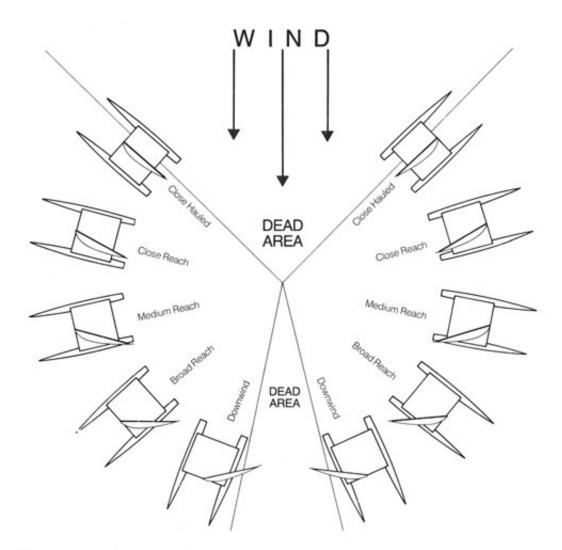
# The Basics of Sailing

# Wind Is The Key

The boats with the wind hitting their starboard (right) side are on starboard tack. The boats with the wind hitting their port (left) side are on port tack.



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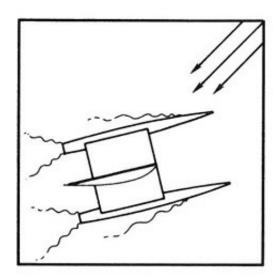
fig. 1. Clockwise from the top: Dead Area, Close Hauled, Close Reach, Medium Reach, Broad Reach, Downwind, Dead Area, Downwind, Broad Reach, Medium Reach, Close Reach, Close Hauled

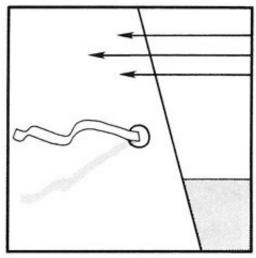
## **Points Of Sail**

**Note:** All angles given exclude the effects of apparent wind. The angles in the next section are valid only in light wind conditions. (See Apparent Wind section.)

# Pointing (sailing toward the wind)

Although it is impossible to sail directly into the wind, it is important to know how to sail as "close" to the wind as possible. The highest most catamarans can point into the wind and sail efficiently, is an angle between 35 and 50 degrees off the wind. When sailing on this point of sail, the wind will be coming across the bows of the boat and the telltales should be pointing straight back parallel with the water. To set your sail for best effectiveness, let it out until the inside (weather) telltale just begins to luff, then pull it back in just to the point when the telltale stops luffing. Look at the telltales to be sure that those on either side are aligned with each other. This tells you that air is flowing smoothly and uniformly over the sail. If the outside telltale begins to luff, just let the sail out a little. Keep both telltales streaming together.



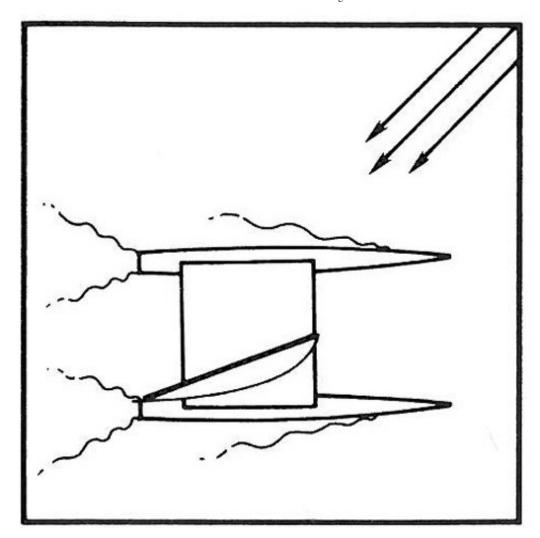


(//cdn.hobiecat.com/digital\_assets/basics-sailing-points-sail-pointing.jpg)

fig. 2.

#### Close Reach

The next point of sail is called the close reach and is one of three types of reaches. In this case, the wind is hitting the boat between the bows and the beam or middle, of the boat. In other words, a 45 degree angle. This is one of the most exciting points of sail. To get the most out of it, just follow the directions above for aligning telltales and adjusting the sail.

