

AT SEA GLOSSARY

- A -

aback

Wind on the wrong side of the sails.

abaft

Toward the rear of the boat, behind the boat.

abeam

At a right angle to the length of the boat.

abreast

Off the side, even with the boat.

admiralty law

The "law of the sea."

aft, after

Toward the stern of the boat.

aground

When a boat is in water too shallow for it to float in; the boat's bottom is resting on the ground.

amas

The outboard hulls of a trimaran.

amidships

In the center of the boat.

anchor

1) A heavy metal object designed such that its weight and shape will help to hold a boat in its position when lowered to the sea bottom on a rode or chain.

2) The act of using an anchor

anchor chain

A chain attached to the anchor. The chain acts partially as a weight to keep the anchor lying next to the ground so that it can dig in better. Chain is also not damaged as much as line when lying on rocks. The weight of the chain also helps to absorb changes in the boat's position due to waves.

anchor light

A white light, usually on the masthead, visible from all directions, used when anchored.

anchor locker

A locker used to store the anchor rode and anchor.

anchor roller

Also called bow roller. A fitting with a small wheel that allows the anchor and chain to roll over when dropping or raising the anchor. Some anchor rollers also have a provision to store the anchor.

anchor windlass

A windlass used to assist when raising the anchor.

anchorage

A place where a boat anchors, usually an established and marked area.

astern

Toward the stern of a vessel, or behind the boat.

autopilot

A device used to steer a boat automatically, usually electrical, hydraulic or mechanical in nature. A similar mechanism called a self-steering gear may also be used on a sailing vessel.

auxiliary

A second method of propelling a vessel. On a sailboat this could be an engine.

aweigh

To raise an anchor off the bottom.

- B -**backstay**

A stay (line or cable) used to support the mast. The backstay runs from the masthead to the stern and helps keep the mast from falling forward.

backwinded

The state of a sail with the wind pushing on the wrong side of it, causing it to be pushed away from the wind.

ballast

A weight at the bottom of a boat to keep it stable. Ballasts can be placed inside the hull of the boat or externally in a keel.

beam

- 1) The widest part of a boat.
- 2) Abeam, at a right angle to the length of the boat.
- 3) Sturdy wooden timbers running across the width of a boat. Used to support the deck of a wooden boat.

beam reach

The point of sail with the wind coming from abeam.

bearing

The direction of an object from the observer.

beat

To sail on a tack toward the wind.

beating

Tacking. To sail against the wind by sailing on alternating tacks.

berth

- 1) A place where a boat or ship can be secured.
- 2) A safe, cautious distance, as in to give something a "wide berth."

bilge

The lowest part of the interior of the boat where water collects.

bilge pump

A mechanical, electrical, or manually operated pump used to remove water from the bilge.

bimini

A cover used to shelter the cockpit from the sun.

bitt

Any of the deck posts, often in pairs, around which lines or chains are wound and held fast.

bitter end

The end of a line or chain that is wound around a bitt.

block

One or more pulleys designed to carry a line and change the direction of its travel. A housing around the pulley allows the block to be connected to a spar or to another line. Lines used with a block are known as tackle.

bobstay

A wire from the bowsprit to the stem of a boat, just above the waterline.

bollard

A large pillar to which a boat's mooring lines may be tied.

boom

A pole securing the bottom of a sail, allowing more control of the position of a sail.

boomkin

A small outrigger over the stern of a boat.

bosun

Also boatswain, bos'n, bo's'n, and bo'sun, all of which are pronounced "bow-sun." A crew member responsible for keeping the hull, rigging and sails in repair.

bosun's chair

A chair, traditionally made from a plank and rope, used to hoist workers aloft to maintain the rigging.

bosun's locker

A locker where tools for maintaining the hull, rigging and sails are kept.

bow

The front of the boat.

bowline

A knot used to make a loop in a line. Easily untied, it is simple and strong. The bowline is used to tie sheets to sails.

bowsprit

Large spar projecting off the front of a boat. A bowsprit allows better positioning of the forestay to maximize use of the jib or genoa sail.

breakers

A wave that approaches shallow water, causing the wave height to exceed the depth of the water it is in, in effect tripping it. The wave changes from a smooth surge in the water to a cresting wave with water tumbling down the front of it.

breaking seas

With sufficiently strong wind, large waves can form crests even in deep water, causing the wave tops to tumble forward over the waves.

breakwater

A structure built to improve a harbor by sheltering it from waves.

bulwarks

The sides of a boat above the upper deck.

buoy

A floating device used as a navigational aid by marking channels, hazards and prohibited areas.

- C -

cabin

A room inside a boat.

canvas

Tightly woven cloth used for sails, covers and biminis. Typically made from cotton, hemp or linen. Modern sails are made out of synthetic materials generally known as sailcloth.

capsize

When a boat falls over in the water so that is no longer right side up.

capstan

A rotating drum used to haul heavy lines and chains. Similar to a winch, but mounted vertically.

captain

The person who is in charge of a vessel and legally responsible for it and its occupants.

cast off

To detach mooring lines, as when leaving a dock.

catamaran

A twin-hulled boat. Catamaran sailboats are known for their ability to plane and are faster than single-hulled boats (monohulls) in some conditions.

caulking

Material used to seal the seams in a wooden vessel, making it watertight.

celestial navigation

A method of using the stars, sun and moon to determine one's position. Position is determined by measuring the apparent altitude of one of these objects above the horizon using a sextant and recording the times of these sightings with an accurate clock. That information is then used with tables in the Nautical Almanac to determine one's position.

chart

Maps for boaters are known as charts. Charts are usually issued by government agencies and include information on channels, navigational aids, water depth and hazards.

chine

The location where the deck joins the hull of a boat.

cleat

A fitting to which a line may be attached easily.

close-hauled

The point of sail with the bow of the boat as close as possible to the wind.

coaming

A small wall to prevent water from entering the cockpit.

cockpit

The location from which the boat is steered, usually toward the middle or rear of the boat.

coordinated universal time

A time standard that is not affected by time zones or seasons. Time measured in coordinated universal time, labeled with the term zulu. It is used so that people around the world can communicate about time without regard to individual time zones.

course

The direction in which a boat is traveling or intends to travel.

