APPENDICES

Sea Scout Sail Training Plan

A visit to almost any body of water on a sunny weekend afternoon will reveal boats, boats, and more boats. Big and little power cruisers, outboards, and runabouts are everywhere, but it's the sailboats that somehow catch the eye. Little kids bob about in sabots, older youth zip past, hiked out in their board boats, and families are out in day sailers. A cluster of bunched sails in the distance indicates a race in progress while a big sailing yacht cruises sedately by.

There's no doubt that boating—and particularly sailing—is one of the nation's fastest growing recreation activities. It's fun, healthy, challenging, and not as expensive as one might assume. So, if sailing is where it's at, then Sea Scouting should be there too.

Today's youth are keenly interested in boating and sailing but many have no access to boats and little opportunity to learn the skills of sailing. As the nation's oldest and largest program dedicated to seamanship and the maritime arts, Sea Scouting is in an ideal position to satisfy their interests.

For many years, the Sea Scout program has been largely centered around power craft of considerable size. The advantages of these vessels are obvious, as they present an ideal platform for a wide variety of unit programs.

Larger boats obtained years ago from government surplus sources are increasingly difficult to maintain, however, and replacements are scarce. Costs of fuel, maintenance, and insurance have risen and many Sea Scout officers are looking to sail as an addition to their unit program or as an alternate to power. When confronted with the cost of powerboat operation, the requirement for Coast Guard certification and licensing, plus the need for adequate mooring space, many potential chartered organizations show reluctance to form new Sea Scout ships under power. Small-boat sailing, however, looks more practical.

Often Sea Scouts become interested in careers in industries and professions that encompass seamanship and maritime arts. Many ship members have gone into government and private services that operate small and large craft, some of which they first operated as Sea Scouts.

So, this outline is dedicated to the experienced Sea Scout officer or the brand-new Skipper who would like to get involved in sailing and isn't quite sure how to begin. It may even offer some help to the veteran "rag sailor" who has been looking for an organized approach to sail training.

The U.S. Sail Training Plan

Most sailing instruction programs for youth are currently being operated by yacht clubs as a service to the sons and daughters of club members. Few high school students who would be interested in sailing have a yacht club affiliation. Many yacht clubs are actively interested in expanding their sail training program to include community youth. Involvement with Sea Scouting could give them this opportunity.

When developing a program in sail training, it is natural to look for the very best sailors to serve as instructors and consultants. In yacht clubs, the best sailors are usually involved in the club's racing program. For this reason, most sailing instruction is directed toward racing. This presents some problems.

Often young people are not initially interested in racing. They want to learn to make the boat go through the water with some degree of facility, enjoy learning a skill and generally enjoy being in, on, and around boats. In a racing program, however, a few people win and a lot of people don't. When sail training is directed solely toward winning, some young people may be discouraged, turned off, and drop out.

A number of instructional plans have been developed where the goal is sailing for pleasure. If the student's pleasure is racing, he or she will certainly receive the skills leading to this sport. It has been found, however, that most students were interested in pure recreation. They wanted to learn how to handle the boat with confidence and reasonable skill, get involved in a variety of boating and water-related activities, and enjoy themselves without the pressure of intense competition. Since most adults who sail today are not involved in racing but in day sailing and cruising, this relaxed approach to instruction will equip the youth for a lifetime of enjoyment.

With the encouragement of the US Sailing Association, the national sailing authority for the United States, we reviewed several plans operated by sailing centers and recreation departments. We then began to look at sailing instruction programs currently being operated within Sea Scouting and found some excellent ones. We asked for suggestions from Skippers and Sea Scout officers and received many good ideas.

The result is a plan that includes the following elements:

- Sailing for pleasure with competition only as an option
- Learning by doing—making a few mistakes and having ample opportunity for the Sea Scouts to correct them themselves
- Drawing counselors from among the Sea Scouts themselves and using volunteer consultants wherever possible
- Maximum time on the water with a minimum of lectures
- Visual aids and simple instructional materials to support the learning
- A series of sailing exercises and drills to add fun and enjoyment to the practice of basic sailing techniques
- Competition involving Sea Scouts of like ability with the emphasis on fun, not winning

Equipment Needs

A PLACE TO MEET. Even the most active sailing instruction program must start with some preliminary orientation ashore. This could, of course, be carried out in the ship's own normal meeting place. It may be more attractive, however, to move to a setting nearer the water. A boat shed, sail loft, yacht club meeting room, or even an open dock might add spice to the instruction. The extra burden of carrying a chalkboard, easel, homemade charts, and instructional materials to the waterfront will be more than offset by the added interest of a nautical location. If you're going to talk about sailboats, why not do it where the sailboats are?

A PLACE TO SAIL. Some people would claim that where there is enough water to float a boat, you can teach sailing. This is not entirely true. Enough water is needed to conduct the exercises and drills. You will need a spot where normal boat traffic will not interfere with the instruction nor will the instruction interfere with normal boat traffic. The main channel of a busy marina on a Saturday afternoon just won't work. By scouting around carefully, you may find back bays and little-used areas that would be ideal. It's probably easiest to teach from a dock, but we found many programs operated from a launching ramp in a harbor or the sandy beach of a reservoir.

Launching ramps are available in most harbor areas, and this should solve the problem of getting the boats into the water. Most yacht clubs have one or more hoists available and are usually happy to let you use them with prior arrangements. If it's necessary to use the hoist at a commercial marina, the cost is really quite nominal.

BOATS. "What is the best boat to use for sailing instruction?" Ask that question among any group of sailing people and you'll get a real argument started! At the present time, there are about 1,100 different classes of one-design sailboats on the books. They were all developed as an improvement over something that had gone before and each class has its corps of dedicated and enthusiastic supporters.

When the shouting dies down, most people will probably agree that the best type of boat for primary sailing instruction is a catboat. Its single sail gives the student a good feeling of how the wind fills the sail and moves the boat through the water. Just because it has only one sail, however, is no indication that the catboat can't be a high-performance racing machine. Some of the hottest sailboats in competition are cat rigged.

Most catboats are small, however, designed for single-handed sailing. Our objective will be to get three to five Sea Scouts aboard and we'll need something a little larger. We will also want to give the Sea Scouts the experience of handling a jib. So, a sloop somewhere between 12 and 18 feet in length would be recommended. Since we are not going to be racing as yet, there is no need for the boats to be all of the same design. For ease of portability, boats with centerboards or dagger boards are more desirable than boats with fixed keels.

If the advocates of beginning instruction with a cat-rigged craft are insistent, the first few lessons can be carried out with the jibs kept ashore. The boats will have a little weather helm and tend to turn into the wind, but this can often be corrected by partly raising the centerboard or cocking the dagger board aft. A little weather helm is a safety factor in instruction since if the tiller is released, a boat with weather helm will head into the wind, the sails will luff, and the boat will come to a stop and start moving slowly backward.

Obtaining boats is a subject unto itself and will be dealt with later in this outline.

BOAT GEAR. Each boat *must* be equipped with a U.S. Coast Guard-approved personal flotation device, sometimes called a life jacket or a PFD, for each occupant. We recommend the PFDs designed for sailboat crewing. The type selected should be designed to be worn. Don't use PFDs made up as cushions—they're risky in a real emergency. It's pretty hard to wear a cushion. Be certain that the PFD bears a label stating that it is U.S. Coast Guard-approved and is the correct size for young adults. Government surplus life jackets almost never qualify.

In each boat you will also need a small paddle in case the wind dies, two bailers made from cut-down plastic bleach bottles attached firmly to the boat with a lanyard, and a large sponge to sop up the last drops of water.

INSTRUCTOR'S BOAT. A small powerboat, usually an outboard, will be necessary for the instructor to supervise the activity and also to provide a rescue boat in case of upset. An operator will be needed since the instructor will be anxiously keeping his eyes on the students. A megaphone or loud hailer will let everybody hear, while preserving the instructor's vocal cords.

INSTRUCTIONAL MATERIALS. A blackboard, flip chart, some homemade charts, teaching aids, and brief quizzes will be necessary. The teaching aids will be found in appendix I. They can be locally reproduced. Lesson plans also include a few simple diagrams and charts that can be reproduced on newsprint pads or drawn on the chalkboard. Use a variety of colored chalk—it makes the instruction clearer and more interesting—and don't forget the eraser.

CONSULTANTS. A consultant is someone who knows more about a subject than you do. Everybody likes to talk about his favorite subject, and you should have no difficulty in recruiting local yachtsmen, yacht club members, and other sailing people to offer instruction and assist with the program.

COACHES/COUNSELORS. The training that actually takes place in boats will be much easier if coaches/counselors are recruited from among the Sea Scouts. This is a good job for petty officers, older Sea Scouts, or Sea Scouts who may already have some skills in sailing.

Some preliminary training will be necessary since the coaches/counselors will actually be demonstrating many of the skills on the water. These selected Sea Scouts can be put through the course as a "dry run" or given special briefing to keep them one or two sessions ahead of the rest of the group. Their skills need not be perfect—they are learners too. Their primary role is to assist the students in carrying out on the water the instruction they have learned ashore. When mistakes occur, they are in an ideal position to review the situation in the boat and try again.

At least one coach/counselor will be needed for each boat used. Even better is a coach/counselor for each training crew of three to five Sea Scouts. In that way, he or she can stay with the group for instruction ashore as well as afloat.

SAFETY. The safety of the Sea Scouts is a paramount concern. Coast Guard-approved personal flotation devices must be available for all persons in a boat.

Before beginning instruction, all Sea Scouts and leaders must be given a swimming classification check. Each *must* qualify as a "beginner" before entering a boat. A "beginner" must be able to jump into the water feetfirst, surface, swim 25 feet, turn, and swim 25 feet back.

It is most strongly recommended that all persons, including adults, wear PFDs at all times while in a boat. There will be some grumbling, but there's nothing "chicken" about protecting your own life.

One or more ring or horseshoe buoys, a floating heaving line, and a reach pole must be aboard the instructor's boat.

Suggested Lesson Plans

I. Getting Acquainted With the Boat

Perhaps the best way to conduct this session is with a real, live boat. We suggest that a boat, on its trailer, be brought to the unit meeting and parked in a lighted area. The boat should be rigged, sails hoisted, and the trailer headed into the wind to avoid a possible blow-down. Of course, all sheets should be slacked. With a felt pen, some scrap cardboard, and a roll of masking tape, labels can be attached to the boat, rigging, and sails for identification.

Each Sea Scout can be provided with a copy of the learning guides (appendices A and B) to check off the parts as they are discussed.

The instructor should name part of the boat, briefly explain its function, and give an opportunity for questions or discussion.

It is suggested that the sessions start with a brief description of the types of boats using quick chalkboard sketches. The group can then move out-of-doors, gather around the trailered boat, and inspect it in detail.

A. Basic Types of Boats
   1. Catboat
   2. Sloop
   3. Cutter

4. Ketch
5. Yawl
6. Schooner

B. Parts of the Boat
1. Hull
2. Mast
3. Boom
4. Gaff
5. Bow
6. Stern
7. Rudder
8. Tiller
9. Keel/centerboard/dagger board

C. Standing Rigging
1. Shrouds
2. Forestay
3. Backstay
4. Boomlift or topping lift

D. Running Rigging
1. Jib halyard
2. Main halyard
3. Jib sheets
4. Mainsheet
5. Downhaul
6. Outhaul
7. Boom vang (if your boat has one)

E. Hardware
1. Cleats (describe operation of jam cleats, cam cleats, and clam cleats)
2. Fairleads
3. Chocks
4. Blocks
5. Traveler

F. Parts of the Sails
1. Head
2. Foot
3. Luff
4. Leach
5. Roach
6. Tack
7. Clew
8. Battens
9. Reef points (if any)

G. Types of Sail Rigs
1. Lateen
2. Jib-headed or Marconi
3. Gaff-headed
4. Lug

H. Directions
1. Aloft
2. Below
3. Forward
4. Aft

5. Ahead
6. Astern
7. Port
8. Starboard
9. Abeam
10. Abaft
11. Inboard
12. Outboard
13. Windward
14. Leeward
15. Upwind
16. Downwind

In appendices A and B, you will find sheets of drawings showing the parts of the boat and sails. These can be reproduced locally and we suggest that they be distributed to the Sea Scouts for review.

