



# **PUT YOUR RACE FACE ON**

How to convert from a Nite cruiser to a Nite *racer*

Without a doubt, the Nite iceboat is the most comfortable, easy-to-rig, two-person iceboat on the planet. There are nearly 600 in use from coast-to-coast, the majority being used for cruising.

But there's a vibrant group racing Nites. They've found that the difference between racing and cruising is narrow. Their hope is to inspire a few more cruisers to give racing a shot.

The Nite is a great for racing. The scantlings are tight which eliminates having to chase technology to remain competitive. The very first boats remain competitive today. All you need is a little willingness to give it a try. Any sailor will gladly give you the time you need to help you join the race, and that goes for all fleets; DNSs right on up to the humongous sternsteers.

Give it try. Use the internet to find Nite owners in your area and show up when they're racing. Following is a page of links to clubs across the country:  
<http://www.pyc.org/nitelinks.htm>

# The Basic Boat Setup

## MAST AND STAYS

Put a dab of grease in the mast cup to reduce wear. Start with the mast cup bolted in the forward position. With the sail up and the sheet relaxed, set the forestay so the boom as roughly parallel with the ice. Tighten the side stays evenly so there's no slop side-to-side. This is a starting position.



Set forestay so boom is roughly parallel with horizon.

If the boat hikes up excessively while going upwind, then stop and let the side stays out a few holes. Repeat as necessary until the boat is just barely in control. If you have to sheet in-and-out on the really big puffs, that's OK. As you let the stays out, you gain more control, but you also lose a little speed downwind. You're looking for a happy medium. Most likely, you'll sail the stays fairly tight in light and medium air, and let them off as the wind gets up into the teens. In real windy conditions, it may help to ease the forestay a hole or two as well to drop the mast back. Some guys do it, some don't.

It will take a few days under different conditions to find the settings you like.

## BLOCKS

The blocks on the boom affect the rotation of the mast. In light air, you want more rotation. In heavy air, you want less. Rotation is controlled by the position of the blocks on the boom. If your blocks are screwed directly into the boom, you may want to consider purchasing a sliding track from S&R Marine.

First find the location where the blocks on the boom and the blocks on the hull seem to nest together and put a mark on the boom with a pen. Call this a neutral position. In light air or when the ice is slow (snow covered or soft) move the blocks on the boom back, which helps push the boom forward, which helps rotate the mast and produce more power. In heavy air move the blocks on the boom forward, which helps pull the boom back, which helps de-rotate the mast.

Don't over think this as the changes are slight and hard to see. Many people have just one position – neutral – and do just fine.

## BATTENS

It helps to have two sets of battens; a soft and a stiff set. Quantum sells both. Battens are held in place with a variety of different mechanisms. The concept is to pre-bend the battens in light air to help with acceleration. But as the wind increases the shape becomes inefficient, so you need to decrease the amount of batten tension to reduce the depth of the shape. In heavy wind, have no tension at all.

Use the soft battens in light air or when you need power to get through snow or soft ice. Use the stiff battens on clear ice and heavier wind. When conditions overlap, such as heavy wind in snow, flip a coin. You'll be fine.

## RUNNERS

The best thing to do as a new racer is to find someone in your area that sharpens runners and pay them to get yours in shape. Ask any of the iceboat parts retailers as many of them sharpen runners and do a great job.

Grease the inside of the chock prior to mounting the runners. Use white lithium grease that comes in a tube and available at any auto parts or hardware store. Tighten the runner bolt to the point that the runner tip barely stays in the air when you let go.

When done sailing for the day dry the runner with a towel, and coat the edge with a thin coat of grease to prevent rusting. Store in a wooden box to protect the edges when traveling. Or, purchase a runner bag at Harken or Quantum.

## SAILS

There are two types of sails: full and flat. It does not mean light air and heavy air. Flat is for clean ice (hard and no snow) with medium to heavy winds. The full sail has more power and works best in lighter wind or sticky conditions such as snow-covered, rough or soft ice. If you're looking to buy a new sail, start with a full sail first. There will be many days when either sail will work.