CQR anchor

Also called a plow anchor. Short for coastal quick release anchor. An anchor that is designed to bury itself into the ground by use of its plow shape.

crew

One or more people who aid in the operation of a boat.

crow's nest

A small, sheltered platform close to the top of a ship's mast, used by the lookout.

cruising guides

Books that describe features of particular sailing areas, such as hazards, anchorages, etc.

cutter

A sailboat with one mast and a mainsail and two headsails.

cyclone

The generic term for a tropical weather system, including tropical depressions, tropical storms and hurricanes.

- D -**deck**

The surface on the top of a boat on which people can stand.

depth sounder

An instrument that uses sound waves to measure the distance to the bottom.

dinghy, dink

- 1) A small boat used to travel from a boat to shore, carrying people or supplies. Also known as a tender.
- 2) The act of using a dinghy.

distress signals

Any signal that is used to indicate that a vessel is in distress. Flares, smoke, audible alarms and electronic beacons are types of distress signals.

dock

- 1) Any platform where vessels can make fast. The act of securing a boat in such a place. Docks are often subdivided into smaller areas for docking known as slips.
- 2) The act of entering a dock.

draft

- 1) The depth of a boat, measured from the deepest point to the waterline. The water must be at least this depth, or the boat will run aground.
- 2) A term describing the amount of curvature designed into a sail.

dragging

Description of an anchor that is not securely fastened to the bottom and moves.

dry dock

A dock where a boat can be worked on out of the water. The boat is usually sailed into a dry dock, and then the water is pumped out.

- E -**EPIRB**

Emergency Position Indicating Radio Beacon. An emergency device that uses a radio signal to alert satellites or passing airplanes to a vessel's position.

Equator

An imaginary line around the center of the world at Latitude 0°.

- F -

FCC rules

Federal Communications Commission rules governing radio equipment and operation in the United States and its coastal waters.

fender

A cushion hung from the sides of a boat to protect it from rubbing against a dock or another boat.

fetch

The distance wind and waves can travel toward land without being blocked. In areas without obstructions, the wind and seas can build to great strength, but in sheltered areas, such as coves and harbors, the wind and seas can be quite calm. Fetch also is used to describe the act of sailing to a location accurately without having to tack.

fiberglass

A construction method using layers of woven glass mats that are bonded together with glue.

fin keel

A keel that is narrower and deeper than a full keel.

flare

A device that burns to produce a bright light, sometimes colored, usually used to indicate an emergency.

flotsam

Debris floating on the water surface.

fluke

- 1) The broad flat parts of an anchor that are designed to grab and hold in the bottom.
- 2) A fin on a whale.

foil

A winglike surface below the hull that, when moved through water, lifts the hull out of the water, allowing greater speeds.

fore, forward

Toward the bow of the boat.

fore-and-aft

From the bow to the stern.

foremast

The mast nearest the bow.

forepeak

The most forward storage area on a vessel.

forestay

A line running from the bow of the boat to the upper part of the mast, designed to pull the mast forward. A forestay that attaches slightly below the top of the mast can be used to help control the bend of the mast. The most forward stay on the boat is also called the headstay.

foresail

A sail placed forward of the mast, such as a jib.

forestaysail

A sail attached to the forestay, as opposed to a jib, which is attached to the headstay.

foretopmast

A mast above the foremast.

founder

Used to describe a boat that is having difficulty remaining afloat.

foul

When a line ends up somewhere it does not belong and becomes jammed. Lines can foul on blocks, winches and other objects on a boat.

full keel

A keel that runs the length of the boat. Full keels have a shallower draft than fin keels.

furl

To lower a sail. Sails are sometimes partially furled to reduce the amount of sail area in use without completely lowering the sail. This is usually known as reefing.

- G -**gaff**

A spar or pole extending diagonally upward from the after side of a mast and supporting a fore-and-aft sail.

gale

A storm with a wind speed between 34 and 40 knots.

gale force winds

Wind speeds strong enough to qualify the storm as a gale.

galley

The kitchen area on a boat.

gallows

A frame used to support the boom.

genoa

A large jib that overlaps the mast.

Global Positioning System

GPS for short. A system of satellites that allows one's position to be calculated with great accuracy by the use of an electronic receiver.

GMT

Time measured in Greenwich Mean Time. Coordinated universal time is the new term. A time standard that is not affected by time zones or seasons.

GPS

Global Positioning System. A system of satellites that allows one's position to be calculated with great accuracy by the use of an electronic receiver.

great circle

A circle drawn around the Earth such that the center of the circle is at the center of the Earth. Following such a circle plots the shortest distance between any two points on the surface of the Earth.

green water

A solid mass of water coming aboard instead of just spray.

Greenwich Mean Time

GMT for short. Coordinated universal time is the new term. A time standard that is not affected by time zones or seasons.

grommet

A ring or eyelet normally used to attach a line, such as on a sail.

ground swells

Swells that become shorter and steeper as they approach the shore due to shallow water.

ground tackle

The anchor and its rode or chain and any other gear used to hold a boat securely in place.

gudgeon

A socket the pintle (pin or bolt used as a pivot) of the rudder sits in.

gunnel, gunwale

Pronounced "gun-nel." The rail around the edge of a boat. Smaller versions are called toe rails.

gybe

Same as jibe.

gypsy

A windlass or capstan drum.

