BOAT LANGUAGE

Education Module

Learning Objectives:

As a result of this session the participant should:

1. Be able to use and understand the special language associated with boats and boating
2. Be familiar with the materials used in boat construction
3. Recognize the various types of boat hulls and styles available in recreational boats
4. Be acquainted with types of power systems that move boats through the water
5. Recognize the various parts of a sailboat's rigging.
6. Understand the factors in boat design that make a boat seaworthy

Resources:

Boating Skills & Seamanship, Eleventh Edition, U.S. Coast guard Auxiliary, Chapter 1
The Squadron Boating Course 2001, The United States Power Squadrons, Section 2
Start Sailing Right!, U.S. Sailing Association/American Red Cross, Chapter 3
Chapman Piloting Seamanship & Small Boat Handling, 62nd Edition, Hearst Marine Books, Chapter 1

Material and Equipment:

Equipment Items
Overhead Projector, as required by instructor

Material Items
Provide one copy for each participant:

Powerboat Terminology Handout
Sailing Dinghies Handout
Sailboat Rigs Handout
Sailing and Boating Terminology Handout

Instructor Qualification:

U.S. Coast Guard Auxiliary Trainer presence required for USCGAUX Certificate Program
U.S. Power Squadron Instructor, Council Venturing Trainer or equivalent

Time Allocation: 1.5 Hours

Session Plan:

Classroom Session

1. **Module Introduction.**
   a. Introduce yourself and each member of the module staff.

   b. Explain the objectives of this module.

   c. Distribute the handout package.

2. **Basic Boat Terms.**
   a. Introduce the terms:
      1. Starboard
      2. Port
      3. Bow
      4. Stern
      5. Beam
      6. Transom
      7. Rudder
      8. Tiller
      9. Keel

   b. Explain the terms:
      1. Gunwales
      2. Flare
      3. Freeboard
      4. Draft
      5. Length overall (LOA)
      6 Waterline

3. **Types of Boats.**
   a. Introduce Power, Sail, and Manual Types of watercraft:

      1.Powerboat Types
         (a) center-console
         (b) sportboats and day cruisers
         (c) express and sedan (convertible) cruisers
         (d) pontoon and houseboats
         (e) personal watercraft.

      2. Sailboat Types
         (a) sloop and cutter
         (b) ketch and yawl
         (c) schooner
         (d) catboat
         (e) catamaran and trimaran

3. Manual Types
    (a) canoes and kayaks
    (b) rowboats and shells

4. **Hull Designs.**
    a. Describe
        1. Flat bottom
        2. Round bottom
        3. Deep-V hull
        4. Cathedral hull

    b. Explain
        1. Displacement hulls
        2. Planing hulls
        3. Semi-displacement hulls
        4. V hulls.

5. **Sailboat Hull Designs.**
    a. Introduce
        1. Mono hull design
        2. Multi-hull design

    b. Explain
        1. Centerboard design
        2. Daggerboard design
        3. Keel hull design

6. **Boat Construction.**
    a. Introduce construction materials
        1. Steel
        2. Aluminum
        3. Wood
        4. Fiberglass

    b. Explain the fiberglass construction processes
        1. Hand-Layup
        2. Chopped-Strand
        3. Matched Die
        4. Sandwich.

7. **Types of Propulsion.**
    a. Introduce the propulsion systems
        1. Outboard
        2. Inboard/Outboard (Stern Drive)
        3. Inboard

4. Tunnel Drive
5. Jet Drive.

b. Briefly mention the unit structure of a Stern Drive (Engine and Lower or Outdrive).

8. **Sailboat Rigging Parts.**
   a. Introduce the terms;
      1. Mast
      2. Boom
      3. Mailsail
      4. Jib, and rigging.
      5. Standing Rigging
         (a) Shroud
         (b) Forestay
         (c) Backstay.
      6. Running Rigging
         (a) Mainsheet
         (b) Jibsheet
         (c) Outhaul
         (d) Halyard
         (e) Cunningham
         (f) Boom vang
         (g) winch
         (h) Cleats (cam, clam, and horn)

9. **Factors Influencing Seaworthiness.**
   a. Explain that Size, Design, and Construction Materials are most important factors affecting the seaworthiness of a vessel.