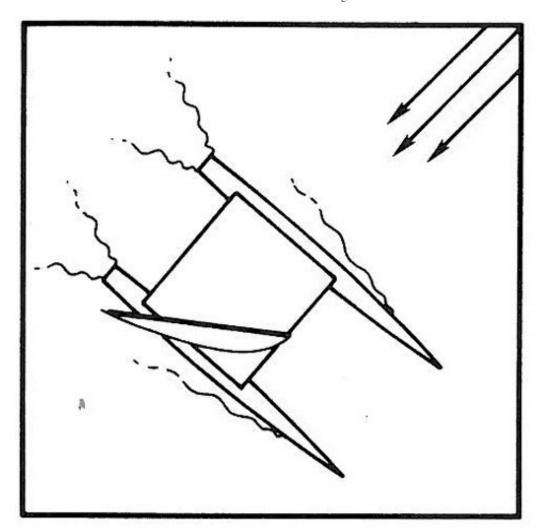


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fig. 3.

## **Beam Reach**

A beam reach is when the wind is coming directly across the side of the boat at a 90 degree angle. Once again, align the telltales and adjust the sail by bringing it in until it just stops luffing. A beam reach is also known as a medium reach.

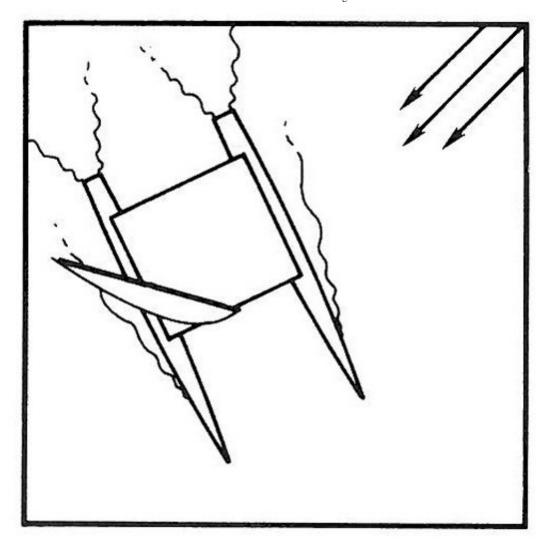


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fig. 4.

#### **Broad Reach**

A broad reach is when the wind is coming between the stern and the side of the boat at approximately a 45 degree angle. Remember to adjust and align. This is the easiest point of sail. The boat will feel very stable and will move through the water quickly and easily. It is important to keep the boat properly balanced on this point of sail for the boat to move to the best of its ability. For example, when heavy winds are present, weight should be kept toward the back of the boat.

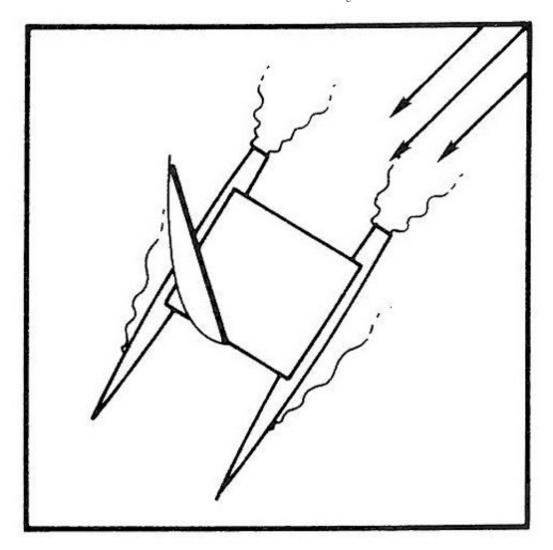


(//cdn.hobiecat.com/digital\_assets/basics-sailing-points-sail-broad-reach.jpg)

fig. 5.

## Run

A run takes place when the boat is directly downwind and the breeze is pushing the boat from behind. In this Case, you will feel very little breeze since the wind is coming from behind the boat. The sail telltales will not be used on a run since alignment is not possible. On a run, the wind is not flowing over the sails but rather pushing the sails.



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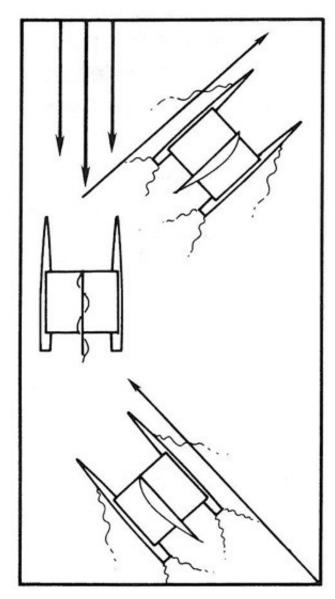
fig. 6.