II. What Makes the Boat Go

Starting this session, you might wish to have the Sea Scouts review the parts of the boat and sails. A little self-conducted quiz sheet will be found in appendix C. This is not a test to be turned in—it's something the Sea Scouts can correct themselves.

Try to keep this discussion from becoming too technical. You will probably find that some sketches on a chalkboard or on a pad of newsprint will be helpful. Some suggestions are found in appendix D. You will also find that the boat/sail teaching aids in appendix I will also be helpful.

A. A boat moves through the water because of the shape of its sails, hull, the effect of the keel/centerboard/dagger board, the action of the rudder, and the way that weight is distributed.

B. The shape of a well-designed sail is an airfoil, somewhat like the wing of an airplane. The boat moves through the water partly because of the force of the wind *against* the windward side of the sail, which *pushes* the boat forward, and partly because of a partial vacuum on the leeward side of the sail which has the effect of *pulling* the boat forward.
   1. When the wind blows directly into a sail (as in a run) it is less efficient due to turbulence on the leeward side.
   2. When the wind strikes the sail at an angle, it acts like an airfoil and the effect is much more efficient.
   3. When the jib is added, additional force is available. The jib also produces an air "slot" which increases the effectiveness of the mainsail.

C. The shape of the hull, the keel/centerboard/dagger board, and action of the rudder helps the boat move in a straight line.
   1. Pressure of the wind against the sails tends to move the boat sideways through the water. This is known as "leeway."
   2. With a deep keel or centerboard lowered, the leeway is reduced.
   3. Because of these combinations of forces, a sailboat will not move in a straight line in the direction it is steered—it always will move in a direction somewhat to leeward of the course steered. The direction actually traveled is called "the course made good."

      The rudder determines the direction of the boat. In maneuvering in tight quarters, it's important to remember that the rudder does not move the bow, but moves the stern, thus pointing the bow in the

new direction. When the rudder is moved, it interrupts the smooth flow of water and may slow the boat down. For this reason, it is important to achieve a balance of sail trim and weight distribution so that very little rudder is needed to maintain course. This comes with practice and experience.

D. Sailing Directions: No boat can sail directly into the wind—a 45° angle to the wind is about the best that can be expected. This 90° dead spot is called "the eye of the wind."
   1. Beating—sailing as close to the eye of the wind as possible with sail trimmed in flat, "close-hauled."
   2. Close reach—sailing with the wind just forward of the beam.
   3. Beam reach—sailing with the wind abeam.
   4. Broad reach—sailing with the wind abaft of the beam.
   5. Running free—sailing with the wind dead astern.

   If the winds are light, use the boat on a trailer to demonstrate the directions of sailing using the boat on a trailer. If it's too breezy, a triangular sheet of cardboard can be used with similar results.

III. Starting to Sail

This session should definitely be held at the water. It would be easier if boats are in the water and rigged with sails unbent. A chalkboard would be helpful, and this is a good place to use your cutout boat teaching aids.

A. Review very briefly the important points covered in the two previous sections. Check terminology again so the Sea Scouts will know what the coaches and instructors are referring to.

B. Tacking: Coming about and jibing.
   1. Tacking means changing the sail from one side of the boat to the other. This can be done when the boat is heading downwind (running) or upwind (beating), but not across the wind (reaching). Tacking upwind is known as "coming about" while tacking downwind is called "jibing."
   2. A boat is on a port tack if the wind comes over the port side to reach the sail. It is on a starboard tack if the wind crosses the starboard side first. Another way to remember it is that the tack is named for the side *opposite* the one the boom is over. If the boom is out to starboard, the boat is on a port tack, if boom to port, it is a starboard tack.
   3. Coming about starts with the sails close hauled. When the helmsman is ready to tack, he gives the command READY ABOUT! to alert the sail handlers to be prepared to release the jib sheets. The tiller is then quickly but smoothly moved to leeward as the command HARD ALEE! or HELM'S ALEE! is given. As the bow moves through the eye of the wind the sails will luff (shiver and ripple), the boom will begin to move across the boat, and normally the helmsman moves to what will become the windward side. As the bow passes just beyond the eye of the wind, the jib will catch the wind on the wrong side and help shove the bow around. As soon as the boom is over, the command CUT!, OVER!, or FLY YOUR SHEETS! is given, the jib is released and cleated for the new tack, and the tiller is brought amidships and the course corrected for the new tack.

4. Novice sailors make two frequent mistakes when coming about. The first is being caught "in irons." Here the tack is started with insufficient speed through the water or the tiller is moved too slowly. The boat heads into the wind, the sails luff, and the boat stops. If this happens, simply hold the jib out into the wind (called "backing the jib") to shove the bow around and you're off.

   The second mistake is failing to bring the tiller amidships promptly. You'll then find yourself sailing off on a reach in a direction you don't want to go. In a stiff wind, the close-hauled mainsail could blow the boat over into an upset. The best solution is to mind the helm carefully and have sailhandlers alert to ease the sheets as needed.

5. Reaching is sailing across the wind. If you're sailing perpendicular to the direction of the wind, it's a "beam reach;" if the wind is forward of the beam, it's a "close reach;" abaft the beam, it's a "broad reach."

   Reaching requires careful sail handling. The sails should be let out until they just begin to luff, then sheeted in just enough to cure the luff. The helmsman steers a steady course while the sail handlers keep the sails properly trimmed. Since few winds are really steady and they tend to shift slightly, constant attention of the crew is needed to maintain trim.

   The boat will tend to heel over on a reach and this should be kept to a minimum by moving all the bodies to windward. You may notice the boat heel excessively, head into the wind requiring a helm correction, then right itself only to heel over again and repeat the process. This means that the sails are sheeted in too closely. Most novice sailors tend to trim sails in too far on a reach. Luff them, then just cure the luff, and the boat will almost sail itself.

   Reaches are named as are the tacks. When the boom is to port, it's a starboard reach—boom to starboard, a port reach.

   In this session, we'll be practicing reaching and coming about. Running and jibing will be covered in the next session.

C. Getting ready to sail: At this point, crews can be assigned for each boat. If the size of the boat permits, three to five Sea Scouts per crew are ideal. The most experienced (or previously instructed) Sea Scout can serve as coach. Establish a definite order for readying the boat; the following is suggested:

1. Place all gear in boat: sailbag with sail, paddle, rudder, tiller, bailer, sponge, dagger board (if used), and personal items. Everything loose should be secured to the boat with a lanyard.
2. Launch the boat (if not already in the water). Be sure that the boat is securely tied and is headed into the wind.
3. Lower the centerboard or dagger board to give the boat stability. If a dagger board is used, be sure it's secured to the boat with a lanyard. ***Caution***: Always get into a small boat by stepping directly into the bottom, not on the seat or gunwale. Otherwise, you may tip the boat over.
4. Fasten rudder and tiller: Put on the rudder—swing it vigorously to make sure it is secure—be sure to put the tiller under the traveler before it is fastened.

D. Bending on the sail: The Sea Scout coach can demonstrate this for the members of his or her crew while other Sea Scouts awaiting a boat observe. Be sure the following points are made:
   1. Be sure the halyard is always secured or attended on both ends. If it goes up the mast, we have a problem.
   2. Find the headboard of the sail, look aloft and check the halyard to see that it is clear, and shackle to the head of the sail.
   3. Overhaul the sail by running your hands along the boltrope beginning at the head and take out any twist.
   4. Insert slides into the mast slot or track as you overhaul the sail starting with the slide on the head of the sail.
   5. Attach the tack at the gooseneck.
   6. Overhaul the sail hand over hand to the clew and insert the boltrope or slides into the boom. (With a loose footed sail, the sail is attached to the boom only at the tack and clew.)
   7. Attach the clew outhaul and draw it moderately tight. Cleat it. (This is a good time to demonstrate how a line is cleated.)
   8. Put in the battens. Be sure they are in the correct pockets.
   9. Clear the mainsheet. See that the sheet runs through the proper blocks and is not fouled. Be sure a figure eight knot is tied in the end of the sheet. This "stopper knot" will keep the sheet from escaping back through the blocks.
   10. Look aloft and hoist the sail. Always look up and watch the sail as it is hoisted to see that the slides are not twisted and that battens do not catch on shrouds or stays. Unhook the boomlift.
   11. Set up on the halyard. Be sure the sail is hoisted as far as it will go and cleat the main halyard, which on most boats is on the starboard side of the mast.
   12. Adjust the downhaul so that the luff of the sail just begins to wrinkle.
   13. Tighten the outhaul so the foot of the sail just begins to wrinkle.
   14. Locate the jib tack and shackle it into place.
   15. Attach jib snaps to the jib stay working from tack to head.
   16. Look aloft to see that it is clear and shackle the jib halyard to the headboard.
   17. Straighten out the foot of the jib, locate the clew, and attach port and starboard sheets.
   18. Determine whether the sheets are led inboard or outboard of the shrouds, thread them through the fairleads, and tie a figure eight knot in the end.
   19. Hoist the jib, set up on the halyard, and cleat it in place on the port side of the mast.

E. Going sailing: For the initial sail, we would suggest that the Sea Scouts sail a course that will give them experience in reaching and coming about. Suggested courses are found in appendix F. The Sea Scout coach serves as helmsman, one Sea Scout handles the mainsheet, another Sea Scout handles the jib, and other Sea Scouts observe. Here the coach can explain the commands READY ABOUT and HARD ALEE and demonstrate reaching, beating, and coming about. After one or two circuits of the course, the coach becomes a passenger, the mainsheet handler becomes helmsman, the jibhandler goes to the mainsheet, and a passenger now handles the jib.

This rotation continues until each Sea Scout has had a chance to serve as helmsman.

When there are more Sea Scouts than can be accommodated at one time in the available boats, a specific number of circuits of the course should be specified, and the boat then returned to the dock to change crews and give the waiting Sea Scouts a chance to sail.

Sea Scouts waiting for a boat can be occupied with instruction in basic knot tying and marlinspike seamanship.

F. Securing the boats: When the sailing has been completed, the Sea Scout coach demonstrates how the sails are lowered, properly folded, and bagged. All hands pitch in to bring the boats ashore, unrig them, and prepare them for trailering or storage.

IV. Sailing a Course

Again, this session should be held at the water. A chalkboard and your teaching aids will be needed too.

A. Inland Rules of the Road: These are simple rules intended to keep boat traffic moving in an orderly manner and prevent collisions. The boat that has the right-of-way is known as the *stand-on* vessel and has the duty to keep its course and speed. The boat that must give way is known as the *give-way* vessel and must maneuver so as to allow the stand-on boat to proceed without altering her course or speed. These are new terms—replacing *burdened* and *privileged*—since they are more descriptive.

1. Sailing craft are *stand-on* vessels over power craft except when overtaking, when the power vessel is limited to a narrow channel, is fishing with nets or trawls, or otherwise has restricted maneuverability. In general practice, sailboats should stay clear of any vessel over 65 feet in length.
2. A boat close-hauled on the port tack must give way to a vessel close-hauled on the starboard tack when both are meeting.
3. A vessel running free must give way to a vessel which is close-hauled.
4. Vessels to windward must give way to vessels to leeward.
5. In a meeting situation with both vessels on the same tack, the vessel to starboard must give way to the vessel to port.
6. Of utmost importance is the "Responsibility Rule" that requires the *stand-on* vessel to alter course, slow down, stop, or take such other action as may be necessary if a collision might result should it hold its course and speed.