- H -**halyard**

A line used to hoist a sail or spar. The tightness of the halyard can affect sail shape.

harbor

An anchorage protected from storms either naturally or by manmade barriers.

harbormaster

The individual who is in charge of a harbor.

hatch

A sliding or hinged opening in the deck, providing access to the cabin or space below.

haul

Pulling on a line.

head

- 1) The front of a vessel.
- 2) The upper corner or edge of a sail.
- 3) The top or front of a part.
- 4) The toilet and toilet room in a vessel.

heading

The actual course of the vessel at any given time.

headsail

Any sail forward of the mast, such as a jib.

head seas

Waves coming from the front of the vessel.

headstay

The most forward forestay. The line from the bow or bowsprit to the top of the mast. This keeps the mast from falling toward the rear of the boat. The headstay is the farthest forward of all the stays on the boat.

heave

To throw or pull strongly on a line.

heaving line

A light line used to be thrown ashore, from which a larger rope can then be pulled.

heaving to

Arranging the sails in such a manner as to slow or stop the forward motion of the boat, such as when in heavy seas.

heavy seas

When the water has large waves or breakers in stormy conditions.

heavy weather

Stormy conditions, including rough, high seas and strong winds. Probably uncomfortable or dangerous.

heel, heeling

When a boat tilts away from the wind, caused by wind blowing on the sails and pulling the top of the mast over. Some heel is normal when under sail.

helm

The wheel or tiller of a boat.

helmsman

The person who is steering the boat.

high tide

The point of a tide when the water is the highest. The opposite of low tide.

hitch

A knot used to attach a line to a cleat or other object.

holding ground

The type of bottom that the anchor is set in.

holding tank

A storage tank where sewage is stored until it can be removed to a treatment facility.

horseshoe buoy

A floatation device shaped like a U and thrown to people in the water in emergencies.

hull

The main structural body of the boat, not including the deck, keel or mast. The part that keeps the water out of the boat.

hull speed

The theoretical speed a boat can travel without planing, based on the shape of its hull. This speed is about 1.34 times the square root of the length of a boat at its waterline. Since most monohull sailboats cannot exceed their hull speed, longer boats are faster.

hurricane

An intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 miles per hour (64 knots or higher in the North Atlantic Ocean, the Northeast Pacific Ocean (east of the International Date Line) or the South Pacific Ocean (east of 160° east longitude). In other parts of the world, they are known as typhoons, tropical cyclones and severe tropical cyclones.

hydrodynamic

A shape designed to move efficiently through the water.

hydrofoil

A boat that has foils under its hull onto which it rises to plane across the water surface at high speed.

- I -

Inmarsat-C

A series of satellites that provide two-way communications. New World connects to the satellite network through Stratos Mobile Networks.

Intertropical Convergence Zone

A band of low pressure that forms over the regions of the warmest waters and land masses in the tropics.

Intracoastal Waterway

A system of rivers and canals along the Atlantic and Gulf coasts of the United States allowing boats to travel along them without having to go offshore.

inverter

An electronic device that converts low-voltage direct current (battery power) into 115-volt alternating current (household electric power). New World uses a PROwatt 800 inverter.

iron sail

Slang for an engine on a sailboat.

- J -

jetty

A manmade structure projecting from the shore. May protect a harbor entrance or aid in preventing beach erosion.

jib

A triangular sail attached to the headstay. A jib that extends aft of the mast is known as a genoa.

jib netting

A rope net to catch the jib when it is lowered.

jib sheet

A sheet used to control the position of the jib. The jib has two sheets, and at any time one is the working sheet and the other is the lazy sheet.

jib stay

The stay that the jib is hoisted on. Usually the headstay.

jib topsail

A small jib set high on the headstay of a double headsail rig.

jibe

To change direction when sailing in such a manner that the stern of the boat passes through the eye of the wind and the boom changes sides. Careful control of the boom and mainsail are required when jibing to prevent a violent motion of the boom when it switches sides.

- K -

kedging

- 1) A method of pulling a boat out of shallow water when it has run aground. A dinghy is used to set an anchor, then the boat is pulled toward the anchor. Those steps are repeated until the boat is in deep enough water to float.
- 2) A traditionally shaped anchor having flukes perpendicular to the stock of the anchor and connected by a shank. These are less common than modern anchors such as the plow and lightweight anchors.

keel

A flat surface built into the bottom of the boat to reduce the leeway caused by the wind pushing against the side of the boat. A keel also usually has some ballast to help keep the boat upright and prevent it from heeling too much. There are several types of keels, such as fin keels and full keels.

ketch

A sailboat with two masts. The shorter mizzen mast is aft of the main mast, but forward of the rudder post. A similar vessel, the yawl, has the mizzen mast aft of the rudder post.

knot

One knot equals one nautical mile per hour. This rate is equivalent to approximately 1.15 statute miles per hour, or exactly 1.852 kilometers per hour.

- L -**lanyard**

A line attached to a tool.

lash

To tie something with a line.

latitude

Imaginary lines drawn around the world and used to measure distance north and south of the Equator. The North Pole is 90° north, the South Pole is 90° south, and the Equator is at 0°.

lazarette

A small aft storage space for spare parts and other items.

lazy jack

A line running from above the mainsail to the boom to aid in the lowering of the sail.

lazy sheet

A line attached to a sail but not currently in use. The line currently in use is known as the working sheet. The working and lazy sheets usually change when the boat is tacked.

lee

The direction toward which the wind is blowing. The direction sheltered from the wind.

leeboard

A board placed alongside a berth to keep its occupant from falling out when a boat heels.

leeward

The direction away from the wind. Opposite of windward.

life boat

A small boat used for emergencies, such as when the parent boat is sinking.

life jacket, life preserver, life vest

A device used to keep a person afloat. Also called a personal floatation device or PFD.

life raft

An emergency raft used in case of serious problems to the parent vessel, such as sinking.

