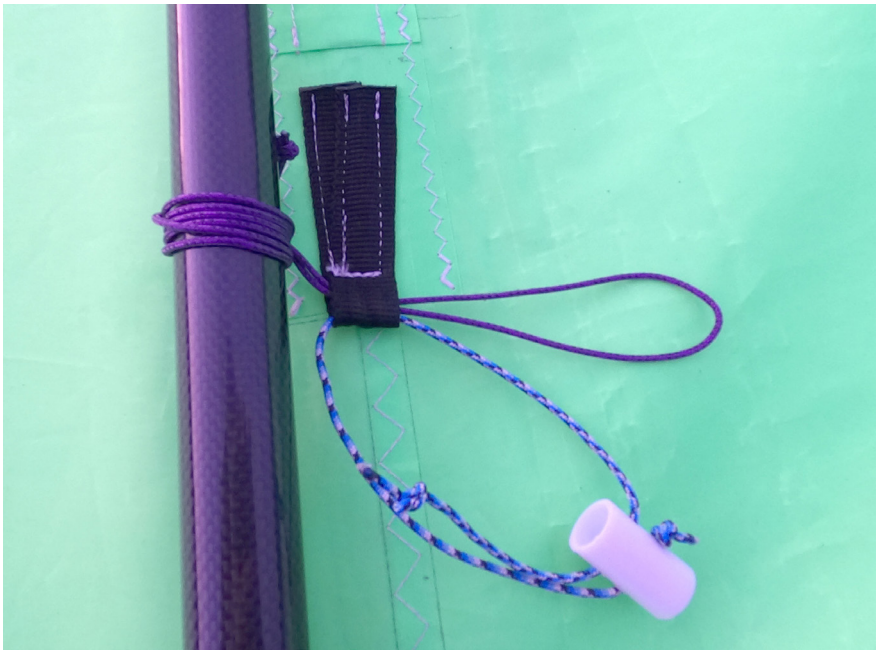
Rig the center batten tensionber over the camber inducer.

Camber inducer is a 42 inch 1.7mm chord with an overhand knot at one end. You may want to make your purchase shorter by tying additional knots.

Wrap the loop end around the boom and pass it through the knot end to create a multi part choke hold on the boom which can be slid forward or back.

Camber inducer wrapped on boom and passed through itself.

Camber inducer rigged through the batten tensioner soft eye



Camber inducer within arrow nock

Camber inducer and center batten tensioner rigged. Center batten is tensioned. Slide choker forward to compress batten against the tack to increase camber.

Release the outhaul when camber inducer is forced forward.

Tack Adjuster

Tack adjuster secures the sail at the tack. Strapping the sail to the front tubes at three points makes the sail more secure. The tack strap also compresses or cantilevers the front of the center batten against the front tube.

Stiff rigs with less give are more reactive and stable.

Rig the tack adjuster through the soft eye at the tack and back to the cleat. Once rigged the purchase may remain in place.

During take down and stow the purchase retains the loose boom assembly.

Illustrations show center batten projecting past the front tube and then tensioned. In order to generate this view tip tensioners were slacked. Normally Skimbat works better with tips tensioned so that sail is tight to front tubes.

Take Down
Stow

1. Pull battens

This also involves releasing the camber inducer.

Release some tension at tips to make it easier to remove aluminum battens.

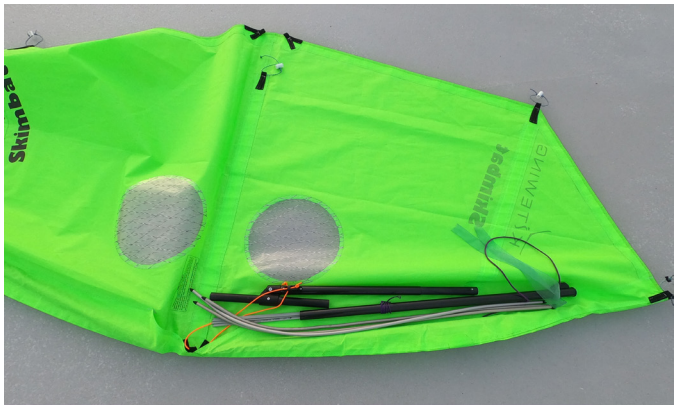
2. Release and relieve tip tensioners so all parts of purchase are even and chord lock is snug at end of poly tube.