   If you are sailing in international waters (in the ocean off the coastline), different rules may apply. These rules are found in the U.S. Coast Guard publication *Navigation Rules—International and Inland*, COMDTPUB P16672.2(Series), available through the U.S. Government Printing Office.

   Note: You'll find that your cutout boat teaching aids will be most helpful with this session. The learning guide in appendix G can be distributed.

B. Beating, Running, and Jibing

1. To sail the boat upwind, it is necessary to make a zig-zag course called beating to windward. Sails should be trimmed in as far as possible. Unlike reaching, the boat is steered to keep the sails filled

properly. Head as close to the wind as possible until the sails just begin to luff—then come off the wind enough to just cure the luff.

2. To tack, swing the tiller smoothly to leeward, let the boom swing across the boat as you pass through the eye of the wind, and as soon as the jib begins to back, trim it onto the new tack. Careful attention to the helm is needed to see that you aren't caught in irons or don't swing too far into a reach.
3. Running free is sailing downwind with the sails out perpendicular to the wind. Often the mainsail will "blanket" or cut off the wind from the jib. The jib can then be set on the other side and you're sailing "wing-and-wing." Very careful attention to the helm is vital in running. Since you are moving with the wind, you are not as aware of the wind direction—if the wind gets around to the front side of your mainsail it can swing it violently across the boat in an "accidental jibe" and someone could be struck by the boom or the rigging could be damaged. When running free and the boom is out to starboard, you are on a port tack (or jibe). It is a starboard tack (or jibe) if the boom is out to port. To further increase boat speed when the wind is well aft, pull up the centerboard or dagger board. Don't forget to lower it, however, before trimming closer to the wind.
4. Jibing is moving the sails to the other side of the boat while running downwind. It must be done carefully to keep the sails under control—a "controlled jibe" rather than an accidental one. The safest procedure is to move into a broad reach, trim the sails in (particularly the main) and get ready with the comment STAND BY TO JIBE! Then move the tiller carefully to windward, trim the main boom amidships, and sing out JIBE-O! At this point, all hands should duck to avoid the swinging boom. As the boom comes across, let your sheets run out smartly and set them for the new tack. Be sure sheets are clear before jibing—if they foul, you could capsize.

C. Sailing a Course

Now we're ready for some sailing. It is suggested that a triangular course be laid out with a leeward, windward, and reaching mark. This is a standard racing course, and while we won't be racing, it provides a good series of experiences. The course starts at the leeward mark, rounds the windward mark, then the reaching mark, leeward mark, windward mark, and runs to the finish. (See appendix F). You may prefer a simple leeward-windward course, but with more than one boat on the course—and novice sailors—there is a risk of collision.

If possible, make up different crews from the last sailing session. In this way the advantages of self-instruction will be spread around and the Sea Scouts will get better acquainted with each other's abilities.

To give each Sea Scout a chance to sail the complete course as skipper, we suggest that the course legs be not more than 200 yards in length.

1. Crews are assigned and the Sea Scout coach supervises rigging the boat, reviewing the procedures learned at the last session.
2. The boats are started out well separated, with the Sea Scout coach as helmsman. Frequent tacks should be demonstrated on the upwind leg and a jibe around the reaching mark.
3. As soon as the reaching mark is rounded, the Sea Scout coach turns the helm over to the mainsheet handler and positions rotate as on the previous session.

4. When the time comes to round the weather mark for the running leg, the Sea Scout coach takes the helm to demonstrate coming about into a run and demonstrates the controlled jibe while sailing with the wind. The coach again turns over the helm.
5. The rotation of Sea Scouts continues until all have had the chance to steer a portion or all of the course.
6. Boats are rotated as needed.
7. When everyone has sailed, all hands pitch in to secure the boats.

V. Practice Drills

By now, the Sea Scouts have gone through most of the evolutions involved in sailing and it's time for some practice. The notion of "drill" can be pretty awesome, but drills can be lots of fun, a real challenge to the new sailors, and an opportunity to teach some new principles and practice what's been learned.

A. Mother Duck Cruise

This is a follow-the-leader event with one boat (selected by lot) as "Mother Duck." Everybody follows Mother Duck and does what Mother Duck did at approximately the same location.

When Mother Duck tacks, succeeding boats tack at the same point, if she reverses course, everybody else does the same, following in her wake. If Mother Duck goofs, so does everybody else (short of capsizing, collision, or damage to the rigging). Mother Duck may turn on her flock and challenge a "duckling" over right-of-way. So must everyone else.

The object is to follow exactly the moves of Mother Duck and try to stay within two boat lengths of the boat ahead. No points or scores are kept: if someone goofs, the comments will provide excellent teaching points.

If prizes are demanded, duck feathers are appropriate!

At stated intervals, a whistle is blown indicating that crew members rotate as in the previous sessions. Depending on the number of boats and the time available, a horn is sounded, Mother Duck becomes the trailing duckling and the second boat becomes Mother Duck.

Sea Scouts seem to be naturally creative people and you will be amazed and amused at some of the problems that Mother Duck can devise for her flock.

B. Sailboat Slalom

Here a series of marks are laid out and the object is for each boat to run the "slalom" course passing each mark alternately to port and starboard. The course can be laid out in a straight line across the wind as a reaching exercise, quartered to the wind for tacking and reaching, or windward-leeward for beating and running. The object is to run the course in both directions, rounding the marks without touching them.

For variety, the course can be laid out in a random pattern to provide a number of sailing experiences.

Some Sea Scouts are going to want to compete at this point and a round-robin contest can be held. Here each crew sails different boats through the course on a rotation basis with the crew's time being noted. Shortest time for a crew sailing all boats wins. No prize is needed—satisfaction is enough.

C. Simon Says

In this activity the boats all start out in a line following the lead boat, "Simon." When Simon does something, so does everybody else exactly at that time. When Simon comes about, so does everybody else at the same instant (or as close to it as they can). The object is to keep the same alignment as the fleet started out with.

Whistles and horn signals can be used to rotate crew members and Simon boats as in the Mother Duck cruise.

With practice, this could turn into a precision sailing team with preparatory commands and commands of execution passed by a leather-lunged boatswain or loud hailer. An inexpensive handheld CB unit in each boat—turned to a little used channel—could make a well-drilled team the hit of a local regatta, boat show, water carnival, or maritime festival. The U.S. Naval Academy team performs in this manner in Luder yawls with spinnakers and it's a spectacular show.

D. Man Overboard

This involves a very practical emergency procedure (retrieving an actual man overboard or picking up a mooring) with some fun and good boat handling. Without warning, the "man overboard" (a floating fender works fine) is cast over the side and the hail of "Man overboard!" given. Someone is instantly appointed as lookout whose responsibility is to keep the "man overboard" in sight and point continually in its direction. The helmsman must maneuver into a beam reach downwind of the "man overboard," turn into the wind, luff, and come to a stop or be nearly stopped so that a crew member leaning over the bow can pick up the unfortunate "victim." If the crew misses on the first pass, they keep trying—fenders are expensive!

E. Flotsam and Jetsam

Four or five floating objects (partly filled bleach bottles work fine) are scattered upon the waters. The object is for a boat's crew to retrieve them.

Add to the challenge by using completely empty bleach bottles. They will float higher in the water and the wind will move them along. For real excitement, use balloons and you'll see some fancy sailing as a boat tries to chase down a balloon that's moving as fast—sometimes faster—than it is.

For this event, use only one boat at a time. Two eager crews heading for the same floating object will almost surely result in a collision.

F. Ball Tag

One boat is "IT" and tries to maneuver so that a crew member can throw a soft rubber ball to land in another boat or strike its sail.

If the ball lands aboard, that boat is now "IT." If the ball hits the sail and goes overboard, the boat is now "IT" and must retrieve the ball and chase someone else. If the ball misses or strikes the hull or shrouds, it doesn't count and the pursuing boat must collect the ball and try again.

We suggest that children's playground balls or underinflated basketballs or volleyballs be used. Don't use footballs—a well-thrown bullet pass can go right through a sail. Frisbees are fun, but be sure they float.

Since it is as much fun to be "IT" as it is to be chased, this crazy game has been known to go on for hours with some excellent self-instruction as a by-product.

VI. Free Sailing

By now, your Sea Scouts will be fairly proficient sailors and all they'll need is practice. Some will want to just sail around enjoying themselves, others may want to try their hand at racing. Some Sea Scouts will be slow to develop their skills and extra time can be devoted to these folks in individual instruction.

Some system should be set up at this point to qualify a Sea Scout to skipper a boat (and take full responsibility for the vessel and crew), to check out boats, define the limits of free sailing, and assure that everyone has equal access to the craft. This is a good project for your quarterdeck or petty officers group. If the Sea Scouts themselves are given the responsibility (with a little quiet advice, if needed) of setting up and operating the sailing program, it will be better accepted than if handed down from the adult leaders.

Involved in the plan must be a procedure for instructing new ship's members as they join and want to get involved. This is vital to prevent your unit from becoming a "closed corporation." Some Sea Scouts may resist admitting new members—the more members with the same number of boats, the less boat time available. It must be pointed out that this is essentially a selfish but understandable attitude. If our purpose is to develop character, train for citizenship, and provide a sailing experience for youth, then we must provide for all who seek membership. Additional floating equipment may be needed, and a growing membership means more parents, contacts in the community, and a sense of urgency to provide more resources on the part of the chartered organization and ship's committee.

Obtaining Boats and Equipment

Before getting involved in a sail training program, a Sea Scout ship or crew will obviously need one or more boats and some related equipment. Immediately all sorts of objections are raised regarding costs, maintenance, storage, insurance, and other reasonable concerns. It is the intention in this section to deal with these problems and offer some suggestions.

WHO'LL OWN THE BOATS. Before setting out to acquire a boat or boats of considerable value, it is important to determine exactly who will hold title to the property. A Scout unit is usually an unincorporated association, not a legal entity that can bear title to property. The chartering organization owns the unit and is responsible for selecting leadership and operating it within the Scouting program. All crew or ship property and funds remain the responsibility of the chartering organization as long as the charter issued by the Boy Scouts of America remains in place. This causes little concern when the property is of modest value, but can be a problem with more costly items unless ownership is clearly defined.

The first step should be to consult an attorney—either a member of the chartered organization or a local volunteer. The council will have several volunteer attorneys available to assist if needed. Title to property will be issued only to an organization or an individual—a Scouting unit is customarily not an incorporated entity and is only an extension of the chartered organization and the local council.

If the boats are obtained through donations, the recipient organization must be qualified to accept such donations if the donor is to realize a tax deduction. All councils qualify as do many chartered organizations such as churches. If the chartered organization is a commercial firm, however, it would not qualify and other arrangements must be made.

Whether title is held by the chartered organization or the local council, it is vital that details concerning the use and future disposition of the boat be clearly outlined in writing.

WHERE TO KEEP THE BOATS. After you get one or more boats, they will have to be kept somewhere—better to worry about this in advance than wind up with a boat and nowhere to keep it.

If the unit limits itself to obtaining boats that are of reasonable size, equipped with centerboard or dagger board, and trailerable, this is not too serious a problem. If space at a marina or yacht club can be obtained, the boat is easy to get to a hoist or down a launching ramp. The trailered boat can be transported to other locations, if desired, thus giving a wider range of cruising opportunities.

So a marina or yacht club is a great place to keep boats—if you can find space. Most public marinas and yacht clubs have waiting lists for boat storage and yacht club yards are limited to club members. The cost in public marinas operated by port authorities or recreation departments is usually modest, while private marinas will be more expensive.

So it may be that a boat trailer in a back yard of a leader or committee member may become the best solution. A reasonable amount of security is needed but be sure that there is easy access to the boat. More than one unit has canceled its sailing plans because the boat was behind a locked gate and the property owner wasn't home.

Don't overlook the possibility of a "mini-sea base" at the end of a channel or on the property of a commercial firm in the harbor area. Often firms on the water will have a yard or even the corner of a warehouse where boats might be kept if arrangements are made. Security is good if the firm is large enough to have a regular security force. With security guards on the gates, access can be available day or night and on weekends. It's worth looking into.