lifeline

A line running between the bow and stern of a boat to which the crew can attach themselves to prevent them from being separated from the boat.

light

A lighted navigational aid such as a lighthouse that can be used at night or in poor visibility.

lighthouse

A navigational light placed on a structure on land.

lightweight anchor

An anchor that has pivoting flukes that dig into the ground as tension is placed on the anchor. It does not have a stock.

line

On a boat, most ropes are called lines.

list

A leaning to one side when not underway. Usually the result of an improperly loaded boat. Heeling is different from a list because it is caused by the forces of wind acting upon a sailboat that is underway. When a boat changes tacks, the direction of the heel will change sides, whereas a list is a continual leaning to the same side under any condition.

lock

A device that allows boats to pass between bodies of water having different water levels, such as in a canal. A boat enters a lock, then large doors close behind it. The water level is then either raised or lowered until a second set of doors can be opened and the boat can pass through.

locker

Any storage place on a boat.

log

1) A device used to measure the distance traveled through the water. The distance read from a log can be affected by currents, leeway and other factors, so those distances are sometimes corrected to a distance made good. Logs can be electronic devices or paddlewheels mounted through the hull of the boat or trailed behind it on a line.

2) A written record of a boat's condition, usually including items such as boat position, boat speed, wind speed and direction, course and other information.

logbook

A book in which the boat's log is kept. Each entry usually contains the time and date of the entry, weather conditions, boat speed and course, position and other information.

longitude

Imaginary lines drawn through the North and South Poles on the globe, used to measure distance east and west.

Greenwich, England, is designated as 0°, with other distances being measured in degrees east and west of Greenwich.

LORAN

An electronic instrument using radio waves from various stations to find one's position. The LORAN system is being replaced by the GPS system and will be obsolete in a few years. Many LORAN stations have already stopped providing service.

low tide

The point of a tide at which the water is the lowest. The opposite of a high tide.

- M -**main mast**

The tallest (possibly only) mast on a boat.

mainsail

The main sail that is suspended from the main mast.

main sheet

The line used to control the mainsail.

main topsail

A topsail on the main mast.

make fast

To attach a line to something so that it will not move.

marina

A place where boats can find fuel, water and other services. Marinas also contain slips where boats can stay for a period of time.

mast

Any vertical pole on the boat that sails are attached to. If a boat has more than one mast, they can be identified by name.

master

The person in charge of a vessel. The captain.

masthead

The top of a mast.

mate

An assistant to the captain.

mayday

An internationally recognized distress signal used on a radio to indicate a life-threatening situation. Mayday calls have priority over any other radio transmission and should be used only if there is an immediate threat to life or vessel. More urgent than a pan pan or securite call.

meridian

A longitude line. Meridians are imaginary circles that run through both poles.

mizzen mast

A smaller aft mast on a ketch or yawl rigged boat.

mizzen sail

The sail on the aft mast of a ketch or yawl rigged sailboat.

mizzen staysail

A small sail that is sometimes placed forward of the mizzen mast.

monohull

A boat that has only one hull, as opposed to multihull boats such as catamarans or trimarans.

moor

To attach a boat to a mooring, dock, post, anchor, etc.

mooring

A place where a boat can be moored. Usually, a buoy marks the location of a firmly set anchor.

mooring buoy

A buoy marking the location of a mooring. Usually attached to an anchor by a small pendant.

mooring line

A line used to secure a boat to an anchor, dock or mooring.

Morse code

A code that uses dots and dashes to communicate by radio or signal lights.

motor

- 1) An engine.
- 2) The act of using an engine to move a boat.

motor sailer

A boat designed to use its motor for significant amounts of time and use the sails less often than a normal sailboat.

mount

- 1) An attachment point for another object.
- 2) The act of putting an object on its mount.

multihull

Any boat with more than one hull, such as a catamaran or trimaran.

mushroom anchor

A type of anchor with a heavy, inverted mushroom-shaped head. Mushroom anchors are used to anchor in mud and other soft ground.

- N -**nautical**

Having to do with boats, ships or sailing.

nautical mile

Distance at sea is measured in nautical miles, which are about 6,067.12 feet, 1.15 statute miles or exactly 1,852 meters. Nautical miles have the unique property that 1 minute of latitude is equal to 1 nautical mile. (There is a slight error, because the earth is not perfectly round.) Measurement of speed is done in knots, where 1 knot equals 1 nautical mile per hour. A statute mile is used to measure distances on land in the United States and is 5,280 feet.

navigation

The act of determining the position of a boat and the course needed to safely move the boat from place to place.

navigator

The person responsible for navigating a boat.

- O -**off the wind**

Sailing with the wind coming from the stern or quarter of the boat.

offshore

Away from land, toward the water.

offshore wind

Wind that is blowing away from the land, toward the water.

open

A location that is not sheltered from the wind and seas.

outboard

On the side of the hull that the water is on. Outboard engines are sometimes just called outboards.

outboard engine

An engine used to power a small boat. Outboard engines are mounted on a bracket aft of the stern of the boat.

outhaul

A line used to apply tension on the foot of a sail, used to maintain proper sail shape.

outrigger

A flotation device attached to one or both sides of the hull to help prevent capsizing.

out of trim

Sails that are not properly arranged for the point of sail that the boat is on. The sails may have improper sail shape, or the boat may be heeling too much. These conditions will slow the boat down.

overboard

In the water outside of the vessel.