3. Release outhaul

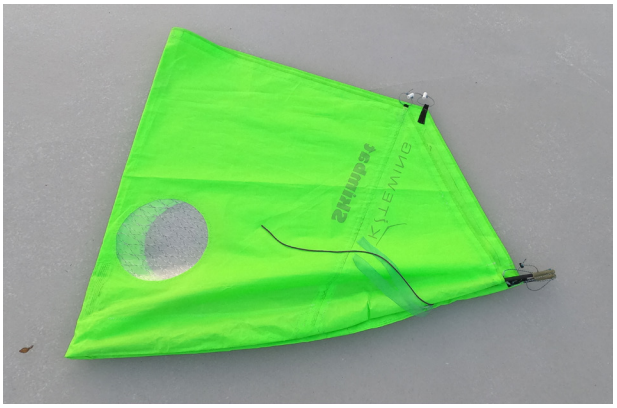
4. Pull tapered front tubes off ferrule. One side and then the other.

5. Stow parts.

6. Fold and roll to stow in bag.



Note curved aluminum battens stowed with curved part turned away from luff with spine against front tubes. Tack purchase remains in place secured at cleat.



Stow parts inside folded half of sail. Single part boom can be stowed alongside front tubes. Roll and stow in super cool bag.

Rigging

Suggested techniques and chord lengths are starting points. Once you get to know your rig Do not be scared to experiment with rigging.

Often what is sold as 2mm chord here in the US is not.

We use Robeline Orion 500 mini spools of 2mm or 1/12 of an inch double braid accessory chord. I believe it is actually 1.7 mm if you measure the chord with a vernier. The Robeline chord works well for tip tensioners, batten tensioners and camber inducer.

The outhaul and tack tensioner work best if the chord is a bit thicker, honest 2mm or 3mm. Parchute chord works ok but it is not really a tight enough braid. Good quality double braid chord works best.

Suggested lengths are more than enough.