Southern Region, B.S.A.
Yachting Initiative
Program Elements

Sailing and Boating Terminology Handout

Abeam. A direction off the side of a boat, at right angles to a line from bow to stern

Aft. 1. The direction toward, or near the back end of a boat, 2. The direction behind the stern of a boat

Afterguard. 1. The owner, skipper, navigator and others aboard a sailboat who are stationed aft 2. Crew members whose duties are to attend the aftergear

Amidships. The middle section of a boat

Anchoring. Stationary positioning of a boat in the water by a weighted object connected to the boat by a rope arid/or chain

Anemometer. A device used to indicate wind speed

Apparent Wind. The wind that flows over a moving boat, which is the result of the "true wind" affected by the movement of the boat.

Appendage. An underwater fin, such as a centerboard, daggerboard, leeboard, keel, or rudder

Astern. See Aft

Athwartships. A sideways direction on a boat that is at a right angle to the line from bow to stern

Back. To push a sail out against the wind to help turn the boat, slow it, or move it backward

Backstay. The standing rigging running from the stern to the top of the mast, keeping the mast from falling forward

Backwind. The wind flowing off the trailing edge of a jib or mainsail

Bailers. Openings in the bottom or transom of a boat to remove water when sailing

Ballast. Weight used to give a boat stability. On large boats, ballast in the keel (usually lead) provides stability. On smaller boats, stability is usually provided by the weight of the sailors

Barometer. A device used to indicate atmospheric pressure

Batten. A thin wooden or plastic stiffener inserted into a pocket on the back part (leech) of a sail

Beam. The width of a boat

Beam Reach. Sailing at approximately 90 degrees to the wind source with the wind coming from abeam and the sails let out about halfway (One of the points of sail.)

Bear Away, Bear Off. See Head Down

Bear Up. See Head Up

Beating. Sailing toward the wind source, or against the wind, with the sails pulled in all-the- way, tacking as you go, to reach a destination upwind

Bilge. The lowest part of a boat inside the hull

Block. The nautical term for a pulley. It can have one or more sheaves, or wheels

Bolt Rope. The rope sewn into the forward (luff) and bottom (foot) edges of the mainsail

Boom. A spar used to hold out or anchor the bottom of a sail

Boom Vang. A control line, usually a multi- purchase tackle, secured to the boom to prevent it from lifting when wind hits the sail (vang)

Bow. The forward end of a boat

Breeze. Wind

Broad Reach. Sailing with the wind coming over the rear corner of a boat, or with the bow approximately 135 degrees to the wind source (One of the points of sail)

By the Lee. Sailing downwind with the wind blowing over the leeward side of the boat, increasing the possibility of an unexpected jibe

Capsize. A boat turned over on its side or upside down

Cast Off. To untie a line and let it go, or to remove a line from a cleat and let it go

Cat. See Catamaran.

Catamaran. A boat with two parallel hulls

Catboat. A boat that has only a mainsail, with the mast located at the bow

Centerboard. A pivoting plate of wood, fiberglass, or metal, projecting below the bottom of a sailboat to help prevent the boat from sliding sideways

Centerline. An imaginary line that runs down the center of the boat from the bow to the stem

Chart. A nautical map showing water depths, obstructions, restricted areas, markers and buoys

C-Jibe. A course steered through a downwind turn (jibe) which results in the mainsail suddenly crossing from one side to the other side uncontrolled. The path of the boat makes a “C” (Slam Jibe, Flying Jibe)

Class. A category into which boats of similar design are grouped

Cleat. A wooden, plastic, or metal device which is used to hold or secure lines

Clew. The lower back corner of a mainsail or jib

Close-Hauled. Describes a boat sailing as close to the wind as possible with its sails pulled in all the way - On the Wind, Sailing to Weather, Sailing to Windward, Sailing Upwind – (One of the points of sail)

Close Reach. Sailing with the wind just forward of abeam, or with the bow approximately 70 degrees to the wind source (One of the points of sail)

Cockpit. The open well in a boat where the helmsman and/or crew sit or put their feet

Come About. To turn the bow of a sailboat through the wind, or no-go zone, so that the sails fill on the opposite side (Tack)

Come Down. See Head Down

Come Up. See Head Up

Coming About. See Tacking and "Hard a-Lee"

Compass. An instrument used to determine the direction that a boat is headed, or to take a bearing (sight) on an object

Constant Angle to the Wind. The correct angle of the wind to a sail, which remains the same for all points of sail when the sail is correctly trimmed (positioned), except when the wind is blowing from behind the stern

Control Line. A rope used to adjust and trim a sail, such as a sheet, outhaul, downhaul, cunningham, or boom vang (Running Rigging, Sail Controls)