- P -**painted waterline**

A painted line on the side of a boat at the waterline. The color usually changes above and below the waterline, and the boat is painted with special anti-fouling paint below the waterline.

painter

A line attached to the bow of a dinghy, used to tie it securely or to tow it.

pan pan

An urgent message used on a radio regarding the safety of people or property. A mayday call is used when there is an immediate threat to life or property. A pan pan situation may develop into a mayday situation. Pan pan and mayday messages have priority on radio channels and should not be interrupted. In the case of a less urgent safety message, the securite signal is used.

parallel

Latitude line.

passage

A journey from one place to another.

personal floatation device, PFD

A device used to keep a person afloat. Also called a life jacket, life preserver or life vest.

pier

A place extending out into the water where vessels may dock. Usually made out of wood or cement.

pile, piling

A pole embedded in the sea bottom and used to support docks, piers and other structures.

pilot

An individual with specific knowledge of a harbor, canal, river or other waterway, qualified to guide vessels through the region. Some areas require that boats and ships be piloted by a licensed pilot.

piloting

The act of guiding a vessel through a waterway.

pinch

Steering a sailboat too close to the eye of the wind, causing the sails to flap.

pitch

- 1) A fore and aft rocking motion of a boat.
- 2) How much a propeller is curved.
- 3) A material used to seal cracks in wooden planks.

plot

To find a ship's actual or intended course or mark a fix on a chart.

plow anchor

Also called a CQR or coastal quick release anchor. An anchor that is designed to bury itself into the ground by use of its plow shape.

point

- 1) To sail as close as possible to the wind. Some boats may be able to point better than others, sailing closer to the wind.
- 2) The named directions on a compass such as north, northeast, etc.

point of sail

The position of a sailboat in relation to the wind. A boat with its head into the wind is known as "head to wind" or "in irons." The point of sail with the bow of the boat as close as possible to the wind is called close-hauled. As the bow moves further from the wind, the points of sail are called: close reach, beam reach, broad reach and running. The general direction a boat is sailing is known as its tack.

poop deck

A boat's aft deck.

pooped

A wave that breaks over the stern of the boat.

port

- 1) The left side of the boat from the perspective of a person at the stern of the boat, looking toward the bow. The opposite of starboard.
- 2) A place where ships go to dock.
- 3) A porthole. A window in the side of a boat, usually round or with rounded corners. Sometimes portholes can be opened; sometimes they are fixed shut.

port tack

A sailboat sailing on a tack with the wind coming over the port side and the boom on the starboard side of the boat. If two boats under sail are approaching, the one on port tack must give way to the boat on starboard tack.

porthole

A window in the side of a boat, usually round or with rounded corners. Sometimes portholes can be opened; sometimes they are fixed shut.

pound

The action of a boat's bow repeatedly slamming into oncoming waves.

pram

A type of dinghy with a flat bow.

prevailing winds

The typical winds for a particular region and time of year.

preventer

A line run forward from the boom to a secure fitting to prevent the boom from swinging violently when running.

prime meridian

The longitude line at 0°, which runs through Greenwich, England.

prop

Slang for propeller.

propeller

An object with two or more twisted blades, designed to propel a vessel through the water when spun rapidly by the boat's engine.

propeller shaft

The spinning shaft from the engine to which the propeller is attached.

proW

The part of the bow forward of where it leaves the waterline.

- Q -**quarter**

The side of a boat aft of the beam.

quay

A section parallel to the shore for docking and unloading vessels.

- R -**radar**

An electronic instrument that uses radio waves to find the distance and location of other objects. Used to avoid collisions, particularly in times of poor visibility.

radio

An instrument that uses electromagnetic waves to communicate with other vessels. VHF (very high frequency) radios are common for marine use, but are limited in range. SSB (single sideband) radios have longer ranges.

radio beacon

A navigational aid that emits radio waves for navigational purposes. The radio beacon's position is known and the direction of the radio beacon can be determined by using a radio direction finder.

raft

- 1) A small flat boat, usually inflatable.
- 2) To moor with more than one boat tied together, usually using only one boat's anchor and rode.

rail

The edge of a boat's deck.

rake

A measurement of the top of the mast's tilt toward the bow or stern.

reef

- 1) To partially lower a sail so that it is not as large. This helps prevent too much sail from being in use when the wind gets stronger.
- 2) A line of rock and coral near the surface of the water.

reefing lines

Lines used to pull the reef in the sail.

rhumb line

A line that passes through all meridians at the same angle. When drawn on a Mercator chart, the rhumb line is a straight line, because the Mercator chart is a distortion of a spherical globe on a flat surface. The rhumb line results in a longer course than a great circle route.

ride out

To weather a storm, either at sea or at anchor.

riding sail

Also called a stability sail. Any small sail set to help the boat maintain its direction without necessarily moving, as when at anchor or in heavy weather.

rig

- 1) A combination of sails and spars.
- 2) To prepare the rig before sailing.

rigging

The wires, lines, halyards and other items used to attach the sails and spars to the boat. The lines that do not have to be adjusted often are known as standing rigging. The lines that are adjusted to raise, lower and trim the sails are known as running rigging.

right

To return a boat to its upright position.

rigid inflatable

A small inflatable boat that has a solid hull but has buoyancy tubes that are inflated to keep it afloat.

Roaring Forties

A region between 40° South and 50° South where westerly winds circle the earth unobstructed by land.

rode

A line or chain attached to an anchor.

roll

A side-to-side motion of the boat, usually caused by waves.

roller furling

A method of storing a sail, usually by rolling the jib around the headstay or rolling the mainsail around the boom or on the mast.

roller reefing

A system of reefing a sail by partially furling it. Roller furling systems are not necessarily designed to support roller reefing.

rope

Traditionally, a line must be over 1 inch in size to be called a rope.

row

A method of moving a boat with oars. The person rowing the boat faces backward, bringing the blade of the oars out of the water and toward the bow of the boat, then pulling the oars through the water toward the stern of the boat, moving the boat forward.

rowboat

A small boat designed to be rowed by use of its oars. Some dinghies are rowboats.

royal mast

The small mast next above the topgallant mast.

rub rail, rub strake, rub guard

A rail on the outside of the hull of a boat to protect the hull from rubbing against piles, docks and other objects.

rudder

A flat surface attached behind or underneath the stern, used to control the direction the boat is traveling.

rudder post

The post that the rudder is attached to. The wheel or tiller is connected to the rudder post.

run aground

To take a boat into water that is too shallow for it to float in; the bottom of the boat is resting on the ground.

runner

Also known as running backstay. Adjustable stay used to control tension on the mast.

running

- 1) A point of sail where the boat has the wind coming from aft of the boat.
- 2) Used to describe a line that has been released and is in motion.

running backstay

Also known as a runner. Adjustable stay used to control tension on the mast.

running bowline

A type of knot that tightens under load. It is formed by running the line through the loop formed in a regular bowline.

running lights

Navigational lights that are required to be used when a vessel is in motion.

running rigging

The rigging used to raise, lower and adjust the sails.