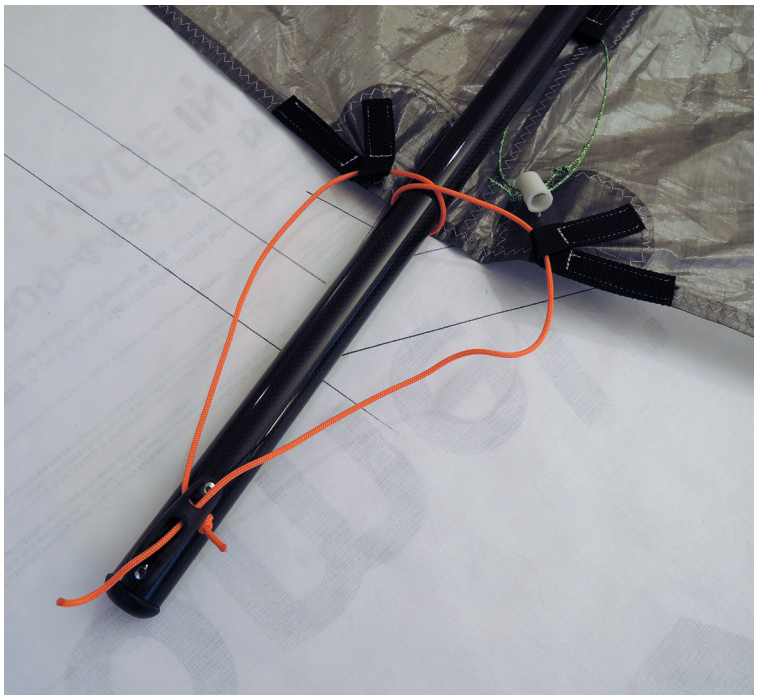
Outhaul 36 inches

Tack tensioner 24 inches

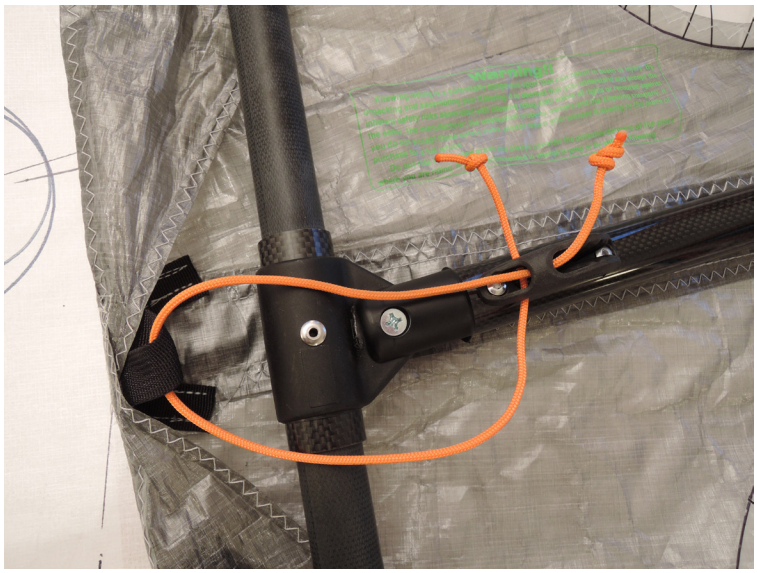
Tip tensioner 48 inches

Batten tensioner 20 inches

Camber inducer 42 inches



Rigged outhaul

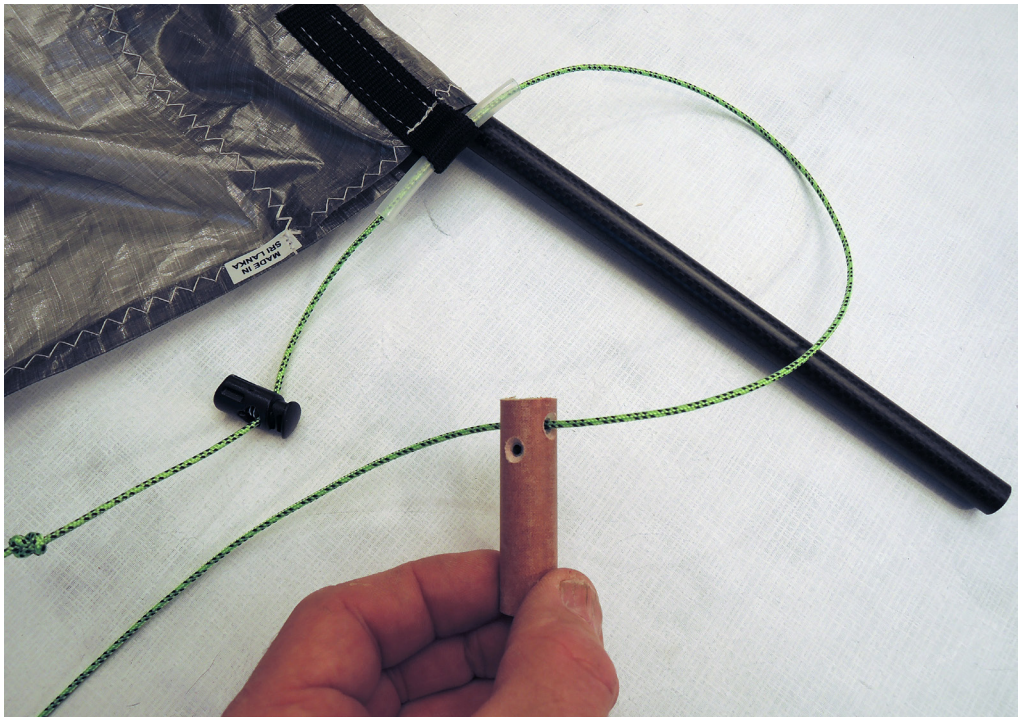


Tack tensioner

Tip Tensioner

Rig the tip tensioner as shown in illustrations.

Tie a stopper knot at one end of the 42 inch chord. Run the other end through the chord lock, through the poly tube, through the web soft eye from back to front, through the top holes in the tensioner tube, back through the poly tube in the same direction, through the lower holes in the tensioner tube and tie an additional stopper knot. This is a 3:1 rig which should be enough. You can rig 4:1 if desired. I sometimes tie a slip knot in my chord to keep it from creeping.



Slip knot to keep chord from slipping.

Excess chord stuffed in to luff pocket so you dont cut it with your skate.

A brief guide to tuning for the conditions:

Skimbat is supremely adjustable. Especially with glass RBS battens.

Adjust camber inducer against tack tensioner, more or less luff tension will influence how much of the center batten can project past the front tube. Dont forget to release outhaul tension if you advance the camber inducer.