Control Signals. Hand signs used between instructors and sailors to communicate while on the water

Course. The direction that a boat is steered to reach a destination

Crabbing (to Weather). See Feathering

Crew. The people who help the helmsman sail a boat

Cunningham. A control line that tensions the forward edge (luff) of a sail

Cunningham Hole. A hole in the tack of a sail through which the cunningham line runs to tension the forward edge (luff) of the sail

Current. The horizontal moving of water caused by tides, wind, or change in elevation

Daggerboard. A movable plate of wood, fiberglass, or metal let down below the bottom of a boat to help prevent the boat from sliding sideways. Similar to the centerboard, except it is raised and lowered vertically rather than pivoted

Dead Downwind. See Run

Deck. The top (horizontal) surface of the hull

De-Rigging. Removing a boat's mast, boom and equipment

Displacement. The weight of water displaced by a floating boat. The weight of water is equal to the weight of the boat; therefore, a boat's weight is often called its displacement

Dolphin Striker. A metal compression rod positioned on the underside of a multihull's forward crossbeam, directly underneath the mast

Downhaul. A control line that adjusts and tensions the luff of a sail by moving the end of the boom at the mast, the movable fitting joining the mast and boom is called the "gooseneck"

Downwind. In the opposite direction from the wind source, or where the wind is blowing to (Leeward)

Downwind Sailing. Sailing away from the wind source with the sails let out (Broad Reach, Run, With the Wind)

Downwind Side. See Leeward Side

Draft. The depth of the hull from the waterline to the lowest point of the keel

Ease. To let out a line or sail, the opposite of pull (Let Off, Sheet Out)

Electrical Hazards. Overhead power lines, electrical cables, electrical power tools and equipment used near the water, or near launching and boat storage areas

Environmental Awareness. The continuous monitoring of wind, weather, sea conditions, current, and distance from the shore

Fairlead. A fitting, such as a ring, eye, block or loop which guides a rope in the direction required

Fail Off. See Head Down

Feathering. Sailing upwind so close to the wind that the forward edge of the sail is staffing or luffing, reducing the power generated by the sail and the angle of heel (Crabbing (to Weather), High, Light, Pinching, Sailing Thin)

Flare. The upward and outward curvature of a hull above the waterline

Fly. See Telltales

Flying Jibe. See C-Jibe

Foot. The bottom edge of a sail

Fore. Toward, near, or at the bow

Fore and Aft. Toward, near, or at both ends of a boat

Fore-and-Aft Line. An imaginary line that runs lengthwise on a boat

Forestay. A support wire connecting the mast to the bow (Part of the standing rigging)

Freeboard. The vertical distance from the waterline to the rail or gunwale

Give-way Vessel. The vessel required to give way to another boat when they may be on a collision course

Glide Zone. The distance a sailboat takes to coast to a stop after turning into the no-go zone or letting out the sails

Go Up. See Head Up

Gooseneck. The joint fitting that connects the boom to the mast

Gunwale. (GUN-nle) The edge of a sailboat where the deck and hull meet

Gust. See Puff

Gybe. See Jibe

Gybing. See Jibing

Halyard. A line used to raise or lower a sail

"Hard a-Lee." A command made by the helmsman when the tiller is moved to leeward to tack a sailboat ("Coming About," "Helm's a- Lee," 'Tacking")

Harden Up. See Head Up

Head. The top corner of a sail where the halyard is attached

Head Down. To turn the boat away from the wind (Bear Away, Bear Off, Come Down, Fall Off, Head Off)

Head Off. See Head Down

Head Up. To turn the boat toward the wind (Bear Up, Come Up, Go Up, Harden Up, Luff Up)

Heading. The direction in which a boat is pointing

Head-to-Wind. When the bow of a boat is pointing directly into the wind, or in the middle of the no-go zone

Heave-to. A position with the sails and rudder countering each other as the boat slowly drifts downwind and forward

Heel. 1. When a boat leans over or tips to one side 2. The lower end of the mast

Helm. 1. The tiller or wheel of a boat, 2. The tendency of a sailboat to turn toward or away from the wind on its own. If the boat wants to turn toward the wind (to weather), it has a weather helm. If it wants to turn away from the wind (to leeward), it has a lee helm

"Helm's a-Lee." See "Hard a-Lee"

Helmsman. The person who steers or drives a boat (Skipper)

High Pressure. Higher atmospheric pressure generally associated with fair skies and good weather

