

TUNE UP YOUR 6.0 PRO KITEWING SKIMBAT SKATE SAIL KITEWING 3.0 a Rapsody AT BINDINGS /NORDIC SKATES SAIL OR WING

> Lake Lee Kodiak AK USA





Kalsin Lake Kodiak AK USA DEC20

## Kitewing SKIMBAT Skate Sail

Kitewing Skimbat Skate Sail

We are in process at Kitewing. The new skate sail is in the production stream. The only model in existence is built from Dupont Tyvek. The goal is to produce a limited number of sails to test this season. Focus is to build an ultra light weight performer.

The frame is all carbon with proprietary tapered front tubes. Less is more. There are no tip wands. Less plastic parts and brackets, our goal is to produce a product with high value for the money.

My experience with the Skimbat has been very positive. I used a version of it with nordic skate skis, and telemark skis last season. I have used the rig with roller blades and nordic skates. My kids and my wing sailing companion Wendy have used the rig with nordic skates.

It is different but not so strange to sail without Y tubes. While I cannot imagine sailing a larger and heavier wing without Y tubes, the skate sail has been instructive. I can maneuver through quicker turns and direction changes without crashing. The skate sail is very light and it does not have a long wing span.

The sail area is approximately 3 square meters. The whole rig weighs 1520 grams or 3lbs 5 oz. The Skimbat rolls up with all its parts to pack in to a  $62 \times 6$  inch roll. The front tubes are two 60 inch tapered tubes. It is still easy to strap the skate sail to a pack.



Skate sail with a Kite-wing 3.0

There is a direct comparison to the Kitewing 3.0 wing.

In my opinion the skate sail competes well with the Kitewing 3.0. The skimbat is easier to set up and works significantly better in light air. In fact the skate sail works better than any Kitewing in light air. The caveat being that once a wing can build combined aparent, it will generate more power. In light air it is often the case that the wings crash because they stall. The skate sail is a wing too, but it works best like a sail.

I have not used an inflatable. I suspect the Skimbat is very competitive with an inflatable. The weight to sail area is very similar. However in heavy air the Skimbat gives up a lot of shape because the tubes are soft. It is still easy to sail because it is light and can be feathered in puffs. The tip of the rig can be dropped down close to the ice and the front tube bolstered by a shoulder making control even easier.

I like the Kitewing 3.0 in heavy air.

The 3.0 is a dog compaired to the Skimbat in light to modurate conditions. When the 3.0 starts to crash, the Skimbat sails on. I experience light to modurate winds more than heavy air.

I do not believe you will get the same top end speeds from the skate sail that you get with the 3.0 wing. Remember the Skimbat is a skate sail. It is all about utility. Skimbat is a versatile tool which can be utilized in a very wide range of wind. The skate sail is not as stiff as the 3.0 frame with Y tubes.

The Kitewing Skimbat Skate Sail is superior fun. It is my go to rig.

Dicky Saltonstall DEC20



Mission Lake Kodiak AK USA DEC20

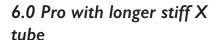
Kalsin Pond Kodiak AK USA DEC20

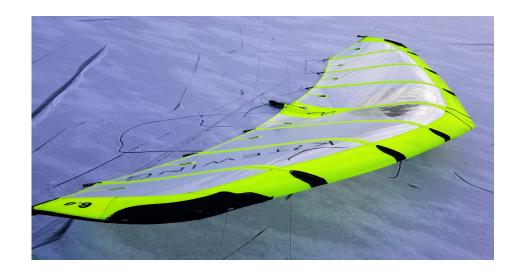




A proto type adjustable X tube bracket

Tune Up Your 6.0





Recently I used a stiffer X tube with an adjutable set up to test a longer tube.

My 6.0 set better with the longer tube. The extra length pre loaded the front tubes a bit more to fill out the luff pocket.

The standard light weight X tube which comes with the 6.0 works very well. The light weight is noticeable. However at flatter settings, or when the out haul is strapped tight, the center batten can bend the light X tube.

Sailing with a stiffer X tube makes the wing stiffer. The extra weight is not so important once the wing starts to fly. A stiff wing generates power faster. Less power is lost when you pump the wing if the wing is stiff.