## MAST AND PLANK STIFFNESS

The mast and plank work together. If they are too stiff, the boat doesn't absorb the initial blast of a puff and it hikes up or skids out – both of which are slow. If they're too soft, the boat doesn't harness all the energy or it bottoms out on snow drifts.

The plank is laminated into a slight arc which serves as a shock absorber. When under sail, the arc flattens out. As a new racer, don't worry about flex. If you look at the results of a regatta, you'll see a random order of soft and stiff setups.



This picture should put you at ease about flex. The plank on the left boat is rounded up, the middle boat is fairly flat, and the boat on the right is flexed past level. All three boats are racing neck-and-neck. For first-time racers, don't worry about flex and sail what you have.

## MAINSHEET

Spend a few dollars and get a good mainsheet so you can really grip the main. Order from S&R Marine, 262-691-2230, Sailing Specialist, 262-245-6242 or any sailing supply house. Ask for a tapered mainsheet for a Nite. They'll produce a sheet that has a thin, non-stretch line that easily runs through the blocks connected to a thick, fat line that is easy to grip.

# Racing the boat

## UPWIND

Just as with softwater sailing, you need to trim the main constantly, especially in heavy air. Work the main in and out so the boat doesn't hike up. Just like softwater, excessive healing is slow.

In light and medium wind, be careful not to over trim. Watch the telltale near the luff. If it stalls, ease immediately and/or head down a bit until you can get the telltale flowing again.

If your boat has a cleat on the deck, it's only there for starting. Do NOT cleat your main while racing because when the boat loads up in a puff, it is very difficult to uncleat quickly.

## TACKING

Before you tack, turn your head to be sure there isn't another boat. You really have to crank it around, but someone could be sailing on your hip and you'll never know it unless you look. You just don't throw tacks in the winter like you do in the summer.

It helps to turn smoothly. Too fast and the steering runner will skid. Ease the sail enough to get your head under the boom and come out of the tack by gradually straightening the steering runner. Use your feet to power the steering, but keep a hand on the wheel to make the movements smooth.

## ROUNDING THE WINDWARD MARK

Organize your main sheet in advance. The hull often wants to hike up as you round the windward mark so don't be caught sitting on your main sheet. Look out over the ice in search of boats approaching on a port tack. You need to be aware because they will have rightaway once you round.

In heavy wind, ease the main about 6' and make an aggressive turn (if no boats are coming). In time, you'll be able to minimize how much you ease as your skills improve.

The downwind strategy is similar to racing with a spinnaker. You balance maximum speed with the most direct course to the mark. If you're sailing too deep, your telltales will stall. Head up immediately.

In light air, round the windward mark very, very gently concentrating on maintaining speed. Keep the telltales flowing. It's not unusual in light air to have to sail 90 degrees to the course for a short while just to get your speed up. It can be frustrating. Deal with it.

### JIBING

Just like with tacking, you need to visually check to be sure it's clear to jibe. Slink down in the seat, let the boom pass over and smoothly straighten out the boat. Plan on coming out of the tack on a slightly higher angle so you can regain speed quickly. If you feel slow, ease your main and head up to get your speed going again.

### LEEWARD MARK

Hang on. You reach the highest speeds at the same time you need to make the sharpest turn. Go figure.

When you first start racing, try to approach leeward marks on a long port. Set a course that allows you to make a wide and gradual rounding. Ease your main considerably in heavy wind. Your runners will grind and groan as you make the turn. If the back of the boat starts to spin out, ease the main more and head down. You'll need to keep playing the steering and the sheet all the way around the mark.

Once around, lean forward in the cockpit, grab the main and pull back hard. It'll take a few pulls. Use your legs, not just your arms.

### ICEBOATING RULES

Iceboating rules are not the same as regular sailing. The speeds are high. Visibility is low. The number one rule in iceboating is **you are responsible to avoid collisions at all times, regardless of rights.**

Make an effort to continually scan the horizon, especially to leeward. With the Nite boom as low as it is, this takes a bit of an effort. If you're on port and will not clear a starboard boat, adjust your course early. Don't dive around transoms because you never know if there's yet another boat on the windward hip of the boat you're diving. You won't see them until it's too late. Remember, tack or steer clear well in advance of approaching boats.