High Side. The side of a sailboat nearest to the wind source (Weather Side, Windward Side, Upwind Side)

Hiking. When a person leans over the side of a boat to counteract heel

Hiking Stick. See Tiller Extension

Hole (in the Wind). See Lull

Hull. The body of a boat, excluding rig and sails

Hull Speed. The maximum speed that a boat can achieve without planing

In Irons. When a boat is pointed into the wind and has stopped or is moving backward through the water, and is temporarily unable to turn onto either tack (In Stays)

In Stays. See In Irons

In the Groove. When a sailboat is moving well with proper balance and sail trim, and is steered so the sails are working at their best with the telltales flowing properly

Jet Stream. A snake-like river of air at about 35,000 feet in the atmosphere which affects the position and movement of high and low pressure systems

Jib. The smaller triangular sail in front of the mast

Jibe. Changing from one tack to the other when sailing downwind. The mainsail swings across the boat, which can be a controlled maneuver or can happen unexpectedly as the wind crosses the stern (Gybe, Jibing, Gybing)

"Jibe Ho." A command made by the helmsman as he or she starts to jibe ("Jibing")

Jibing. 1. The maneuver of changing from one tack to the other when sailing downwind (Gybing, Jibe, Gybe) 2. A command made by the helmsman as he or she starts to jibe ("Jibe Ho.")

Jury Rig. A temporary fix to damaged equipment enabling a boat to be sailed

Keel. The fixed underwater fin on a sailboat hull which helps provide stability and prevents the boat from slipping sideways

Knot. One nautical mile per hour (1 knot equals 1.15 miles per hour)

Land Breeze. See Offshore Wind

Leeboards. A pair of pivoted boards that are lowered through trunks in the bilges to improve lateral resistance on small sailboats

Leech. The back edge of a sail (between the head and clew) where the battens are located

Leeward. In the opposite direction from the wind source, or where the wind is blowing to (Downwind)

Leeward Side. The side of a sailboat or sail away from the wind source (Downwind Side, Low Side)

Leeway. The distance a boat is pushed to leeward of its course by the action of the wind or current

Length overall (LOA). The length between the forward most and after most points on the hull of a boat

Lift. 1. The aerodynamic or hydrodynamic force that results from air passing by a sail, or water flowing past a centerboard or rudder, 2. A change in wind direction which lets the boat head up

Light. When only the forward edge of a sail is stalling or luffing (Feathering, High, Luffing, Pinching, Soft) 2. Description for low wind speed (Soft)

Line. A rope used for a function on a boat, such as a sheet, halyard, cunningham or painter

Low Pressure. Lower atmospheric pressure generally associated with clouds, rain, and inclement weather.

Low Side. The side of a sailboat away from the wind source (Downwind Side, Leeward Side)

Luff 1. The forward edge of a sail, 2. To stall or flap the sail at its forward edge, or over the entire sail

Luff Rope. The rope sewn into the forward edge (luff) of the mainsail, which is usually attached to the groove or track on the mast (Bolt Rope)

Luff Up. See Head Up

Luffing. When the sail is stalling or flapping at its forward edge, or the entire sail is flapping (Feathering, High, Light, Pinching, Soft)

Lull. A decrease in wind speed for a short duration (Hole)

Main. See Mainsail

Mainsail. The sail which is attached to the mast and boom (Main)

Mast. A spar placed vertically in a boat to hold up the sails

Masthead. The top of a mast

Masthead Fly. A wind direction indicator at the top of the mast

Monohull. A boat with only one hull

Moor. To fasten a boat to a mooring

Mooring. A permanent anchor connected to a buoy by a rope and/or chain, to which a boat may be fastened

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

Navigation Rules. Laws establishing right-of-way in different situations that are intended to prevent collisions on the water ("ColRegs," Collision Rules)

No-Go Zone. The area into the wind where a sailboat cannot sail, even with the sails pulled in all-the-way. The zone covers the direction pointing directly into the wind source and extending to about 45 degrees on either side of it (No-Sail Zone. No-Sail Zone. See No-Go Zone)

Off the Wind. Any of the points of sail, except sailing upwind

Offshore. Away from the shore

Offshore Wind. Wind blowing away from the shore to the water (Land Breeze)

On the Beam. See Abeam

On the Wind. See Close-hauled

One-Design. Any boat built to conform to rules so that it is identical to all others in the same class

Onshore. Toward the shore

Onshore Wind. Wind blowing from the water to the shore (Sea Breeze)