BUYING NEW BOATS. Without a doubt, this is the most expensive way to obtain a boat—but it has some real advantages. The boat will be new and you're assured that everything will be in working order. A warranty on parts and labor is included if there should be a problem. It is not unusual for new boats to actually increase in value if you catch an emerging one-design class boat as its popularity begins to blossom; however, this is a big gamble. You are probably wiser to select an already-popular design of proven performance.

Even if you feel that a new boat may be beyond the means of the ship, go shopping anyway. Salespeople are eager to show off their new lines, boat shows can get you in touch with other sailors, and you'll get an idea of what is currently available.

There is always the possibility of approaching a person of means to contribute the money to purchase a new boat. It's done all the time and it's known as a project sale.

The first step in making a project sale is to decide what your ship wants and prepare a proposal. We suggest that the proposal be in three parts. The first part outlines the cost of the basic boat, less sails. The second part would include the sails and basic rigging needs to operate the boat. The third part should include the trailer, special rigging, lifelines, jib furler, genoa, spinnaker, and other refinements. By giving the prospect three parts to the proposal, he or she has the opportunity to buy the whole package or one or more portions. If the original prospect buys only part of the plan, it can be redesigned for an approach to another prospect.

Next, select a number of prospects. The criteria are simple—they should be interested in youth, like boats, and have enough money to be able to give some of it away. At this point, the local council can be very helpful. Your Scout

executive or finance director should be consulted since he or she will be aware of such things as tax advantages and economic trends, he or she may know the prospect, and he or she may know someone from the executive board or finance committee who can assist with the contact. He or she may even suggest prospects.

Clear all prospects with the local council before making a contact. The person may be under cultivation for a major gift to Scouting and you may be asked not to make an approach at this time. Follow this advice.

You may secure a $2,000 boat for a single ship while the council has been cultivating the prospect for a $20,000 addition to the camp that would benefit all units. On the other hand, the council may not have found a project that strikes the prospect's fancy and your proposal may be a door opener.

BUYING USED BOATS. This may be a more practical course than purchasing a new boat, but it is fraught with some important hazards and problems.

Finding used boats for sale isn't as easy as many assume. Often the boat is parked in a neighborhood or in a marina with a small sign and a phone number. So, you may have to circulate around to locate used boats. Most boat dealers simply don't handle smaller used boats—their commission isn't worth the effort. Bulletin boards in yacht clubs and marinas always have boats listed and this is a good source. Don't overlook newspaper ads, since the person advertising has probably had no results from the bulletin boards and may be anxious to sell and open to some bargaining. Of course, you'll wonder why the boat didn't sell immediately—there may be something wrong with it.

Many one-design associations have local chapters and these are often good sources of information. They can frequently provide lists of boats for sale plus information on the condition and performance of individual craft. Check with boat dealers or your local yachting editor for the person to contact.

In shopping for a used boat, inspect it very carefully and expect to find the worst. Don't even look at a boat unless it is a one-design, preferably by a reputable builder. If it is a home-built one-design or a kit-boat, don't consider it unless it is registered with the appropriate class association—these groups maintain high standards and, if desired, the boat can be used for racing. Above all, avoid a boat designed by the seller. These usually float like a brick and sail like a tub!

When you find a boat that looks right, get acquainted with the owner and let him know you're involved with Venturing and Scouting. If he or she acts interested, ask for the boat as a donation—the worst he or she can do is refuse. If that doesn't work, bargain hard. Keep going back if necessary with new offers. Don't be pressured—if the boat is sold while you're bargaining, then good for the seller. Remember, there are other boats for sale.

BUILDING A KIT-BOAT. Some real savings over the cost of a new boat can be realized with a kit-boat. These are widely advertised in yachting and sailing magazines and most are quite good boats. Write for their catalogs, learn what's available, and determine what's really involved in assembling the kit.

Fiberglass kits are the easiest to assemble, since simple hand tools are usually all that are required. Wooden kits may require more skill, but are usually less expensive. Normally, kits come with all of the parts, complete instructions, and detailed drawings. They usually do not include sails and running rigging, however, and some do not include masts, spars, or hardware. These are available at additional cost from the builder and should be ordered with the kit to assure that everything works together. Shipping costs may be considerable if the kit

builder is located at some distance. Of course, a suitable place to build the boat is important.

In assembling kits, Murphy's Law, "If anything can go wrong, it will!" usually applies. Be certain that there is one boss on the job and he is the absolute authority on the plans, specifications, and assembly procedures. No one makes a move without his approval. Don't let anyone "improve" the kit. Kit-boats are designed by experienced naval architects, the company's reputation is based on a quality product, and one-design class boats must meet certain design specifications. Relocating a cleat, altering the shape of the rudder, modifying the hull shape, or changing the weight can disqualify a boat from racing in its class.

BUILDING A BOAT FROM PLANS. If your unit wants to undertake a really serious project, building a boat from scratch may offer an attraction. A number of firms sell detailed plans and they advertise widely in boating and home craftsmen magazines.

Boat building requires woods not normally available in the local lumberyard, and often sophisticated woodworking equipment may be required. Some equipment might be available through the local high school or community college woodshop, and cabinet workers or furniture makers might be approached to handle some of the more precise woodworking on a volunteer basis.

As with kit-boats, it is vital that the plans be followed exactly. This is particularly important in one-design class boats where standards are rigidly controlled by the class association.

We would not recommend designing the boat yourself unless some very skilled assistance is available. Most boats designed by amateurs are far from satisfactory.

OBTAINING BOATS BY DONATION. Currently, this is the most frequent way that ships obtain watercraft. A number of councils have embarked on active boat acquisition programs. Where the boat is usable in the Sea Scouting program, the council assigns it to a particular ship or may operate it out of a council sea base. Where the boat is not suitable to the program, it is sold and the proceeds used to acquire more suitable craft. Where vigorously pursued, this has produced some excellent results.

People donate boats to Scouting for several reasons. In some cases they have acquired a boat, find themselves making very little use of it, are having difficulty selling it, or simply don't want to bother with selling the boat and would prefer to give it away. Prospects for this type of donation can be developed from bulletin board notices that have been posted for a long period of time or newspaper ads that have been run regularly for several weeks.

A good source of donations are yachtsmen who are trading up—disposing of their current boat for a new craft. Often boat dealers are reluctant to accept a small boat as a trade-in since commissions are small and they cannot give the customer anywhere near the fair market value of the trade-in. Not infrequently, the customer can donate the boat to a qualifying organization and apply the fair market value as a tax deduction, with some advantages to the donor. It is important that the donor's tax accountant or attorney be involved to assure that the plan is properly carried out and that the recipient of the boat is qualified to accept charitable contributions. If contacted, boat dealers may be willing to suggest this procedure to customers trading up.

Occasionally, donated boats come with strings attached and these should be carefully considered. The donor may insist that the vessel be actually used in the

Sea Scouting program. This is excellent if the vessel is suitable to the program. The best arrangement is to obtain a vessel on the condition that it can be sold and the resulting funds used to obtain more suitable equipment if necessary.

BORROWING BOATS. Borrowed boats present an excellent resource for sail training. If the boat is borrowed from an individual yachtsman, you will usually also obtain the world's leading authority on that particular boat as a consultant—the boat's loving and devoted owner.

Many yachtsmen are interested in youth, anxious to see young people learn how to sail, and might be interested in Sea Scouting but not willing to accept a permanent commitment as a leader. The best source of borrowed boats from individual yachtsmen is a direct contact with sailing clubs, yacht clubs, sailing associations, yacht racing associations, marina operators, and simply asking lots of people. If your local newspaper has a boating editor, he or she may be willing to include your appeal in his or her regular column.

It's important that the yachtsman loaning a boat to your program receive adequate recognition. A letter of thanks, a nice certificate, election as an honorary member of the ship, and other thank-yous will be both appreciated and productive for the future.

Very often boats can be borrowed from other organizations. If your unit is in any way connected with a yacht club, you may find that boats used by their junior sailing program might be made available to Sea Scouting. Colleges and universities often have sailing clubs or sailing teams with boats used by the club or team members. These boats may often be available during the summer period or when they are not ordinarily used by the school. Parks and recreation programs often have sailboats and this may present another source.

Many naval installations have a small-boat sailing center as a part of the Special Services program. Small craft associated with the center may be made available to Sea Scouts when not otherwise used by naval personnel. This presents a fine opportunity for afternoon sailing and weekday sailing during the summer period when naval personnel will generally be on duty. A branch of the U.S. Naval Sailing Association is often connected with these sailing centers. The branch commodore of the sailing association will know about Sea Scouting, since he has been contacted by the sailing association's national commodore and urged to give full support to Scouting, with particular emphasis on Sea Scouting.

Personally Owned Boats

Once a Sea Scout gets involved in sailing, he or she is going to start thinking about a boat of his or her very own. It's a tribute to the leader and the unit when this happens: another sailor has been introduced to a lifetime of fun and adventure. Some suggestions may be in order to assist you in fielding the question, "Skipper, what kind of boat should I get?"

Most Sea Scouts won't be very excited about smaller boats such as the sabot, pram, or dhow. These are often considered as "little-kid boats" since they are commonly used in teaching preteens. Don't be misled, however. Under a skilled hand they can become ferocious racing machines, as more than one adult has discovered in a pickup race with a 9-year-old sabot skipper.

Sea Scouts will be more inclined to the sportier, high-performance craft of modest price. Boats like Sunfish, Laser, Dagger, Kite, Finn, and the Hobie cat are fast, quick handling, and popular everywhere, so there will be opportunities for racing if desired. They are also wet to sail and tip over from time to time. To most Sea Scouts, however, this just adds to the fun.

Sloops like Tempest, Force Five, Lightning, International, Thistle, Snipe, Coronado, Comet, 420, 470, Flying Junior, and similar craft are essentially competition boats but can be used for family sailing too. They're also more expensive and will require a trailer, so the Sea Scout may have to sell the family on getting involved.

If the Sea Scout's family really does decide to get involved, then one of the popular day sailers may be in order. There are dozens of types available from a variety of builders. O'Day and Chrysler have complete lines of day sailers popular nationwide with other manufacturers moving in that direction. Many day sailers have a small cuddy cabin that offers a little shelter. This is handy, but one sailor has described spending a night in a cuddy as similar to living under your dining room table.

Don't be too surprised if one of your Sea Scouts invites you over to see the family's new full-scale cruising sailboat—complete with galley, head, bunks for six, and all the amenities. You'll probably be invited for a ride, and who knows, they may even let you steer!

Fair winds and following seas!

Additional Reading

This plan doesn't pretend to be a definitive work on sail training. There are many excellent books on the subject that will be helpful in filling in the gaps. Armchair sailors will find them particularly enjoyable. Here are some you will find helpful.

Basic Keelboat. US Sailing.

Boatowner's Guide to Marine Electronics. Gordon West. International Marine, Camden, Maine, 1993. 266 pp.

Boatowner's Illustrated Handbook of Wiring. Charles Wing. International Marine, Camden, Maine, 1993. 312 pp.

Celestial Navigation for Yachtsmen. Mary Blewitt. International Marine, Camden, Maine, 1995. 69 pp.

Emergency Navigation. David Burch. International Marine, Camden, Maine, 1986. 248 pp.

Handbook of Trailer Sailing. Robert F. Burgess. International Marine, Camden, Maine, 1992. 227 pp.

Oceanography & Seamanship. William G. Van Dorn. Cornell Maritime Press, Centreville, Md., 1993. 440 pp.

Origins of Sea Terms. John G. Rogers. Mystic Seaport Museum, Mystic, Conn., 1984. 215 pp.

The Practical Pilot. Leonard Eyges. International Marine, Camden, Maine, 1989. 244 pp.

Rigger's Apprentice. Brion Toss. International Marine, Camden, Maine, 1984. 195 pp.