### KITEWING 3.0

Time passes. My passion returns with the cold air. She is gracious but firm. I behave myself. We step forth together now with a sparkle in our eyes when the black ice arrives. For us it is like an aniversary. To cellebrate the conjugal arrangement between ourselves and the ice. It is spiritual. We cant get enough.

Oh but to troll over icy mirrors. To anticipate the rapture between the sky and a reflection. To experience vertigo within the sheets of a sunny day carressed by soft breezes.

Finding the ice again is like time travelling. You get the chance to live your best memories all over again with spontanious sauce.

Today my love is an x ply 3.0 with an all carbon frame. Her red and black livery stiched to fishnet Mylar leave me breathless. She tensions to fit with exquisit curves to bend the air to carry me over. We glide with glee together.

I am hungry for a crust of transformed snow.

We are headed back to the lake where the North West wind heralds the last gasp of a crystal clear day. Cant get enough.

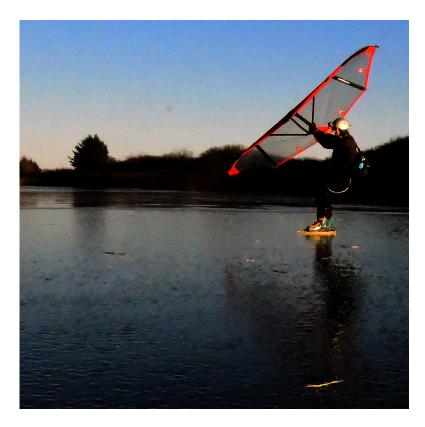
Imagine that.

Dicky Saltonstall

DEC<sub>20</sub>



Lake Lee Kodiak Alaska USA November 2020



Lake Lee Kodiak Alaska USA November 2020



### AT BINDINGS /NORDIC SKATES

Mounting Plum AT bindings to a Nordic skate.

The bindings are Plum Pikas. I use aluminum rivets with backing washers. I have mounted Dynafit AT bindings in the same manner.

The skates are 55 cm Lunghag Nordic skates which come with a binding designed to be used with hiking boots. https://nordicskater.com/collections/ice-skates-gear/nordic-ice-skates

The Plum binding has counter sunk holes for fasteners which happen to be a very close match for the washers I used. Rivets can be installed as shown.



Top illustration shows the Plum Pika binding riveted to a Nordic skate.

The ill;ustration to the left shows the same skate looking up from the blade. The rivets are installed from the bottom of the skate deck.



Illustration shows the rivets used. ACE is the place.

I used 3/6 aluminum rivets by I/4 inch grip range. Washers are standard.

Think about what you are doing before you drill holes. Boots come and go. It is conveniant to be able to fit different sized boots to the same skate. A binding which can be adjusted to fit different boots is nice.

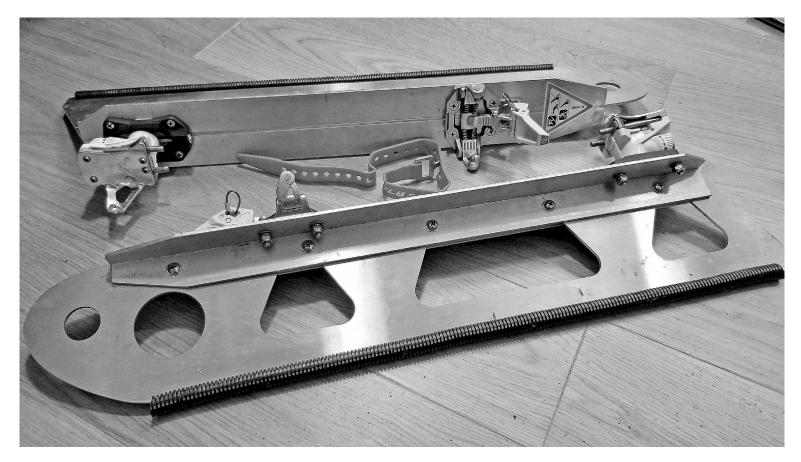
Skaters like to be centered or ahead of skate rocker profile. Decide where you want to be relative to rocker before you mount your bindings.

I mount my set ups closer to the back of the skate to be able to carve a tighter turn when I am wing sailing. I sharpen my skates with a shorter radius at the back of the blade.