Outhaul. A control line that is attached to the clew of the mainsail that adjusts tension along the bottom (foot) of the sail

Painter. A rope attached to the bow of a small boat, which is used to fasten the boat to a dock or mooring

PFD. A personal flotation device (Iife Jacket, Life Vest)

Pinching. See Feathering

Planing. When a boat accelerates enough to break loose from its bow wave and ride on top of the water

Points of Sail. The headings of a sailboat in relation to the wind, i.e., close-hauled, close reach, reach, broad reach, run

Port. The left side of a boat (when looking forward)

"Prepare to Tack." See "Ready About"

Puff. A sudden increase in wind speed

Push-Pull Principle. The way a sail generates power to propel a boat through the water. The wind acts to either push or pull the boat

Reach. Sailing with the wind coming over the side, or abeam (One of the points of sail.)

"Ready About." A command made before tacking to ensure everyone is ready to tack. ("Prepare to Tack," "Ready to Tack.")

"Ready To Tack." See "Ready About."

Reef. To reduce the area of a sail

Rig. 1. The spars, standing rigging, sails, or their configuration, which determines the type of sailboat, such as a catboat, sloop, yawl or schooner 2. To prepare the boat for sailing

Right-of-Way. A right of the stand-on vessel to maintain its course

Roller Furling. A way of stowing a sail by rolling it up around its front edge (luff), like a window shade

Rudder. An appendage in the water, which is used to steer or scull the boat

Run. Sailing away from the wind source with the sails let out all-the-way - Downwind, With the Wind - (One of the points of sail.)

Running Rigging. The lines and associated fittings used to adjust and trim the sails, such as halyards, sheets, outhaul, downhaul, cunningham or boom vang (Control Line, Sail Controls)

Safety Position. When a boat is stopped with the sails eased and flapping with the wind coming from the side

Sail Controls. Ropes used to adjust and trim the sails, such as sheets, outhaul, downhaul, cunningham, boom vang (Control Lines, Running Rigging)

Sail Trim. The positioning and shape of the sails to the wind (Set)

Sailor's Code. Standards of behavior and courtesy demonstrated by sailors to other boaters

Scoop Recovery Method. The method of righting a capsized boat while "scooping" a person into the cockpit as the boat rights.

Scope. The ratio of the length of anchor rope let out to the depth of the water

Scull. 1. To propel a sailboat forward by moving the rudder and tiller side to side repeatedly 2. To propel a boat forward by using an oar or paddle in a figure eight motion at the stern of the boat

Sea Breeze. Wind resulting from cooler air over the water moving in to replace the warm air that rises over the land (Onshore Wind)

Sea Conditions. The size, shape, and frequency of the waves

Secure. Fasten, put away or stow

Self-Bailers. See Bailers

Self-Bailing. The automatic draining of water from a boat through openings in the bottom or transom when sailing

Self-Reliance. The ability to sail and react to changing conditions by oneself without needing outside assistance.

Self-Rescue. 1. The maneuver of righting a capsized boat and removing any water quickly without outside assistance 2. An important design characteristic of a sailboat which allows it to be righted and bailed out quickly after capsizing without outside assistance

Set. 1. To raise and trim a sail 2. The direction in which a current flows

Shackle. A U-shaped fifing closed with a pin and used to secure sails to lines or fittings, and lines to fittings

Sheet. 1. The rope which pulls in or lets out a sail (Line) 2. To adjust a sail by using the sheet (Set, Trim, Sheet In, Pull In, Take In)

Sheet Out. To let out a sail (Ease, Let Off)

Sheeting. Pulling in or letting out the sail (Setting, Trimming)

Shrouds. Wires supporting the mast on either side (Standing Rigging)

Side-to-Side Balance. Using body weight to achieve proper angle of heel for the boat

S-Jibe. A method of jibing a sailboat resulting in the mainsail crossing the boat under control, the path of the boat makes an "S"

Skipper. See Helmsman

Slam Jibe. See C-Jibe

Soft. See Light

Spar. A wooden or metal pole used to support a sail, such as a mast or boom

Spinnaker. A lightweight, three-cornered balloon type sail used when sailing downwind

Spreader. A support strut extending athwartships from the mast, used to support the mast and guide the shrouds from the top of the mast to the chainplates

Squall. A strong wind of short duration, usually appearing suddenly and accompanied by rain

Stand-on Vessel. The vessel or boat with the right-of-way

Standing Rigging. The fixed wires and associated fittings used to support the mast