The Rigger's Locker. Brion Toss. International Marine, Camden, Maine, 1992. 193 pp.

The Sailmaker's Apprentice. Emiliano Marino. International Marine, Camden, Maine, 1994. 494 pp.

Sextant Handbook. Bruce A. Bauer. International Marine, Camden, Maine, 1992. 189 pp.

The Splicing Handbook. Barbara Merry. International Marine, Camden, Maine, 1987. 100 pp.

Start Sailing Right. US Sailing.

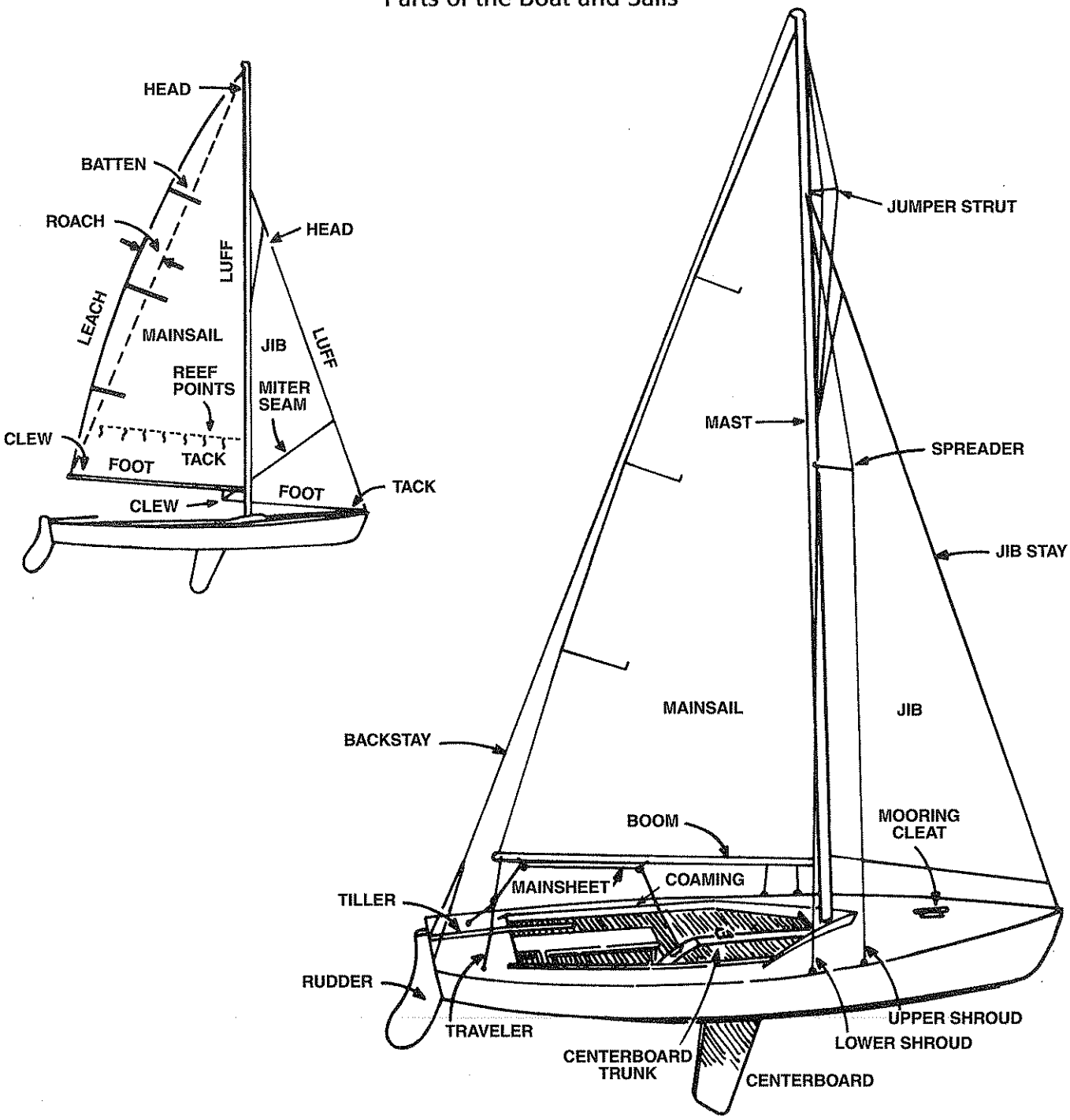
The 12-Volt Bible. Miner K. Brotherton. Seven Seas Press, Newport, R.I., 1985. 174 pp.

Understanding Rigs and Rigging. Richard Henderson. International Marine, Camden, Maine, 1985. 258 pp.

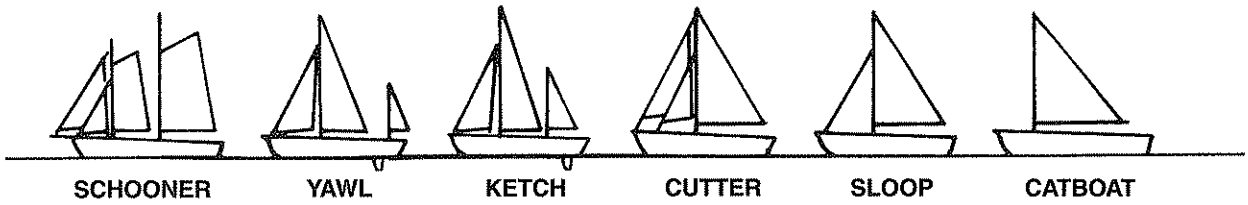
If your Sea Scouts become interested in racing, they can contact their local yacht club for information or write to the United States Sailing Association, 15 Maritime Drive, P.O. Box 1260, Portsmouth, RI 02871-6015.