Tip tensioners adjust luff tension. More tension will help to create draft forward. Tensioned rigs are stiff and more reactive rigs. Stiff reactive light weight rigs are easier to sail.

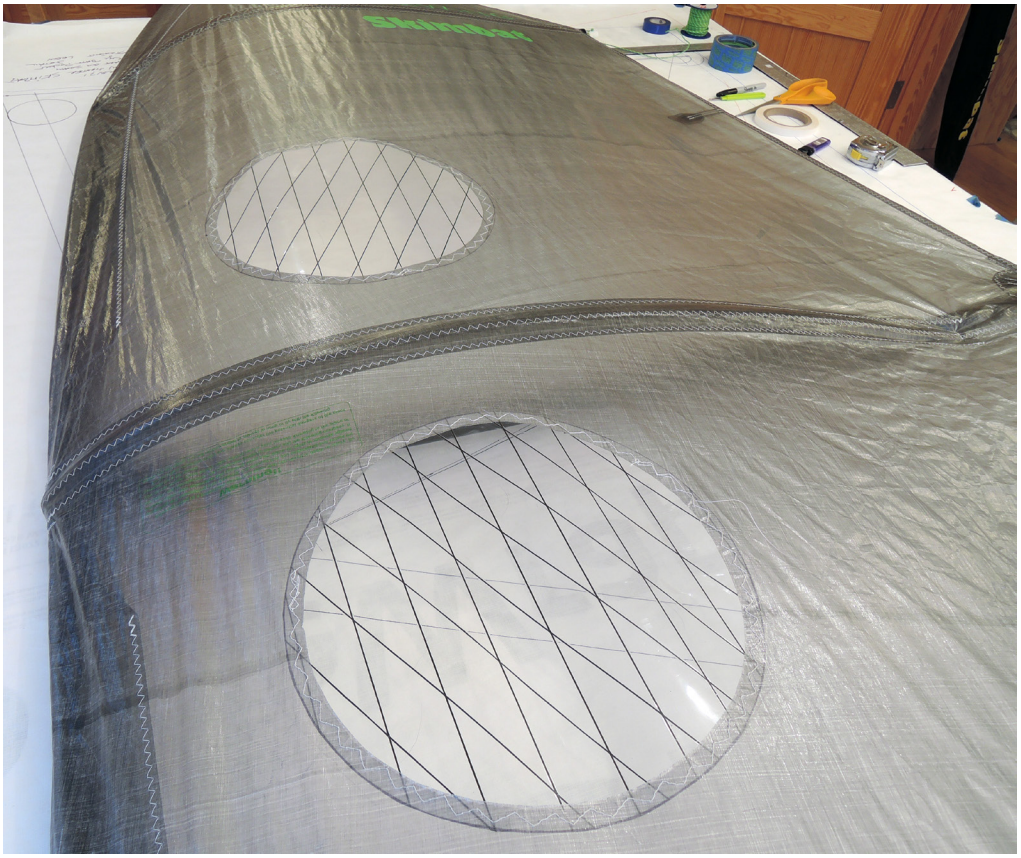
Outhaul tension is more about twist or changing the angle of attack between the tip of the rig and the center of the rig. The outhaul also allows for less camber or a flat set.

The best way to get your rig tuned for the conditions is to play with it. Make changes until the wing feels best in your hand.

Speed dictates tuning. Less camber required for windy days on smooth fast surfaces. More camber required for light air and slow surfaces.

Flat sails can distort easier.

You may be surprised to find small adjustments make a big difference.



Above shows a full set with RBS battens.

RBS rigged flat

Camber inducer is a choke purchase which works best when it is tight. Tighten the purchase by pulling on the working loop.

It is easier to adjust the camber inducer by loosening the outhaul, standing the rig on the nose or front tube, compress the center batten with your hand, take up the slack with the camber inducer, tighten the outhaul and release excess camber to the outhaul.

Most of us sailing Skimbats these days have learned to use the rig with one hand. Sailing one handed gets the rig further away from the turbulence around your body. Find the ballance point on the boom. Cant the leading edge forward to drive the leeward wing tip down, cant back to bring leeward tip up. Two hands on the boom is more secure. the most secure way to hold the Skimbat is one hand on the front tube and one hand on the boom.

Keep the rig down wind from you. Never let the wing get between you and the wind.

Skimbat is a light air machine.