Starboard. The right side of a boat (when looking forward)

Stays. Wires which support the mast fore and aft

Stern. The back end of a boat

Stowing. Putting away and securing sails and equipment

Tack. 1. To turn the bow of a sailboat through the wind or no-go zone so that the sails fill on the opposite side (Come About) 2. When the wind is blowing on a side of a sailboat on any of the points of sail (does not include the no-go zone), i.e., starboard tack, port tack 3. The forward lower corner of a sail

Tacking. 1. The maneuver of turning a sailboat through the no-go zone so the sails fill on the opposite tack (Coming About) 2. A command made by the helmsman when the tiller is moved to leeward to tack the boat ("Coming About," "Hard a-Lee," "Helm's a-Lee")

Telltales. 1. Short pieces of yarn, ribbon, thread, or tape attached to the sail which are used to show the air flow over the sail 2. Short pieces of yam, ribbon, thread, or tape attached to the shrouds to indicate the apparent wind direction (Fly)

Tidal Current. The horizontal movement of water caused by tides

Tide. The vertical rise and fall of water caused by the gravitational forces of the moon and sun

Tiller. The stick or tube which is attached to the top of a rudder that is used to turn it

Tiller Extension. A stick or tube which is attached to the tiller that allows the helmsman to sit further out on the side of the boat (Hiking Stick)

To Weather. See Upwind

Topsides. The sides of the hull above the waterline

Towing. Pulling a boat with a another boat

Transom. The back end of a boat which is vertical to the water

Traveler. A track or bridle that controls sideways (athwartships) movement of the boom and mainsail

Trim. To adjust a sail by using the sheet (Sheet, Set)

Trimaran. A boat with three parallel hulls, the center hull usually being the longest

True Wind. The actual speed and direction of the wind felt when standing still

Turnbuckle. A fitting used to adjust the length and tension of a shroud or stay

Turtling. A capsize position with the boat turned upside down with the mast pointing down to the sea bottom

Unrig. Removing and/or stowing sails as well as securing halyards and sheets

Upwind. In the direction of the wind source or where the wind is blowing from. (Windward, To Weather)

Upwind Sailing. Sailing toward the wind source, or against the wind, with the sails pulled in (Close-Hauled, Close Reach, On the Wind, Sailing to Weather, Sailing to Windward)

Upwind Side. See Windward Side

Vang. See Boom Vang

Walkover Recovery Method. A capsize recovery method where the helmsman climbs over the windward gunwale when re-righting the boat

Water Reading. Observing and assessing the wind blowing on the water surface

Waterline. The line where the water surface meets the hull when the boat is floating at rest

Weather Helm. The natural tendency of a sailboat to turn toward the wind (to weather), which the helmsman feels as the tiller tries to turn to leeward

Weather Side. See Windward Side

Winch. A deck-mounted drum with a handle offering mechanical advantage used to trim sheets or halyards

Wind Sensing. Determining wind direction and velocity using feel, sight, and hearing

Windward. In the direction toward the wind source, or where the wind is blowing from. (To Weather, Upwind)

Windward Side. The side of the sailboat or sail toward the wind source (High Side, Weather Side, Upwind Side)

Wing and Wing. Sailing directly downwind with the jib and mainsail set on opposite sides of the boat to capture more wind