APPENDIX A

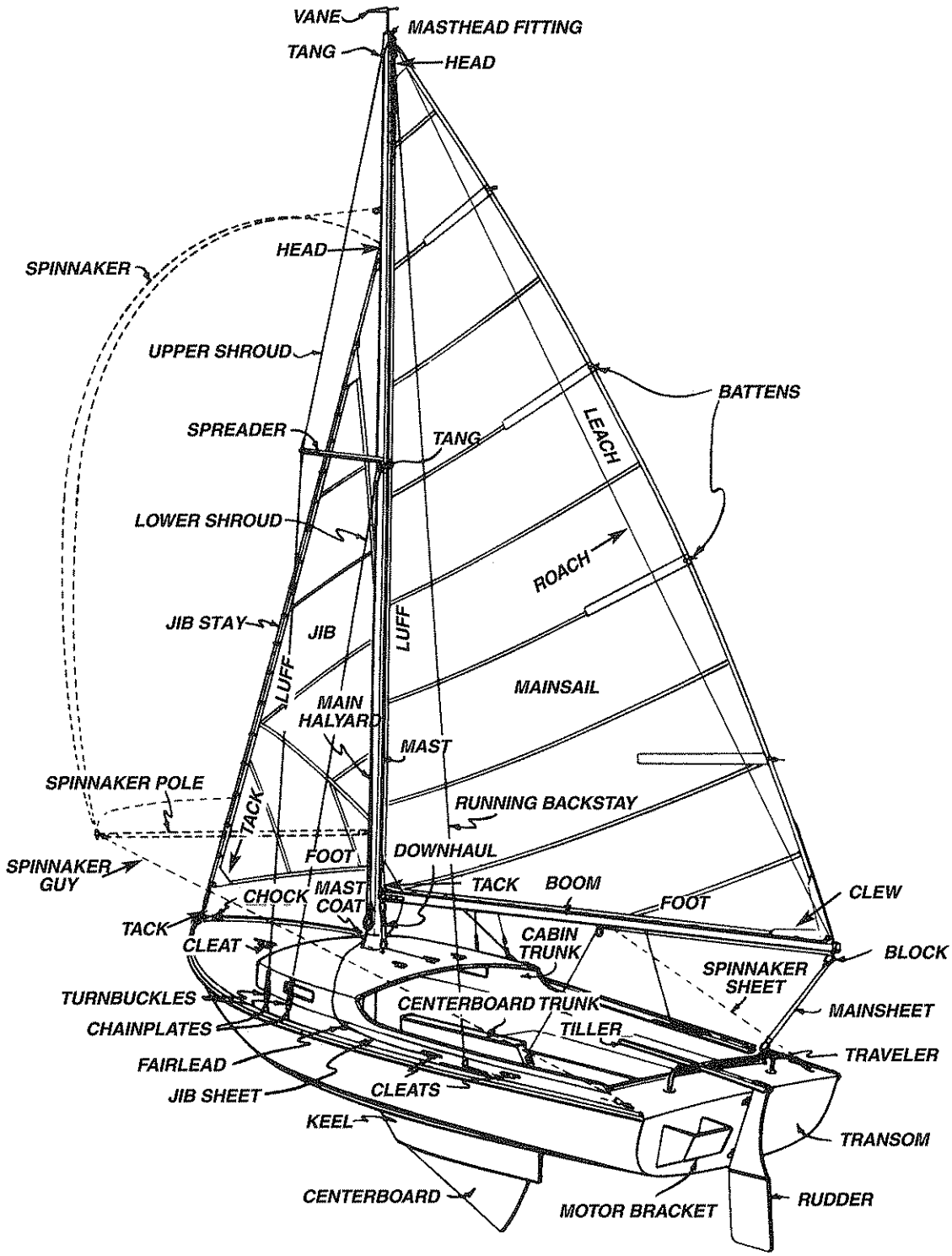
Parts of the Boat and Sails



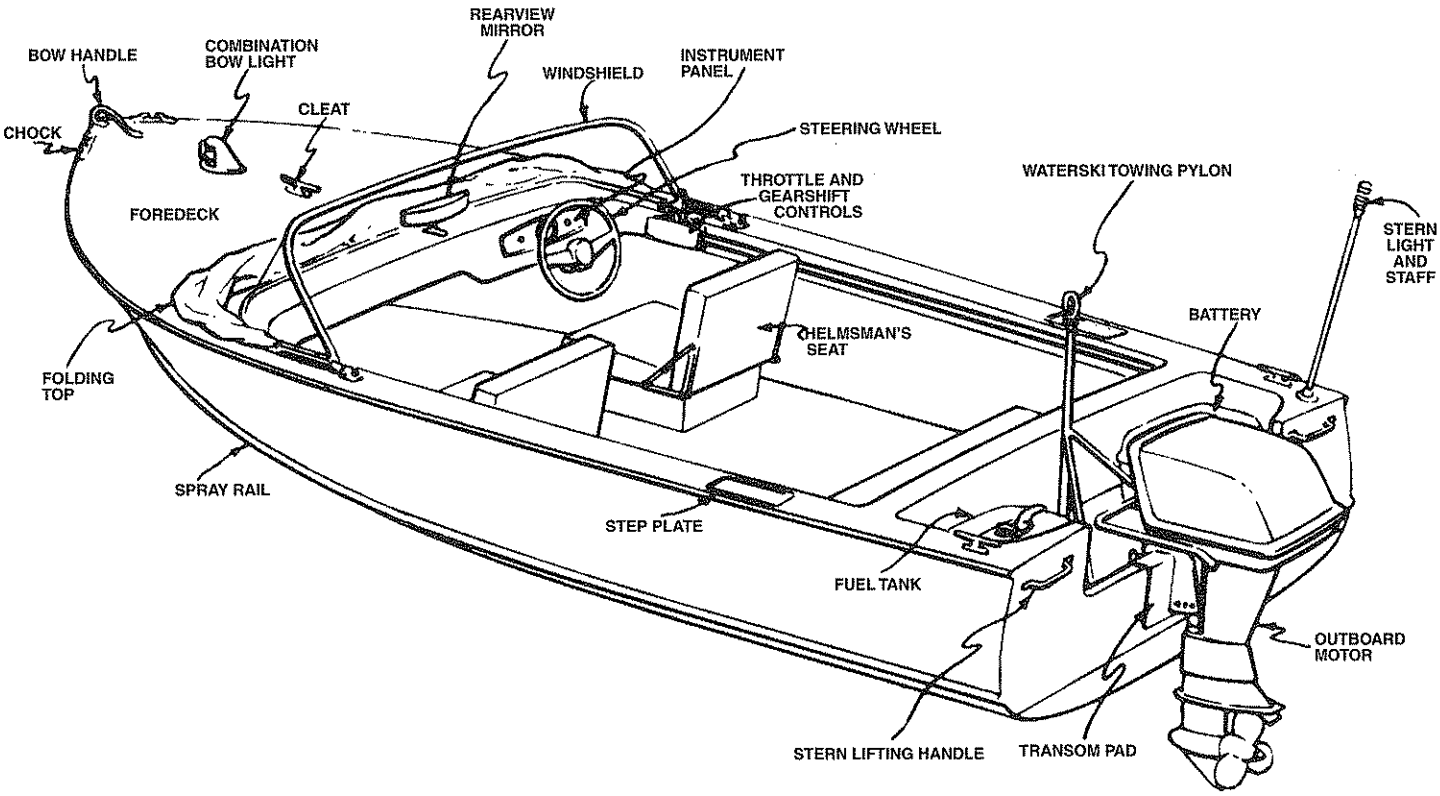
Types of Rigs



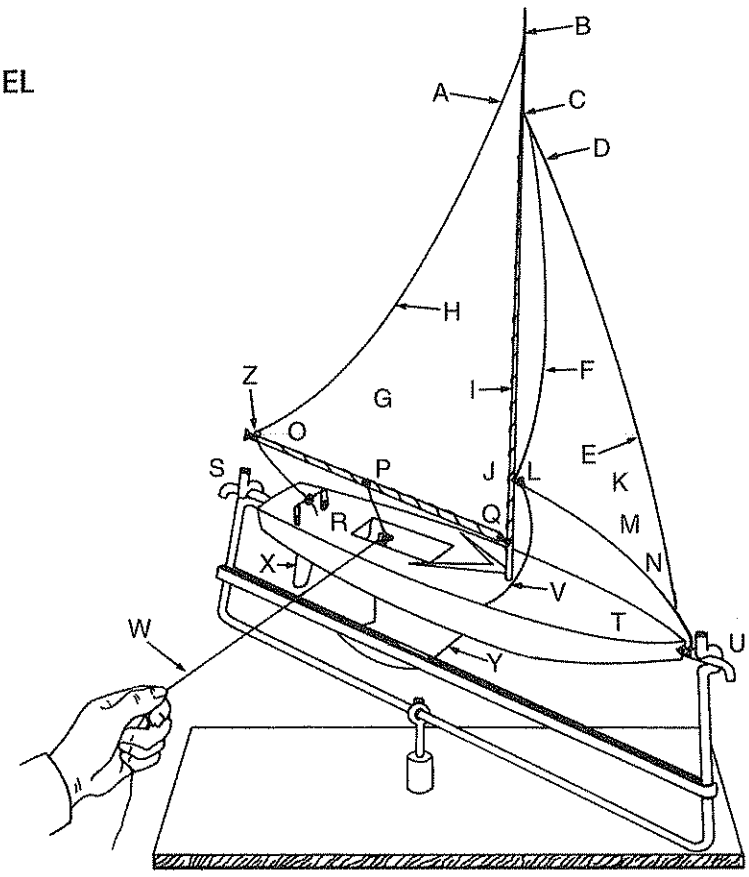
TYPICAL SAILBOAT AND EQUIPMENT



TYPICAL OUTBOARD BOAT AND EQUIPMENT



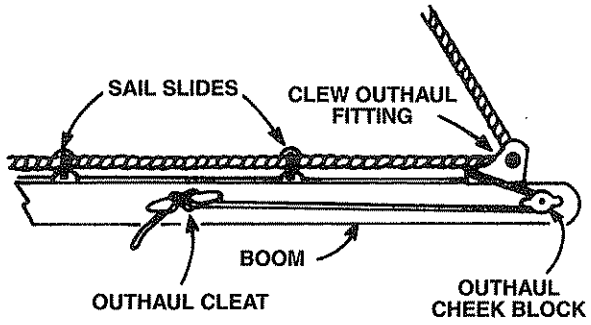
SAIL TRAINING MODEL

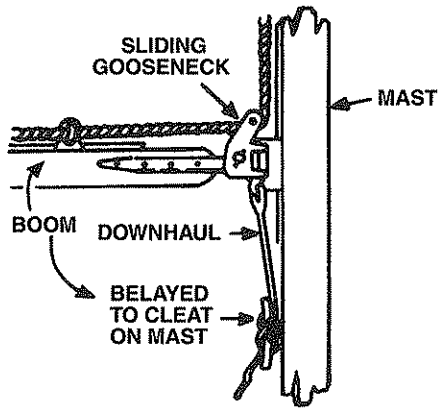


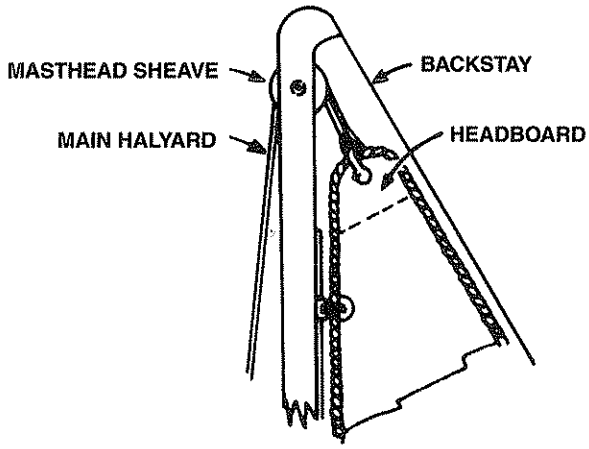
A. Head
B. Mast
C. Forestay
D. Head
E. Luff
F. Leach
G. Mainsail
H. Leach
I. Luff
J. Stay
K. Jib
L. Clew
M. Foot
N. Tack
O. Clew
P. Foot
Q. Tack
R. Tiller
S. Stern
T. Deck
U. Bow
V. Jib Sheet
W. Mainsheet
X. Rudder
Y. Centerboard
Z. Boom