The Hobie 14 sails well on a run, but because the Hobie 16 (/sail/hobie-16/) and 18 carry jib sails, most skippers prefer to generate more speed by reaching and thus making use of apparent wind. (See Apparent Wind section for an explanation of this phenomenon.)

There is a danger of gybing, that is turning away from the direction of the wind, when running downwind. If the boat hits a wave, the course may be altered enough so that the wind will be able to sneak around the side of the sail and force it to the other side, causing the boom to snap across. There are symptoms of an upcoming gybe. The boom will begin to waver and slowly rise. Be prepared for a gybe. If one should take place, make the necessary adjustments such as switching positions.

#### The Effects Of Wind Direction

The direction from which the wind is coming will dictate your course. Imagine that you are sailing on the face of a giant clock. The wind is coming from noon on the clock and you wish to sail to the area between 10 on one side and two on the other side. Unfortunately, this area is normally "dead area," meaning that it is impossible to sail directly into it. Instead, you will have to zigzag across the face of the wind to arrive at your destination. This is known as "tacking". Any other course on the clock face can be reached simply by sailing toward it. For example, if you wished to sail to "three" on the clock face, you would be sailing a beam reach directly for the goal. The same would be true if you were sailing to nine on the clock. Sailing to three would put you on a port tack. Sailing to nine would call for a starboard tack.



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fig. 7.

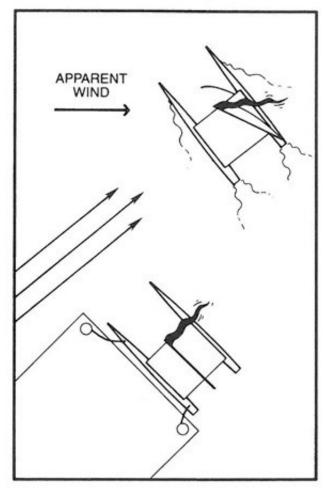
Whenever you change your course, remember to align and adjust the sail. If

you forget, you will not be getting the best performance out of your cat. Watch those telltales and the sails. Align and adjust.

To determine which direction the wind is Coming from, watchn flags or trees around the body of water on which you plan to sail. It's also a good idea to ask fellow sailors about the "wind reputation" of a given area and to watch the weather report the night before. While you are still learning, it is a good idea not to venture out when strong winds are blowing. They may be a bit more than you are prepared to handle.

# **Apparent Wind**

Apparent wind is the term sailors use when talking about where the wind appears to be coming from. Because of the speed catamarans are capable of generating, the true wind (which can be determined by looking at a stationary object), is affected by the forward motion of the boat. Therefore, a pennant or telltale attached to the bridle fly or mast will show the wind coming from a different direction from the true wind. As a general rule, the faster the boat is going, the more forward the wind appears to be originating.



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fig. 8.

When sailing, the sails should **always** be adjusted to the apparent wind rather than the true wind. This is so an airfoil can be maintained and the boat can generate lift.

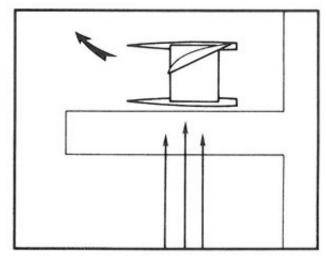
# Launching

Now that we've gone over all the points of sail, parts of the boat and some basic rules, let's describe how to get started from a beach or dock. Remember, though, that it is necessary to read and understand all of the instructions in this manual before you attempt the maneuvers described.

#### Launching From the Dock

If your boat is resting at a dock, the problem will be how to move the boat from a standstill at the dock and turn it away from its mooring. First, step aboard, keeping your weight on the trampoline. Be sure all sails are loose and unsheeted. Have someone untie the line connecting the boat with the dock, or, if nobody is present, untie the line before getting into the boat. Sit facing the sail and check to make sure that no other boats or obstacles are too close for you to be able to negotiate the boat away from the dock. Remember cardinal rule number four?

When the wind is blowing away from the dock, launching is very easy. Just let the wind fill the sails and move you downwind using the tiller to navigate your way out.



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fig. 9.

If you are on the windward side of the dock, however, you face a problem. In this case, the wind will tend to hold you fixed against the dock. An easy way out is to walk the boat to the end of the dock, let the wind fill the sails and out you go. But, if this is impossible, trim your sails just the way you would if you were sailing under the same wind conditions out on the water. Then, shove off with one hand on the tiller to begin steering immediately. This is the joy of sailing small boats. They can gather enough speed to get away from docks and the like in just seconds.