Other notes:

- All upwind boats have right away over all downwind boats.

- Port/starboard only works if both boats are going upwind or BOTH going downwind.
- An overtaking yacht must ALWAYS stay clear of the boat in front. Why? Because the boat in front cannot see the boat behind them.
- It's common to round the leeward mark by setting up fairly wide and then rounding up tightly to the mark. This may look like an opportunity for a trailing boat to shoot into the gap. DON'T DO IT. Once the leading boat begins to setup for their rounding, all trailing boats must keep clear. Why? Again – the lead boat can't see what's behind him.
- Going upwind, the windward yacht must keep clear of a leeward yacht, BUT . . .
- Going downwind, the leeward yacht must keep clear of a windward yacht.

Simple rule graphic:

[http://iceboat.org/images/designements/NEIYA\\_rules\\_no\\_club.jpg](http://iceboat.org/images/designements/NEIYA_rules_no_club.jpg)

Complete rules: <http://www.iceboat.org/NIA-May-2004.pdf>

### THE STARTING PROCEDURE

The starting line is setup perpendicular to the wind and located downwind of the leeward buoy. Numbered blocks of wood are placed on the ice and evenly spaced to the right and left; odd numbers to starboard, even numbers to port. Position your windward runner next to your assigned starting block with the hull approximately 45 degrees to the wind. (If you finished 18<sup>th</sup> in a race, then you start in the #18 spot for the next race. The starting position for the first race is a random drawing).

Essentially, the fleet is lined up with half aiming right and the other half aiming left. A starter will stand in the middle of the line, near the buoy, and will tell everyone to line up. You get about a minute or two to be in position and ready. The starter will call out "Ready on the right, ready on the left" as they raise a flag. At this point the race can start at anytime so you need to be in a crouched position on the windward side of your hull ready to push. Trim your main slightly and hold it in your hand so you don't step on it when you're pushing. When the flag drops, push your hull until you can't run any faster, place your outside foot on the plank next to the hull and climb in with your inside foot first.

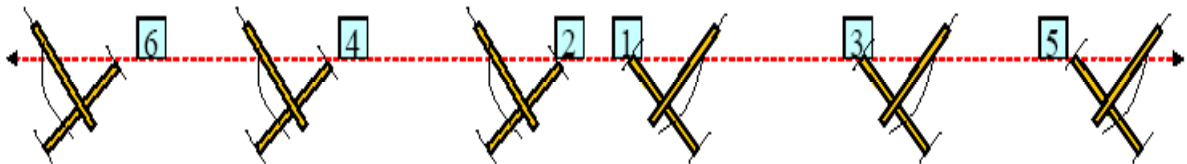
In light and medium wind, keep the sail full as you gradually build speed. In heavy wind, pinch up a bit so the boat doesn't hike up wildly as you're running and climbing in. You'll eventually develop a technique that fits your ability.

Wind  
direction



Windward mark

Leeward mark



The starting line is set as wide as necessary to accommodate all boats. Half start to the right, half to the left.  
The finish line is between the leeward mark and a temporary mark or flag moved into place during the race.

# Odds and ends

## TRAVEL

The average lake is frozen and clear of snow for only a few days a year, and you can bet those days will fall during the work week. So forget the idea of racing on your home lake. Use your sailboat trailer to get around. A scow trailer works perfectly for a Nite. The hull fits snugly over the back bunk. Just tie the hull, mast and plank down so they don't bounce. Most trailers can accommodate two Nites. Find a half-empty trailer and split the gas money.

Boat covers plus mast and plank bags keep the road grime off your equipment. They're available at Harken, S&R, Quantum, Sailing Specialist and any canvas shop.

## SAFE ICE

There's no room for being brave and stupid. Ice changes every day. Thin ice opens up. Thick ice can heave and crack. It needs to be checked each and every time you sail. Volunteers put in lots of time searching and scouting. Plan on doing your part as well as you become more experienced.

The key is communication. When arriving at a lake, don't sail until you've spoken to the person with local knowledge. Some jurisdictions, such as Madison, WI, do not allow cars on the ice. It's no big deal to push your trailer on to the ice and there's usually someone around to help if needed.