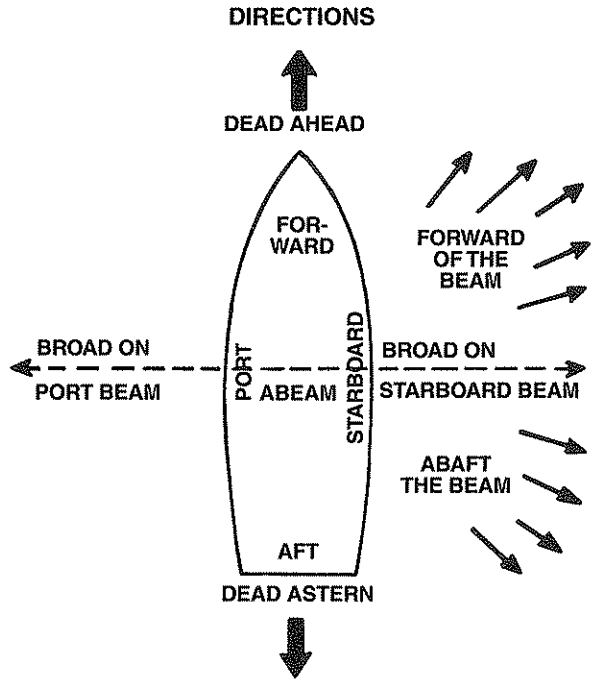
APPENDIX B

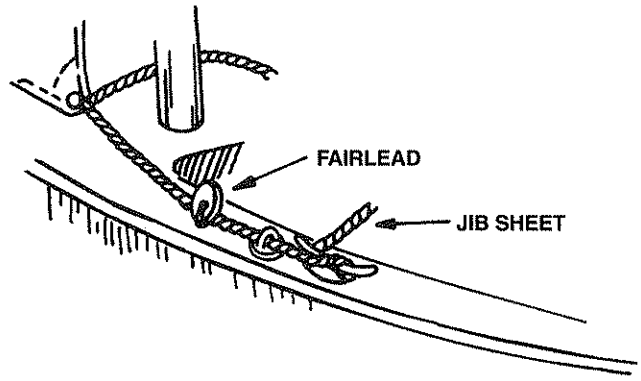
Rigging Details



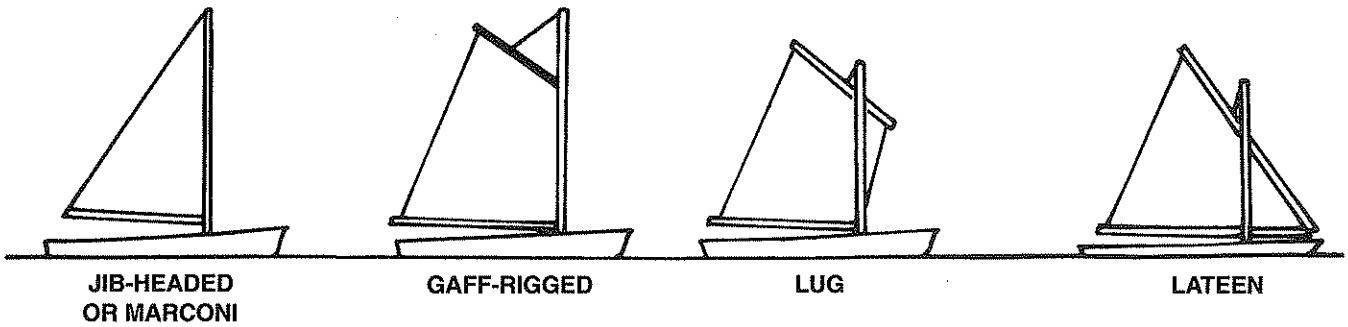






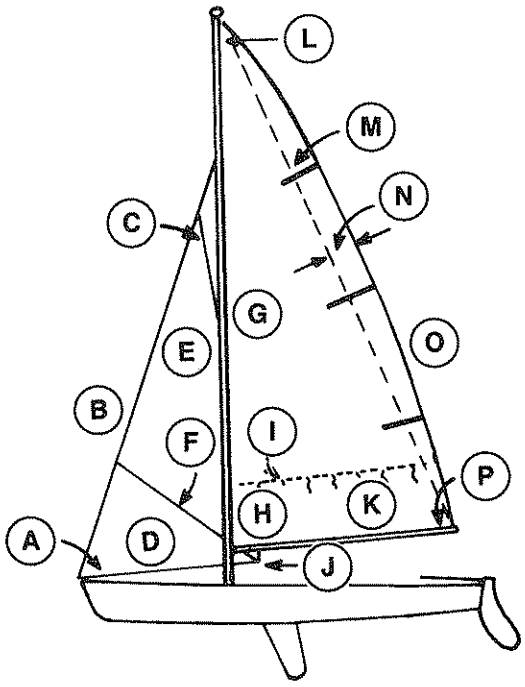


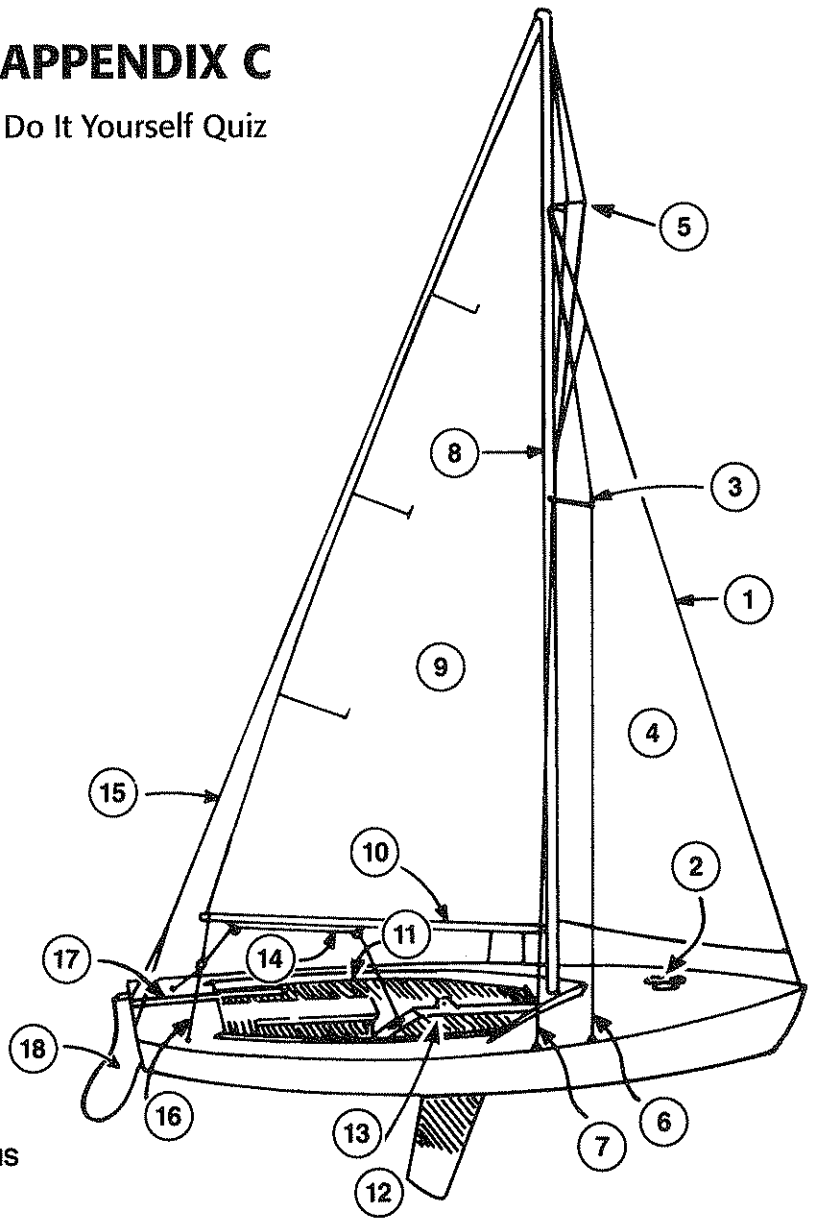
Types of Sails



APPENDIX C

Do It Yourself Quiz



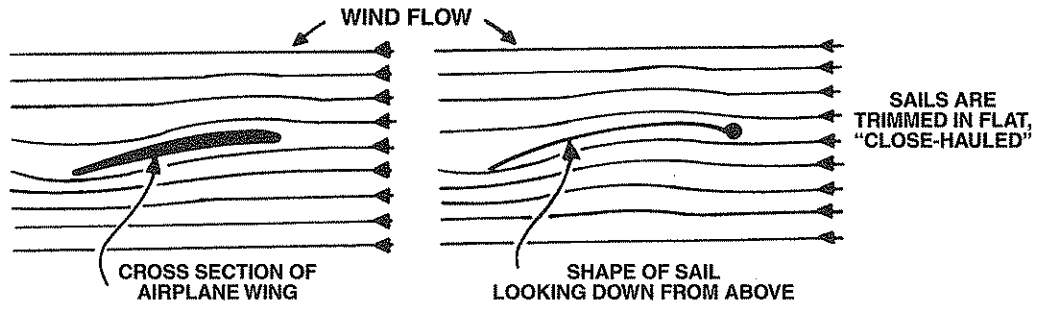


A QUICK REVIEW SO YOU'LL KNOW THE TERMS YOUR INSTRUCTOR WILL BE USING.

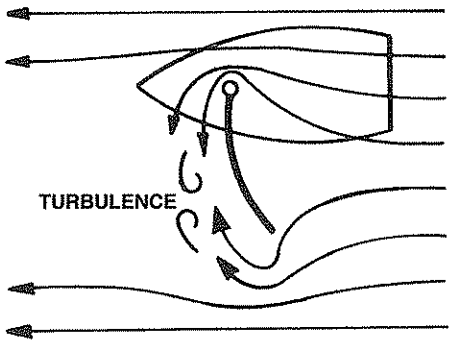
A	_____	M	_____	7	_____
B	_____	N	_____	8	_____
C	_____	O	_____	9	_____
D	_____	P	_____	10	_____
E	_____			11	_____
F	_____			12	_____
G	_____	1	_____	13	_____
H	_____	2	_____	14	_____
I	_____	3	_____	15	_____
J	_____	4	_____	16	_____
K	_____	5	_____	17	_____
L	_____	6	_____	18	_____