- S -

safety harness

A device worn around a person's body that can be attached to lines to help prevent the person from becoming separated from the boat.

sail

- 1) A large piece of fabric designed to be hoisted on the spars of a sailboat in such a manner as to catch the wind and propel the boat.
- 2) The act of using the wind to propel a sailboat.

sailboat

A boat which uses the wind as its primary means of propulsion.

sailcloth

A fabric, usually synthetic, used to make sails.

sail shape

The shape of a sail, with regard to its efficiency. In high winds, a sail would probably be flatter, in low winds rounder. Other circumstances can cause a sail to twist. Controls such as the outhaul, halyards, sheets and the bend of the main mast all can affect sail shape.

sail trim

The position of the sails relative to the wind and desired point of sail. Sails that are not trimmed properly may not operate efficiently. Visible signs of trim are excessive heeling and the flow of air past telltales.

sampson post

A strong post used to attach lines for towing or mooring.

sand bar

An area in shallow water where wave or current action has created a small, long hill of sand. Since they are created by water movement, they can move and may not be shown on charts.

satellite navigation

Navigation using information transmitted from satellites.

scale

Climb.

schooner

A sailboat with two or more masts. The aft mast is the same size as or larger than the forward one(s).

scope

The ratio between the length of the anchor rode and the depth of the anchor. A scope of 7:1 is usually used, depending on the holding ground. Too little scope can cause the anchor to drag.

screw

A propeller.

scud

To run before the wind in a storm.

scull

A method of moving a boat by using a single oar at the stern.

scupper

An opening through the toe rail or gunwale to allow water to drain back into the sea.

scuttle

To sink a boat.

sea anchor

A device designed to bring a boat to a near stop in heavy weather. Typically, a sea anchor is set off the bow of a boat so that the bow points into the wind and rough waves.

sea buoy

The last buoy as a boat heads to sea.

sea level

The average level of the oceans, used when finding water depths or land elevations.

seagoing

A vessel designed to be able to cross oceans.

seamanship

The ability of a person to motor or sail a vessel, including all aspects of its operation.

secure

To make fast. To stow an object or tie it in place.

securite

A message transmitted by radio to warn of impending storms, navigational hazards and other potential problems that are not an immediate threat to life or property. Less serious than mayday and pan pan messages.

seizing

Tying two lines, or a spar and a line, together by using a small line.

set

- 1) To put an object in place.
- 2) The manner in which an object is in place.
- 3) The direction that a current is moving.

severe tropical cyclone

An intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 miles per hour (64 knots or higher in the Southwest Pacific Ocean (west of 160° east longitude) or in the Southeast Indian Ocean (east of 90° east longitude). In other parts of the world, they are known as hurricanes, typhoons and tropical cyclones.

sextant

A navigational instrument used to determine the vertical position of an object such as the sun, moon or stars. Used with celestial navigation.

shackle

A metal U-shaped connector that attaches to other fittings with the use of a pin that is inserted through the arms of the U.

shake out

To remove a reef from a sail.

shank

The long bar part of an anchor. The flukes are at one end of the shank, and the stock is at the other.

shear pin

A pin attaching one part to another that is designed to break if excessive loads are applied; for example, to connect the propeller to the propeller shaft so that the pin can break if the propeller strikes something, preventing damage to the propeller and engine.

sheathing

A covering to protect the bottom of a boat.

sheave

A wheel used to change the direction of a line, such as in a block or at the top of the masthead.

sheer

- 1) The fore and aft curvature of the deck.
- 2) A sudden change of course.

sheet

A line used to control a sail's trim. The sheets are named after the sail, as in jib sheet and main sheet.

ship

- 1) A large vessel.
- 2) To take an object aboard, such as cargo or water.
- 3) To put items such as oars on the boat when not in use.

shipshape

Neat, orderly and ready to use.

shoal

- 1) Shallow water.
- 2) An underwater sand bar or hill that has its top near the surface.

shore

The edge of the land near the water.

shoreline

Where the land meets the water.

shove off

To push a boat, as from a dock or from another boat.

shroud

Part of the standing rigging that helps to support the mast by running from the top of the mast to the side of the boat. Sailboats usually have one or more shrouds on each side of the mast.

side lights

Green and red lights on the starboard and port sides of the boat, required for navigation at night. Each light is supposed to be visible through an arc of 112.5° , beginning from directly ahead of the boat to a point 22.5° aft of the beam.

sideslip

The tendency of a boat to move sideways in the water instead of along its heading due to the motion of currents or winds.

signal halyard

A halyard used to hoist signal flags.

single sideband

A type of radio carried on a boat to transmit long distances.

sink

- 1) To go to the bottom of the water.
- 2) To cause an object to go to the bottom of the water.

skeg

Any flat protrusion on the outside of the hull that is used to support another object, such as the propeller shaft or rudder.

skin

The outside surface of a boat. Usually used when describing a fiberglass or other molded hull.

skiff

A small boat.

slack

- 1) A line that is loose.
- 2) To ease a line.

slide

Also called a lug. Metal or plastic pieces attached to the forward edge of a sail to allow easy hoisting of a sail.