With the Wind. See Run

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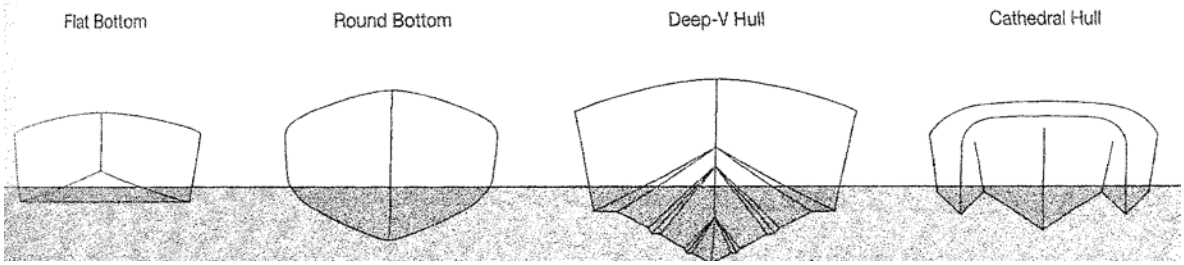
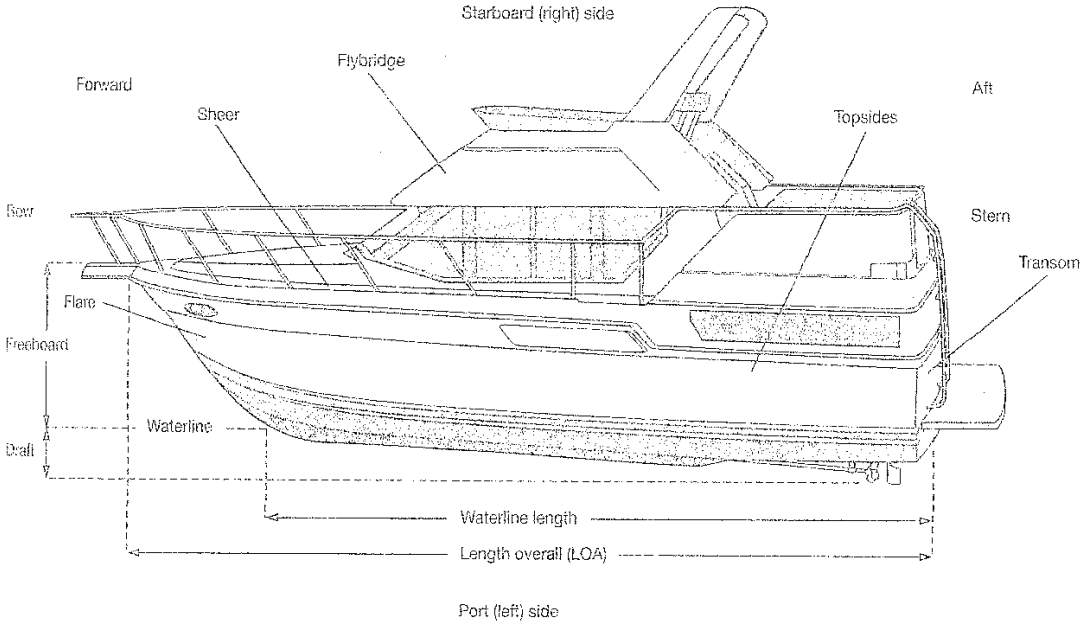
POWERBOAT NOMENCLATURE HANDOUT

TYPES OF HULLS



POWERBOAT HULL DEFINITIONS



These terms relate to the hull, and directions on board a boat. Note that port and starboard sides remain the same, no matter which way one is facing, and that LOA is figured similarly for sailboats.

SAILING DINGHIES HANDOUT

Examples of Sailing Dinghies

Definitions:

Length — The maximum length of hull, not including rudder.

Beam — Width at widest point.

Draft — The depth of the boat below the water's surface, measured with the centerboard and rudder in the down position.

Centerboard — An underwater appendage in the middle of the boat that pivots as it is raised and lowered.

Daggerboard — An underwater appendage in the middle of the boat that is raised and lowered vertically.

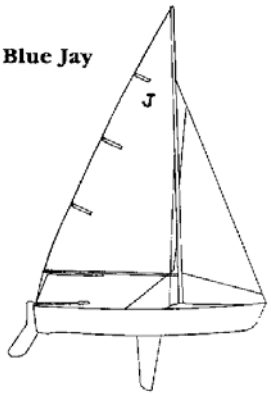
Leeboard — A pivoting underwater appendage that is attached to one side of the boat.

Weight — The total weight of the boat, including rig and sails.

Self-Rescuing — Design features that allow a capsized boat to be easily re-righted, bailed out and sailed away without outside assistance.

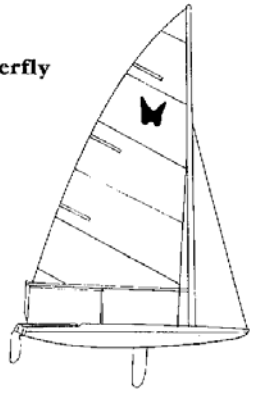
Sailors — Suggested number of people (adult or youth) for optimum performance.