#### Launching From the Beach

One of the great joys of Hobie Cat sailing is the ability to land and launch the boats directly from the beach. In fact, that was the inspiration behind their invention.

When launching from the beach, be certain that the sheets are out so the wind won't catch the boat, push the boat out into the water until you are standing about knee deep. Take note of the wind direction. It will tell you what your first move should be when you jump aboard. If the Wind is blowing toward the beach, decide ahead of time what tack you have to take to sail toward your target. Then, just slip aboard the boat, sheet in, and have fun.

Although launching through the surf can be intimidating, it is not terribly difficult if the proper steps are taken. Launching through the surf should only be done by experienced skippers, it requires some fast movements and beginning skippers may not be able to anticipate fast enough.

Check the wind. If the surf is of any size at all, be sure that the wind is blowing parallel to the beach, in other words, a 90 degree angle to your boat. It's possible to launch through the surf if the wind is blowing from offshore, but it must be blowing fairly hard as enough boat speed to get you through the waves will be of prime importance.

Place your mainsheet and the tiller extension on the correct side of the boat for sailing. Just act as if the boat is really in the water. Everything should be where it would be if you were sailing.

Watch the surf. You'll note that it comes in sets of waves and that there is a space of time between the sets.

As soon as you see a lull, start pushhing the boat from the back crossbar out into the water. Be careful to keep the bows pointing directly into the surf. If they should turn sideways, the boat could flip over. If you see them starting to turn, run to the front of the boat and set them straight again.

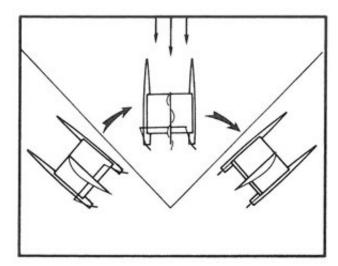
As the water deepens, jump onto the boat and immediately lower the rudder closest to you and pull in the sail. Never let go of the tiller as the boat could head

directly into the wind and stop. Pull in the sail enough to get some good speed going but not all the way.

Once the boat is moving, it is acceptable to head the boat on a slight angle to the waves if this will yield more speed. As you move over a wave, keep your weight forward and then bear off slightly as the boat comes down the back of the Wave. If it appears that a wave is going to break right in front of you, get as much speed as possible, then, at the last moment, point the boat directly into the wave. Once the wave passes, bear of a little to get your speed built up again.

# **Turning Into the Wind**

Turning into the wind, or coming about, is the most common sailing maneuver. When coming about, the object is to pass the bows of the boat through the eye of wind and over to the other side. Let's refer to the clock example. Suppose you are sailing to the ten o'clock position, but Wish to Change Course and sail to the two o'olook spot. You would first move the tiller toward the sail to move the bows through the wind coming from noon. Then you would straighten the tiller once the boat is heading on the desired course.



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fig. 10.

Here's the procedure step by step.

Before coming about, ask yourself what you are trying to achieve by doing so. Where do you want the boat to be when you have completed your turn? It's a good idea to pick a spot on land and aim the boat toward that spot for reference. Remember, you must turn the boat at least 90 degrees or you may stall in the wind (put yourself in irons).

Push the tiller smoothly but firmly about half the distance toward the sail while letting the mainsheet out about one foot.

As the boom swings over, duck and move to the other side, opposite the new sail

position.

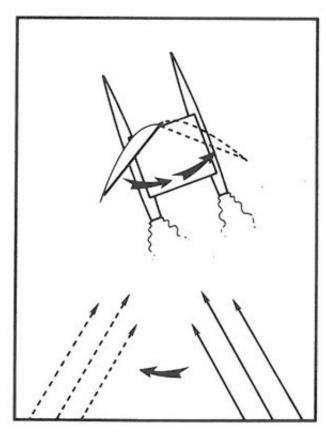
Exchange the mainsheet and tiller extension in your hands. The mainsheet should always be in your forward hand, the tiller extension should always be in your aft hand.

Straighten the tiller after you have completed your turn and the boat is moving toward your reference point.

**Notes:** Move the tiller firmly, but avoid sudden, jerky moves. Try to carve a smooth arc in the water. Forcing the tiller all the way over will put on the brakes and put the boat in irons (or stall it). Let go of the tiller, or the boat will straighten out before you want it to. When tacking a catamaran with a jib sail, keep the jib sheet cleated until the bows are fully through the eye of the wind. Then release the jib sheet and pull it in on the other side. This is called "baokwinding."