sling

- 1) Lines used to hoist heavy or awkward objects.
- 2) The act of using such lines to hoist heavy or awkward objects.
- 3) Ropes used to secure the center of a yard to the mast.

slip

A space between two docks or piers where a boat can be moored.

sloop

A style of sailboat characterized by a single mast with one mainsail and one foresail.

slot

The opening between the jib and the mainsail. Wind passing through this opening increases the pressure difference across the sides of the mainsail, helping to move the boat forward.

snap hook

A metal fitting with a arm that uses a spring to close automatically when connected to another object.

snatch block

A block that can be opened on one side, allowing it to be placed on a line that is already in use.

snub

To suddenly stop or secure a line.

snubber

A stretchable line attached between two long pieces of rode to absorb anchor line strain and soften the impact of waves or tidal pull.

sound

- 1) To measure the depth of the water.
- 2) A long wide body of water that connects other large bodies of water.
- 3) A long, wide ocean inlet.

sounding

The depth of the water as marked on a chart.

spar

A pole used as part of the sailboat rigging, such as masts and booms.

spinnaker

A very large, lightweight sail used when running or on the point of sail known as a broad reach.

spinnaker halyard

A halyard used to raise the spinnaker.

spinnaker pole

Sometimes spinnaker boom. A pole used to extend the foot of the spinnaker beyond the edge of the boat and to secure the corner of the sail.

spinnaker pole lift

Also spinnaker lift. A line running from the top of the mast, used to hold the spinnaker pole in place.

spitfire

A storm jib. A small jib made out of heavy cloth for use in heavy weather. Sometimes brightly colored.

spreaders

Small spars extending toward the sides from one or more places along the mast. The shrouds cross the end of the spreaders, enabling the shrouds to better support the mast.

spring lines

Docking lines that help keep a boat from moving fore and aft while docked.

squall

A sudden intense wind storm of short duration, often accompanied by rain. Squalls often accompany an advancing cold front.

square rigged

A sailboat having square sails hung across the mast.

square sail

A square sail hung from a yard on the mast. Best used when sailing downwind.

SSB

Single sideband radio. A type of radio used on a boat to transmit for long distances.

stability

Ability of a boat to keep from heeling or rolling excessively, and the ability to quickly return upright after heeling.

stability sail

Also riding sail or steadying sail. Any small sail set to help the boat maintain its direction without necessarily moving, as when at anchor or in heavy weather.

staff

A vertical pole on which flags can be raised.

stall

1) To stop moving.
2) Air is said to stall when it becomes detached from the surface it is flowing along. Usually air travels smoothly along both sides of a sail, but if the sail is not properly trimmed, the air can leave one of the sides of the sail and begin to stall. Stalled sails are not operating efficiently.

stanchion

A post near the edge of the deck, used to support lifelines.

starboard

The right side of a boat, from the perspective of a person at the stern of the boat and looking toward the bow. The opposite of port.

starboard tack

A sailboat sailing on a tack with the wind coming over the starboard side and the boom on the port side of the boat. If two boats under sail are approaching, the one on port tack must give way to the boat on starboard tack.

statute mile

A mile as measured on land, 5,280 feet or 1.6 kilometers. Distances at sea are measured in nautical miles.

stay

Lines running fore and aft from the top of the mast to keep the mast upright. Also used to carry some sails. The backstay is aft of the mast, and the forestay is forward of the mast.

staysail

A triangular sail similar to the jib, set on a stay forward of the mast and aft of the headstay.

stem

The forward edge of the bow. On a wooden boat, the stem is a single timber.

step

- 1) A fitting for the bottom of the mast.
- 2) The act of placing the foot of the mast in its step and raising the mast.

stepped

- 1) A mast that is in place.
- 2) Where the mast is stepped, as in keel stepped or deck stepped.

stern

The aft part of a boat.

stern light

A white running light placed at the stern of the boat. The stern light should be visible through an arc of 135°, to the rear of the boat.

stern line

A line running from the stern of the boat to a dock when moored.

stiff

A boat that resists heeling.

stink pot

Sailors' slang for a powerboat.

stock

A crossbeam at the upper part of an anchor.

stopper

A mechanical device or knot used to keep a rope from running.

stores

Supplies on a boat.

storm jib

Sometimes called a spitfire. A small jib made out of heavy cloth for use in heavy weather. Sometimes brightly colored.

storm sail

The storm jib and storm trysail. Small sails built from heavy cloth for use during heavy weather.

storm trysail

A very strong sail used in stormy weather. It is loose footed, being attached to the mast but not the boom. This helps prevent boarding waves from damaging the sail or the rigging.

stow

To put something away.

surf

The breaking waves and resulting foam near a shore.

swab

- 1) A mop made from rope.
- 2) To use such a mop.

swallow

The place between the sheave and housing of a block, through which a line is run.

swamp

To fill with water.

swell

Large smooth waves that do not break. Swells are formed by wind action over a long distance.