Websites are great for getting the word out regarding available ice. Be sure of the date the information was posted, not the day. Sometimes people write things like, "I checked the ice Tuesday and it was great." The question is, "Which Tuesday?"

## TOOLBOX

Buy a simple plastic toolbox and dedicate it to your iceboating. Put your name on it because some day you will leave it on the ice. Basic tools:

- A 7/16" socket/ratchet and a 7/16" wrench for attaching stays (if you use bolts). Don't use pliers for attaching bolts. That's bogus.
- A 9/16" socket/ratchet and a 9/16" wrench for attaching the hull and runners.
- A tube of white lithium grease to lubricate runners and the mast ball. This type of grease works best in cold temperatures.
- Electric tape to tape ring clips.

- A rag to wipe off grease (end of day)
- Spare pins/bolts for stays (In the cold, sometimes you'll drop a pin in the snow and it's as good as gone.)
- The two bolts and washers used to attach the plank. You can't lose them if they're in "the box".

### HELMET, GOGGLES, SPIKES and MITTS

Using a snowmobile or motorcycle helmet to sail an iceboat is like playing golf in waders. It works but not very well. A modern ski helmet with a quality pair of goggles is comfortable and greatly increases visibility. Any retailer that carries ski equipment carries helmets, and there are many styles from which to choose. Some helmets come with an adjustable chin guard.

For footwear, spikes help for fast starting but they also add a level of security when walking around on the ice or putting up a mast. Golf shoes with metal spikes work just fine. Use your own or buy a used pair on ebay a size or two larger so you can wear extra socks for warmth. Most guys remove the spikes under the heel so your foot doesn't catch when jumping into the cockpit.

Track spikes are excellent for pushing, but they have no insulation and are cold.

And then there's the tried-and-true sheet metal screw. Just screw them into the sole of an old pair of boots. Obviously, select a short length so not to penetrate the inside of the boot. They work OK for traction, but your feet stay warm.

Don't use strap-on cleats or pull-over spikes. They're clunky and they slip.

What you wear on your hands is your own call. A pair of "choppers" available at a Farm & Fleet store work great at keeping your hands warm and they slip on/off with ease when setting up.

### PLASTIC TUBS

Keep your "stuff" (clothing, tools, helmet, goggles, warm clothes, mainsheet, stays, towel, extra mittens, etc) in large plastic tubs available at Target or Home Depot. It simplifies everything. When it's time to go sailing, you just load the tubs in your car, hook up the trailer and go.

### FOOD and WATER

This may sound kind of silly, but it happens all the time – when the sailing gets good, you get hungry. Pack a sandwich and water.

## SAFETY MEASURES

The organized traffic flow of a race adds an element of safety. Conversely, sailing before or after a race can be chaotic because you don't always know where boats are going. Sail smart. Be aware.

Often at regattas, one fleet will race on the course while a second fleet is waiting their turn. If you're waiting, stay off the course. Non-racing boats on the course are a moving hazard to those racing.

Some racers wear lifejackets and carry ice picks:  
[http://www.wlyc.org/WMIYC/wmiyc\\_forsale.htm](http://www.wlyc.org/WMIYC/wmiyc_forsale.htm).

The bottom line on safety is it is your responsibility, period.

## Closing thought

In an informal survey of Nite owners who cruise rather than race, the majority said they'd like to try racing but they didn't know where or when racing was taking place. Here's a solution:

Use the following websites to link up with racers in your area. Find out where they're setting up and check it out. The decision is usually made late in the week to get the latest ice and weather information. Either show up with your boat or just stop by to walk around and see how it's done.

National Organization's homepage  
Madison, WI club  
Minnesota iceboating  
Grand Traverse, MI  
Official Builder

[www.pyc.org/nitehome.htm](http://www.pyc.org/nitehome.htm)  
[www.iceboat.org](http://www.iceboat.org)  
[www.iceboating.net](http://www.iceboating.net)  
[www.gtiyc.com](http://www.gtiyc.com)  
[www.niteiceboat.com](http://www.niteiceboat.com)