Blue Jay



Length: 13'6" Board Type: centerboard
Beam: 5'2" Weight: 275 lbs.
Draft: 3'9" Self Rescuing: yes
Sailors: 2 adults or 2-3 youths

Butterfly



Length: 12'2" Board Type: daggerboard
Beam: 4'6" Weight: 170 lbs.
Draft: 2'6" Self Rescuing: yes
Sailors: 1 adult or 1-2 youths

Coronado 15

Length: 15'4" Board Type: centerboard
Beam: 5'8" Weight: 385 lbs.
Draft: 3'6" Self Rescuing: yes
Sailors: 2 adults or 2-3 youths

Flying Junior

Length: 13'3" Board Type: centerboard
Beam: 5'3" Weight: 209 lbs.
Draft: 2'6" Self Rescuing: yes
Sailors: 2 adults or 2-3 youths

420

Length: 13'9" Board Type: centerboard
Beam: 5'5" Weight: 220 lbs.
Draft: 3'2" Self Rescuing: yes
Sailors: 2 adults or 2-3 youths

Hobie 16

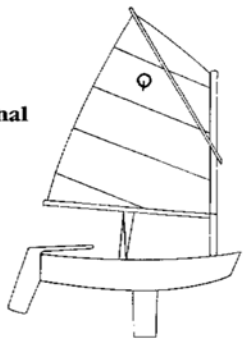
Length: 16'7" Board Type: no board
Beam: 7'11" Weight: 320 lbs.
Draft: 6" Self Rescuing: yes
Sailors: 2 adults or 2-3 youths

Examples of Sailing Dinghies

Holder Hawk

Length: 9′0″ Board Type: centerboard
Beam: 3′10½″ Weight: 95 lbs.
Draft: 2′3½″ Self Rescuing: yes
Sailors: 1 adult or 1-2 youth

International Optimist

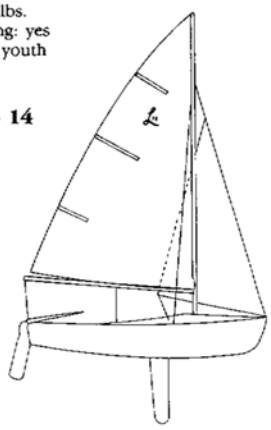


Length: 7′6″ Board Type: daggerboard
Beam: 3′8″ Weight: 92 lbs.
Draft: 2′8″ Self Rescuing: yes
Sailors: 1 youth

Laser & Laser Radial

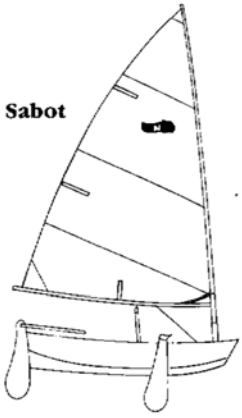
Length: 13′10½″ Board Type: daggerboard
Beam: 4′6″ Weight: 130 lbs.
Draft: 2′6″ Self Rescuing: yes
Sailors: 1 adult or 1-2 youths

Lido 14



Length: 14′0″ Board Type: centerboard
Beam: 6′0″ Weight: 310 lbs.
Draft: 4′0½″ Self Rescuing: yes
Sailors: 2 adults or 2-3 youths

Naples Sabot

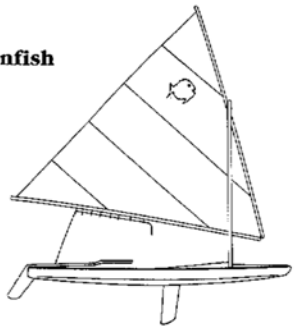


Length: 7′11″ Board Type: leeboard
Beam: 3′10″ Weight: 105 lbs.
Draft: 1′6″ Self Rescuing: no
Sailors: 1 youth

Puffer

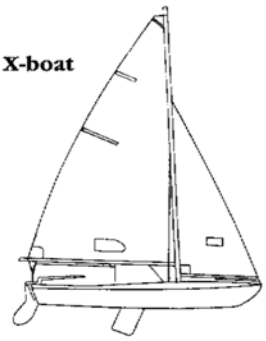
Length: 12′6″ Board Type: daggerboard
Beam: 4′10″ Weight: 160 lbs.
Draft: 2′8½″ Self Rescuing: yes
Sailors: 2 adults or 2-3 youths

Sunfish



Length: 13′10″ Board Type: daggerboard
Beam: 4′1″ Weight: 129 lbs.
Draft: 2′7″ Self Rescuing: yes
Sailors: 1 adult or 1-2 youths

X-boat



Length: 16′0″ Board Type: centerboard
Beam: 6′1″ Weight: 500 lbs.
Draft: 1′3″ Self Rescuing: yes
Sailors: 2 adults or 2-3 youths

Sailboat Rigs Handout