# **Turning Away From the Wind**

Turning away from the wind, or gybing (sometimes spelled jibing), is changing course while sailing downwind. Just think of gybing as the opposite of coming about. When coming about bows cross the wind. The **sterns** cross the wind when gybing. When gybing in light air, you will probably have to give the boom some help in swinging across to the other side of the boat.



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fig. 11.

To gybe, just pull the tilter extension toward your body with the same smooth

motion as when coming about, grab the mainsheet just below the boom, and, when the sterns cross the wind, warn the crew and swing the boom across. As soon as the sail begins to fill with wind, move to the other side of the boat and off you go.

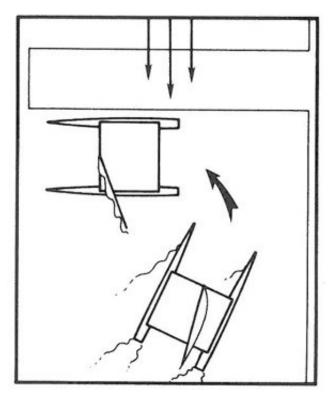
Gybing in heavy air can be more difficult since everything will have to be speeded up correspondingly in heavy air, the boom can snap across with a lot of force. For this reason, it's best to come about in lighter winds until you have had a chance to practice gybing to the point where you feel confident that you can handle heavy air with dexterity. You should be especially aware of wind shifts in heavy air. If the wind should suddenly change direction as it blows across the stern of the boat, it could grab the sail and swing it far out to the other side very quickly. This is an unplanned gybe and could damage the boat if the wind is strong enough, or it could cause injury to unaware crew members.

# **Landing the Boats**

Now that you've practiced sailing, what do you do when you are ready to come in? Landing your boat, whether at a dock or on a beach is not difficult if the proper procedures are followed for the various wind conditions you are likely to encounter.

#### **Leeward Landing**

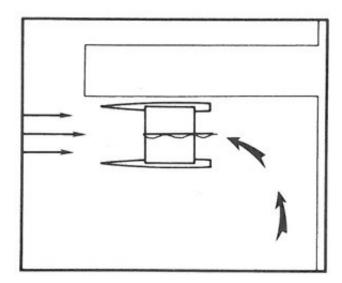
If a choice is available to you, it is always best to land at the dock from the leeward or downwind side with your bows heading into the wind or pointing. The trick is to be able to head into the dock with just enough speed to be able to turn at the proper moment without stalling yourself before you get there. To land, let the sail out slightly to reduce your speed; come about just before the bows hit the dock; let the sails out and grab on to the dock.



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fig. 12.

If you are approaching the dock on a reach, follow the same basic procedure being sure to point the boat into the wind slightly before you reach your destination and let your sails luff so that you can simply glide into the position you want.

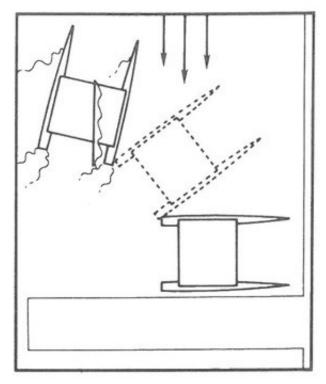


 $(/\!/ cdn. hobiecat. com/digital\_assets/basics-sailing-landing-boats-leeward-landing-reach.jpg)$ 

fig. 13.

## Windward Landing

When landing on the windward side of the dock, approach at an angle at a reduced rate of speed. Then head up to point your bows into the wind and allow the sails to luff. The wind will then blow you back into the dock. Although this is the least desirable way to land a boat, it is certainly nothing to be afraid of and practice will cure any problems you may encounter during your first few tries.



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fig. 14.

#### **Beach Landing**

Two of the greatest joys of owning a Hobie Cat are the ability to land at your favorite beach without having to dock the boat and being able to take off again without any trouble. That's why many people like to take their Hobies on picnics and camping trips. There is just no need for a dock so availability is never a problem.

Beware of sailing into isolated coves, bays and beaches, however. Power companies often string powerlines over these areas, so ask other sailors if they know of any powerlines and keep a sharp eye out for them yourself. If there is any doubt about the presence of powerlines, do **not** sail into the area. Also, be sure not to sail onto unknown beaches since hidden rocks and stones can damage the hulls.