- T -**tack**

- 1) The lower forward corner of a triangular sail.
- 2) The direction that a boat is sailing with respect to the wind.
- 3) To change a boat's direction, bringing the bow through the eye of the wind.

tacking

- 1) To change a boat's direction, bringing the bow through the eye of the wind.
- 2) To tack repeatedly, as when trying to sail to a point upwind of the boat.

tackle

Lines used with blocks in order move heavy objects.

tail

- 1) The end of a line.
- 2) A line attached to the end of a wire to make it easier to use.
- 3) To gather the unused end of a line neatly so that it does not become tangled.

take in

- 1) To remove a sail.
- 2) To add a reef to a sail.

telltale

A small line free to flow in the direction of the breeze. It is attached to sails, stays in the slot and in other areas, enabling the helmsman and crew to see how the wind is flowing. Proper use of the telltales can help sailors improve their sail trim.

tender

A dinghy.

tidal current

Also called tidal stream. The flowing of water caused by the rising and lowering tidal waters.

tide

The predictable, regular rising and lowering of water in some areas due to the pull of the sun and the moon. Tidal changes can happen approximately every six or 12 hours, depending on the region. To find out the time and water levels of different tides, you can use tide tables for your area. The period of high water level is known as high tide, and the period of low water level is known as low tide.

tiller

An arm attached to the top of the rudder to steer a small boat. If the helmsman wants to steer to starboard, he pushes the tiller to port. Larger boats usually use a wheel instead of a tiller.

toe rail

A small rail around the deck of a boat. The toe rail may have holes in it to attach lines or blocks. A larger wall in place of the rail is known as a gunwale.

topgallant

- 1) Situated above the topmast and below the royal mast on a sailing vessel.
- 2) Higher than the adjoining parts of a ship: said of a rail, deck, etc.

top heavy

A boat that has too much weight up high. This can adversely affect the boat's stability.

topmast

A mast on top of another mast.

topsail

- 1) On a square-rigged vessel, a sail directly above the lowest sail on a mast.
- 2) On a fore-and-aft-rigged vessel, the next sail above the gaff of a fore-and-aft sail.

topsail schooner

A fore-and-aft-rigged schooner carrying a square topsail and a topgallant sail on the foretopmast.

topsides

The sides of the hull above the waterline and below the deck.

tow

To pull a boat with another boat, such as a tugboat towing a barge.

towing light

Running lights that should be used by boats when towing to indicate that a tow is in progress.

trade wind

Winds in certain areas known for their consistent strength and direction. Trade winds are named because of their reliability, allowing for planned voyages along the routes favored by those winds.

trailing edge

The aft edge of a sail, more commonly called the leech.

transit

Also called a range. Two navigational aids separated in distance so that they can be aligned to determine that a boat lies on a certain line. Transits can be used to determine a boat's position or to guide it through a channel.

transom

The aft side of the hull.

traveler

A bar with an attached block, allowing more controlled adjustment of sail trim.

trim

- 1) To haul in on a sheet to adjust the sail trim.
- 2) Sail trim.
- 3) A properly balanced boat that floats evenly on its waterline. Improperly trimmed boats may list or lie with their bow or stern too low in the water.

trimaran

A boat with a center hull and two smaller outer hulls called amas.

trip line

A line attached to the end of an anchor to help free it from the ground.

tropical cyclone

An intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 miles per hour (64 knots or higher in the Southwest Indian Ocean. In other parts of the world, they are known as hurricanes, typhoons and severe tropical cyclones.

trysail

Also called storm trysail. A very strong sail used in stormy weather. It is loose footed, being attached to the mast but not the boom. This helps prevent boarding waves from damaging the sail or the rigging.

tugboat

A small, powerful boat used to help move barges and ships in confined areas.

turnbuckle

A metal fitting that is turned to tighten or loosen the tension on standing rigging.

typhoon

An intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 miles per hour (64 knots or higher in the Northwest Pacific Ocean (west of the International Date Line). In other parts of the world, they are known as hurricanes, tropical cyclones and severe tropical cyclones.

- U -**underway**

A vessel in motion is underway.

unfurl

To unfold or unroll a sail. The opposite of furl.

upwind

To windward, in the direction of the eye of the wind.

- V -**veer**

A shifting of the wind direction, clockwise in the Northern Hemisphere, counter-clockwise in the Southern Hemisphere.

VHF

- 1) Very High Frequency radio waves.
- 2) A radio that transmits in the VHF range. VHF radios are the most common communications radio carried on boats, but their range is limited to "line of sight" between the transmitting and receiving stations.

- W -**wake**

Waves generated in the water by a moving vessel.

watch

- 1) A division of crew into shifts.
- 2) The time each division of crew has duty.

waterline

The line where the water comes to on the hull of a boat. Design waterline is where the waterline was designed to be. Load waterline is the waterline when the boat is loaded. The painted waterline is where the waterline was painted. Actual waterline is where the waterline really is at any given time.

waterlogged

Completely filled with water.

waterway

A river, canal or other body of water that boats can travel on.

way

The progress of a boat. If a boat is moving it is considered to be "making way."

weigh

To raise, as in to weigh anchor.

wharf

A quay. A section parallel to the shore for docking and unloading vessels.

wheel

One of two methods used to steer a boat. A wheel is turned in the direction that the helmsman wants the boat to go. On smaller boats, a tiller usually is used, and it steers in the opposite manner.

whisker pole

A spar used to help hold the jib out when sailing off the wind.

winch

A device used to give a mechanical advantage when hauling on the lines.

Windbugger

The wind-driven electrical generator aboard New World.

windlass

A mechanical device used to pull in cable or chain, such as an anchor rode.

windvane

A system of lines, pulleys, paddles and clamps that work together with the wind to hold a sailboat on course. New World is equipped with a Monitor windvane.

windward

In the direction of the wind. Opposite of leeward.

working sails

The sails used on a particular sailboat in normal weather conditions.

working sheet

The sheet that currently is taut and is in use to control a sail. The opposite of the lazy sheet.

- X -

Nil

- Y -

yacht

A sailboat or powerboat used for pleasure, not a working boat.

yard

A spar attached to the mast and used to hoist square sails.

yard arm

The end of a yard.

yaw

Swinging off course, usually in heavy seas. The bow moves toward one side of the intended course.

yawl

A two-masted sailboat with the shorter mizzen mast placed aft of the rudder post. A ketch is similar, but the mizzen mast is forward of the rudder post.

- Z -

zephyr

A gentle breeze. The west wind.

Zulu

Used to indicate times measured in Coordinated Universal Time, a successor to Greenwich Mean Time, both of which are time standards not affected by time zones or seasons.