Use the boot to locate the toe of the binding on the skate. Mark holes with a pencil. Suggest you drill one hole and mount the binding. Check forward and back alignment. You are checking to make sure the boot heel comes down on center line. Then drill the rest of your fastener holes and rivet.

Suggest check the rear binding adjustment to be sure both rear bindings are adjusted forward or back the same. Allow for a larger or smaller boot.

I have had one pair of skates loosen up after a hard day of very aggressive sailing on rough ice. It is simple and easy to drill out the old rivets and re rivet. I have only had that happen once.



Wing Blades mounted with Dynafit AT bindings. machine screws and nylocks

The Wing Blades are mounted with Dynafit AT bindings, SS flat head machine screws and nylocks. The skate deck is 4 1/2 inches off the ice which loads the binding fastener. Rivets are quick and conveniant but not as strong as the SS fastener.

Wing sailors should use releasable bindings. I wrecked my knee when a snow drift grabbed a Nordic skate. If the skate had come off I would not have had to have knee surgery. Cracks in the ice and other hazards which can grab a skate justify releasable bindings. You sail too fast to be able to save yourself if a blade suddenly stops.



Front binding
Note rivets with washers

## www.squambats.com



FI Swing Wing

2.8 m Swing Wing.749.003.4 m799.004.2 m.849.005.0 m.899.006.0 m.999.00Air pump.69.00

F-One. Swing Wing. Great light weight Wings, easy to learn, flies weightless while skating slow, speeds up with little wind and faster with big wind. Sets up using a pump in minutes, weight 3 to 5 lbs, packs up in it's own small backpack with a pump. This is an Entry and Expert level wing, that is used for water foiling as well as ice wing skating and skiing. Very user friendly.

The next step in winter wing technology is to graduate to a Kitewing, capable of more pull, faster speeds, and incredible jibes at top speeds arcing the radius of the skis or blades. The whole family will enjoy the progression from the new inflatable wings to the New Carbon Fiber Framed Kitewings. Excelling at winter sports.

The Squambats are proud to promote the sport of winging using the many tools in their quiver, from Wing Blades, Nordic Blades, Tele Blades, Hockey and Speed Skates, downhill and Telemark skis, and on the water using Wing Board Foils and SUPs. Winging is now a year round event.



Martin Kimbell Summer 2020

Water Winging on hydrofoils and boards is super fun. The sport is spreading around the globe an exponential rate, the popularity bringing many people to the Winging community, which used to be dominated by the winter enthusiasts on ice and snow. Now you can ride above the waters surface, using a board that is airborne above a water wing hydrofoil. We here in NH are Wing foiling locally on many of our Lakes in the Lakes Region. This new sport is like riding in deep powder, smooth sailing elevated above the waves. The addiction and fascination takes over and the rider thirsts for more wind days to play on the water. Winging is easier to learn on ice and snow, and the foils are at first difficult in water. But after one gets the hang of foiling, it is easy to get up on, like riding a bicycle. The joys of winging year round on our lakes and oceans is now a fabulous reality. Frozen or liquid. Come play.

> Martin Kimbell NOV20



Kitewing 6.0 Pro The Pro is a high aspect ratio cruiser designed to generate power at slow speeds

#### SAIL OR WING

Sail shape relative to sail area is important. In fact shape is more important than area. A foil shape generates lift more efficiently than a flat plate the same size.

Smaller wing areas require higher velocities to generate the same lift as a larger wing with the same camber.

Saving weight is crucial to wing performance. Inertia makes the wing slow to react.

Shorter booms are easier to manipulate. Moving Y tubes more in line with front tubes makes control from the Y tube more forgiving. Longer front tubes relative to sail shape or higher aspect ratio rigs save weight relative to sail area. Shorter booms and battens make the difference.

Higher aspect ratio wings are generally more efficient than lower aspect ratio wings the same wing sail area at slow speeds.

Longer wing spans change the way we sail. The Kitewing can be flown closer to parallel to the ground.

