

# RaceWorks

(An Illustrated Sailing Primer)

### Table of Contents:

### **1. Basic Sailing Terminology:**

- Boat Related
- Wind Related
- Other key terms

### 2. Sailing Basics:

- Points of Sail
- The Wind
- The Boat
- The Sails

### 3. Crew Roles





## **Basic Sailing Terminology**

Bow – The front of the boat

Stern – The back of the boat

**Cockpit** – The area of the boat that has seats/space for the crew to steer the boat and adjust the sails.

**Mast** – The vertical pole to which the sails and rigging are attached

**Boom** – The horizontal pole to which the foot (bottom) of the mainsail is attached

**Main** (mainsail) – The sail attached to the mast and the boom. This sail projects back from the mast toward the stern

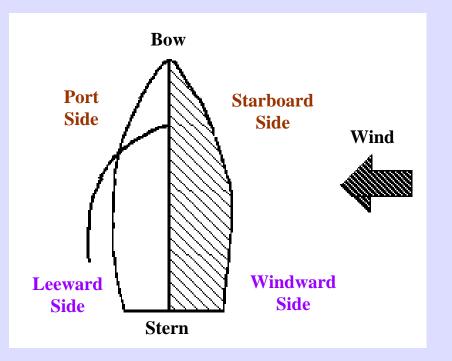
**Jib** – The sail forward of the mast. Usually attached to the bow of the boat and the mast.



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## **More Sailing Terminology**

The diagram below identifies sailing terms that refer to locations on the boat or the boat's position in relation to the wind. The left side of the boat, while facing the bow is **port**. The right side of the boat is called the **starboard side**. **Leeward** and **windward** are terms rwhich efer to the sides of the boat in relation to the wind. The side nearest the wind is the **windward side**, and the side which is away from the wind is the **leeward side**.



Course - The direction the boat is being steered (heading)

**Falling off** (bearing off, bearing away) – Altering the boat's course to be further away from the direction of the wind (falling off or away from the wind)

**Jibing** – Turning the stern of the boat through the wind so that the sails swing from one side of the boat to the other

**Heading up** (coming up) - Altering the boat's course to come closer to the direction of the wind

Halyard - A line (rope) used to raise or lower a sail

**Irons** ("in irons") – A condition in which the boat is pointing into the wind so that the sails cannot fill and the boat significantly slows down or stops.

Line - General term for any rope used on a boat

**Luffing** – When a sail starts to flutter and causes the boat to lose speed. This usually indicates that the sails, course of the boat or both needs adjustment to sail effectively.

**Points of Sail** (see next page) – Points of Sail describe the angle between the boat's course and the direction of the wind (often referred to as beating, reaching and running)

**Sheet** – A line used to trim (pull in) or ease (let out) a sail

**Tacking** – Turning the bow of the boat through the wind so that the sails swing from one side of the boat to the other



The **points of sail** relate to the angle between a sailboat's heading, or course, and the direction of the wind.

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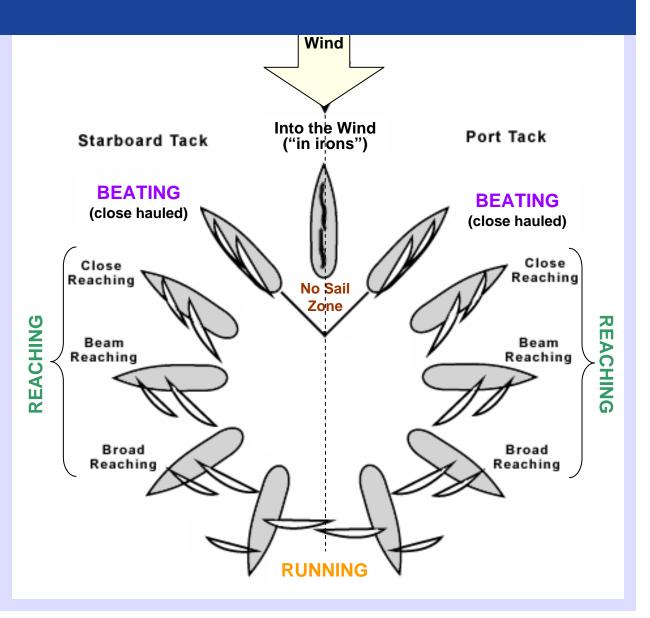
There are three basic courses:

- **BEATING** (wind is from the bow)
- **REACHING** (wind is from the side)
- RUNNING (wind is from the stern (astern))

A sailboat can sail in any direction except into the wind. Specifically, there is a zone of about forty-five degrees on either side of the eye of the wind (ninety degrees altogether) in which the sails will not fill. This zone is called the **No Go Zone** and the boat will be "*in irons*".

#### Notice two things:

- Sails are trimmed in (pulled in) as you head closer to the wind (heading up) and eased out (let out) as you head further from the wind (falling off).
- The diagram is symmetrical about the eye of the wind (dotted line). For example, there are two close reaches, one with the wind hitting the starboard side first (*starboard tack)*, and one with the wind hitting the port side first *port tack*.



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## **Crew Roles**

#### **Driver or Helmsman:**

- Responsible for steering the sailboat.
- Focus is on speed!
- Must communicate & the Main & Jib Trimmer

#### Main Trimmer:

- Responsible for the main sail
- Key contributor to speed & maneuverability of the sailboat.
- coordinate his/her actions with Must coordinate actions with Jib Trimmer and Driver

#### **Jib Trimmer(s)**:

- Responsible for the Jib (sail)
- Contributes to speed & maneuverability of the sailboat.
- crucial role when the sailboat makes major course changes

#### **Tactician:**

- Focuses on the "chess game"
- assists Driver with course navigation & planning
- monitors the boat's, progress & performance relative to the course and the other boats