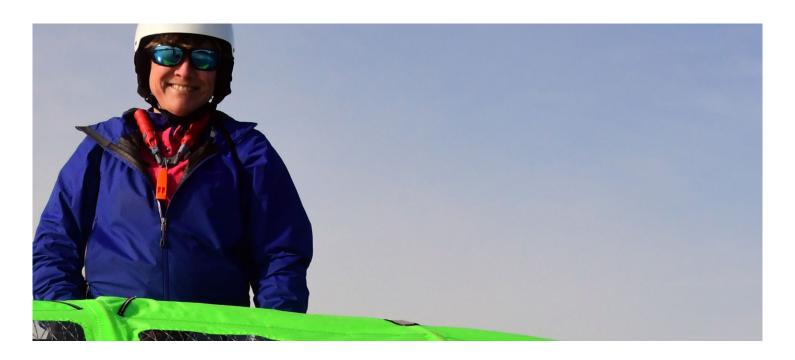
Horizontal wings parallel to the ground generate more lift than vertical wings 90 degrees to the ground. However a vertical sail opposed to lateral resisitance generates forward motion. A wing can be a sail.

At some point the value of aspect ratio will diminish relative to Kitewing handling.

Down wind performance is usually better with a big wing which can generate power at low velocities. The large wing is generally more efficient than the small wing at slow speeds. A smaller wing has to have higher velocity to generate the same lift. The sailor with a small wing cannot bear away from true wind as far as the sailor with a larger wing. As comnbined aparent velocities diminish the wing with less lift has to head back up towards the true wind.

Upwind the smaller wing has an edge as long as combined apparent velocity is enough. Often combined velocities generate more lift and drag than a big wing sailor needs; the big wing over powers the sailor. The small wing sailor can take advantage of a lower drag signature to go faster with less effort.

The joker in the deck: Sailing technique makes a big difference. Experienced sailors are a lot more efficient than beginners. Experienced sailors recognize changes to true wind vector and velocity quicker than beginners.



#### STACEY KEEFER

I have always liked winter, but now I love winter since I recently took up kitewing sailing. Most people complain that winter is too long, but now I think summers are too long.

Some favorite moments this year were getting out with friends who are newbies. What is so cool about sailing kitewings is people who have only skied or skated get it easily. I have also witnessed people who have only ever sailed pick it up quickly. Smiles for everyone when they first gain some momentum and you hear their first "whoo hooo." You recall your own first time and you know they're hooked already too.

Sailing on lakes we usually see bald eagles soaring above us. I think they like watching us cruise around and are curious about us weird, ice birds. I love flying over the ice with kitewings because it is different than sailing a boat or windsurfer. You are THE thing sailing. You aren't in it or on it --the energy is moving your body. Depending on conditions, I may feel like I am gliding or sometimes it feels like a rocket.

Most days I prefer sailing the 6.0. I describe it as having the glide of an albatross and the weight of a chickadee. I will admit I had a wicked fun time hanging on to Nacho one day this March. Nacho is our little, red and yellow SK8. It is a triangle sail, like a flying tortilla chip. I was on skis and it was blowing like hell from the NW. Nacho was plenty of sail for the conditions and I was scooting over 20 mph on skis and really didn't want to go any faster. I will call it my extra spicy Nacho day.

All I can say is kitewing sailing is cool AF. I can't wait to go again.

Stacey APR20



Ole Mau 4.8 Skimbat Hawaii 2020

# https://kitewinghawaii.com

Rigid wings are so much more efficient than inflatables, no leash is required so you don't get wrapped up in your board leash. The wing won't blow away so I can put it in the water and go back for my board when I launch off the beach making it a lot less cumbersome to launch. Speed and hang time of these wings are un rivaled

For water use and hydrofoil information contact Ole Mau at www.kitewinghawaii. com and www.zensports.ca

I have been riding hydrofoils since 2001, mostly on kites, then in the surf with kites and foils, progressing to surf and SUP foiling in the surf in Maui and Tofino, linking waves with the ability to pump out to the next wave on the foil. The use of hand wings eliminates all the inefficiency of kites and allows me to merge surfing foils on any swell with the energy of the wind. Truly addicted to these hand wings and developing a busy School with www.zensports.ca



Ole Mau 5.5 Speed 2019



Somewhere Over the Rainbow George Peterson Kitewing 7.0 Powerfoil Winter 2019



Submit stories, rapsodies, pix and insite to:

**American Skimbat** saltonstall.richard@gmail.com