APPENDIX D

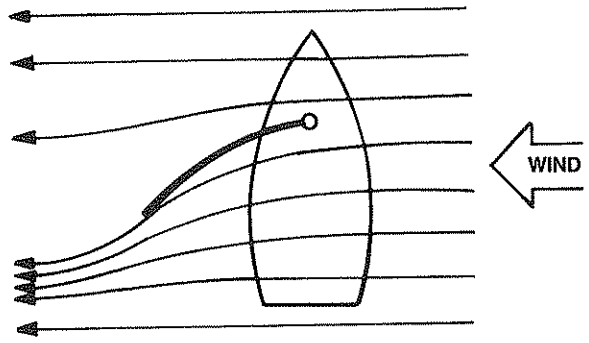
What Makes a Sailboat Go



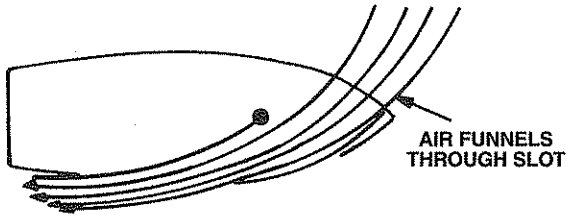
A SAIL IS AN AIRFOIL



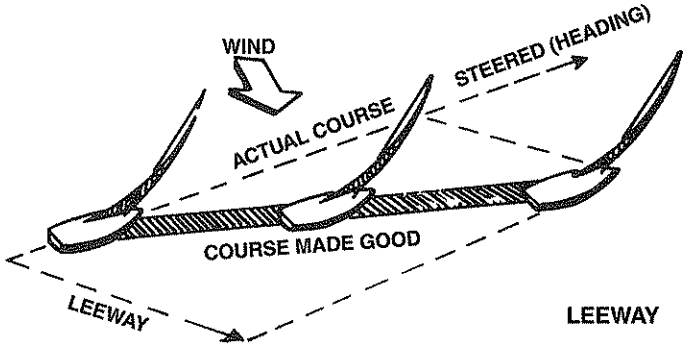
RUNNING



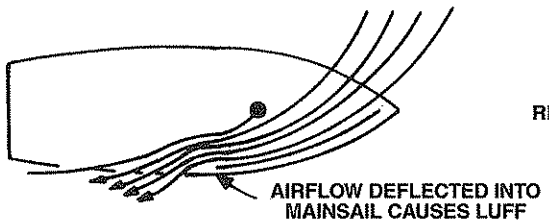
REACHING



JIB TRIMMED PROPERLY

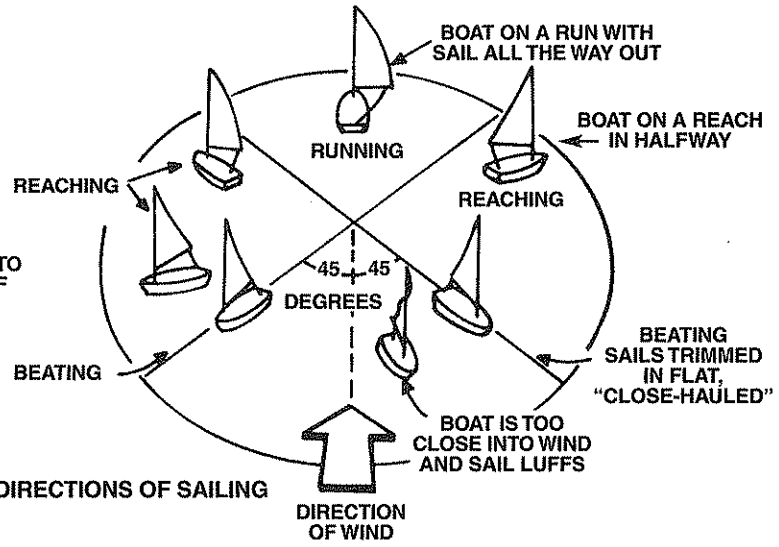


LEEWAY



JIB TRIMMED IN TOO FAR

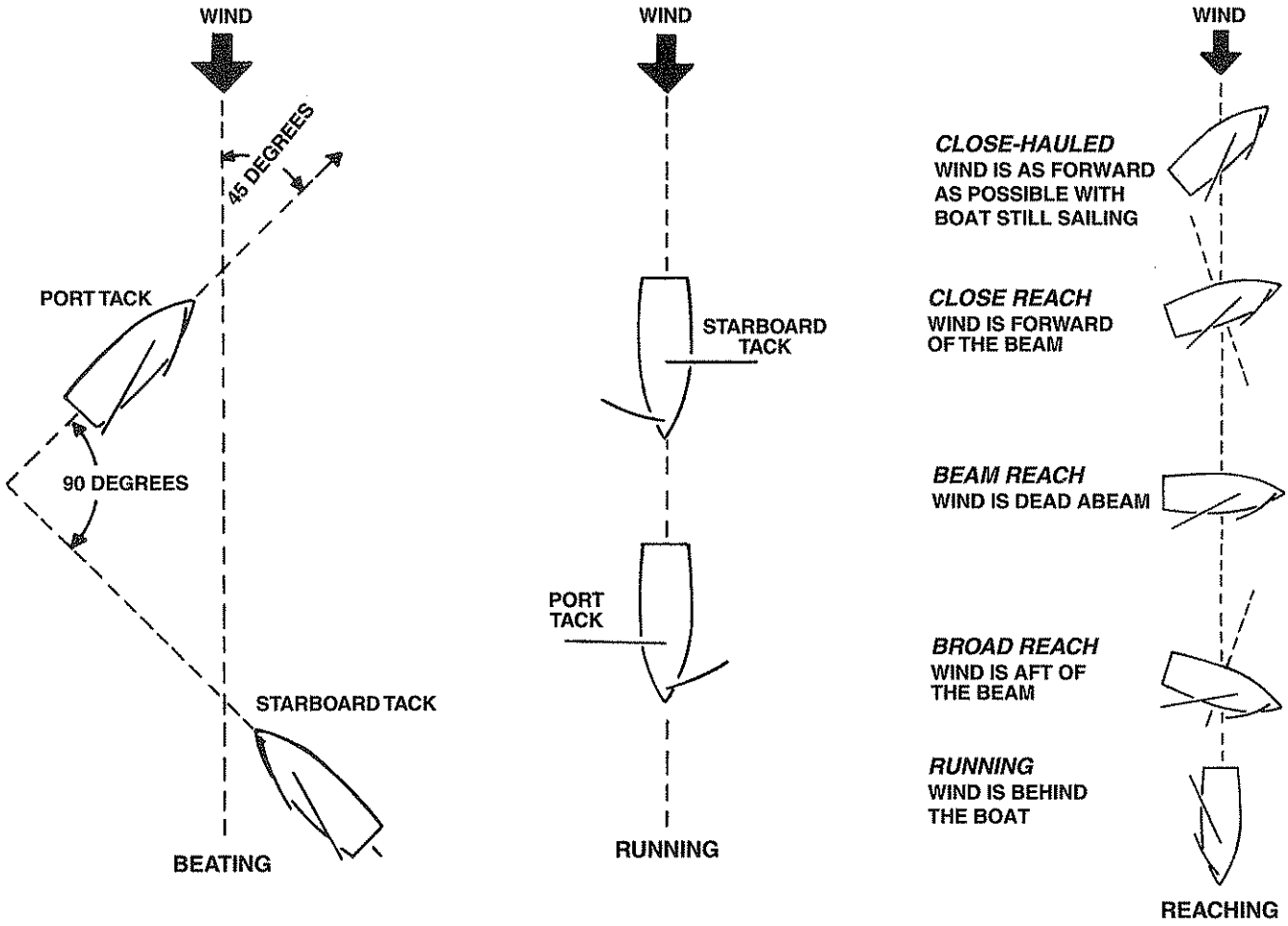
THE AIR "SLOT" ADDS POWER

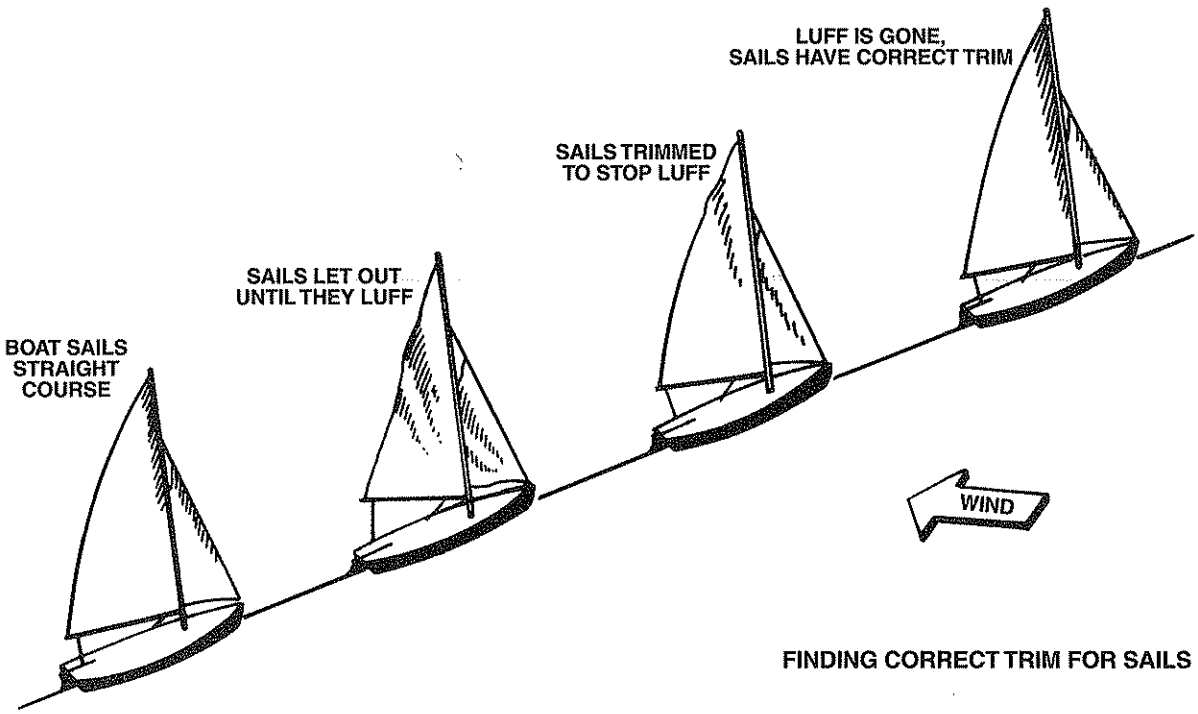


DIRECTIONS OF SAILING

APPENDIX E

BEATING, RUNNING, AND REACHING

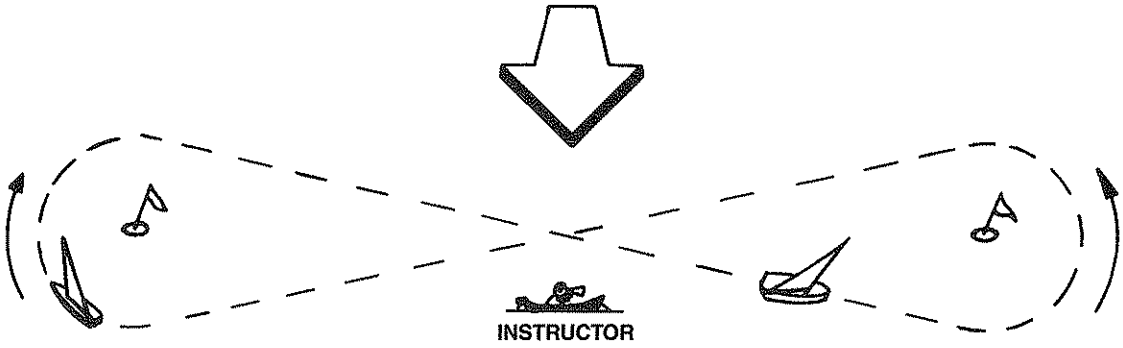




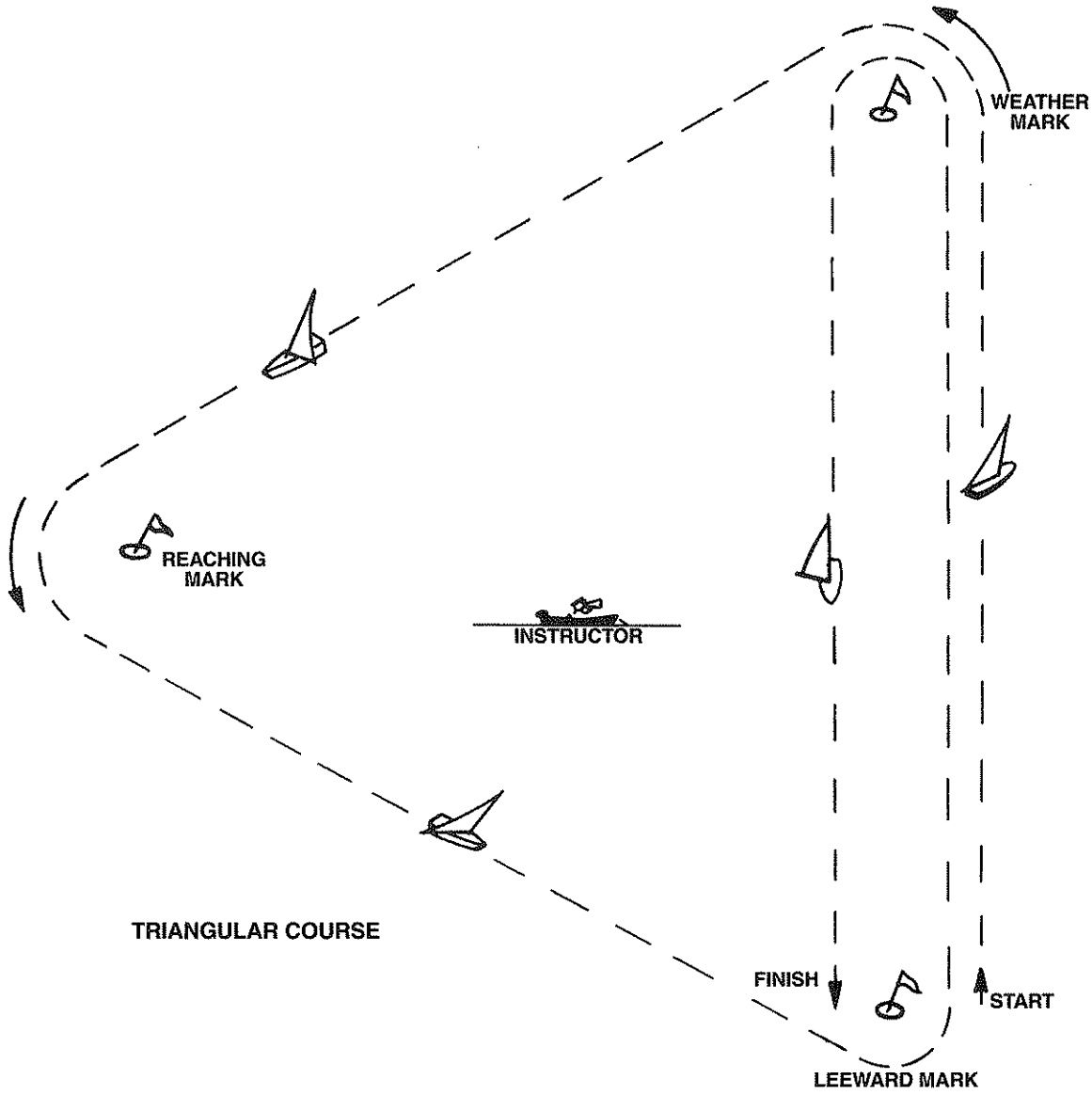
FINDING CORRECT TRIM FOR SAILS

APPENDIX F

PRACTICE COURSES



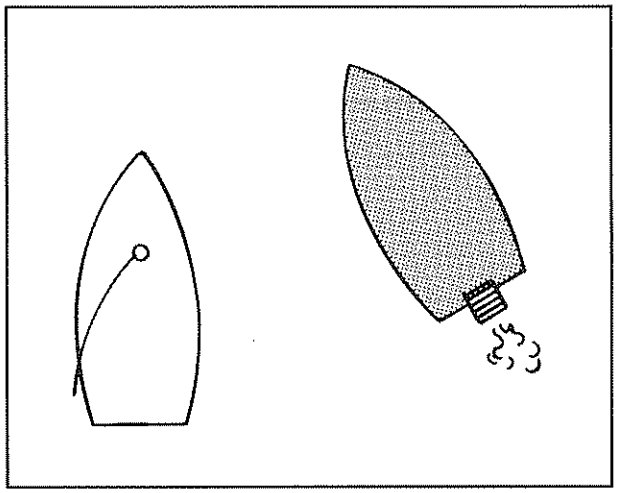
REACHING COURSE



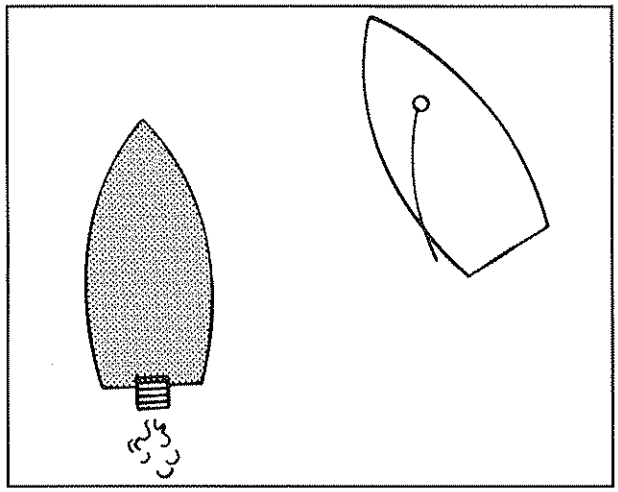
TRIANGULAR COURSE

APPENDIX G

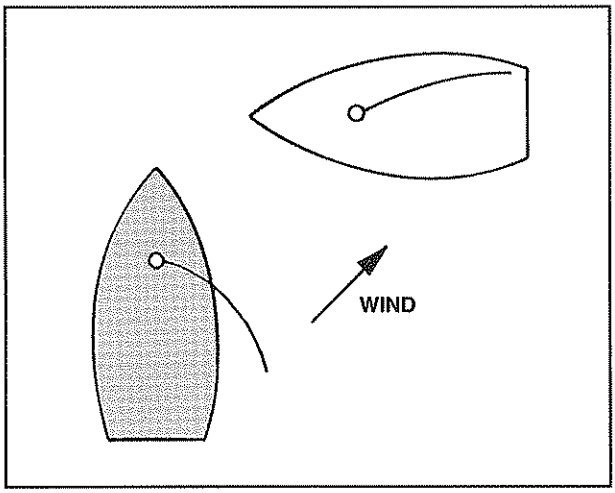
RULES OF THE ROAD



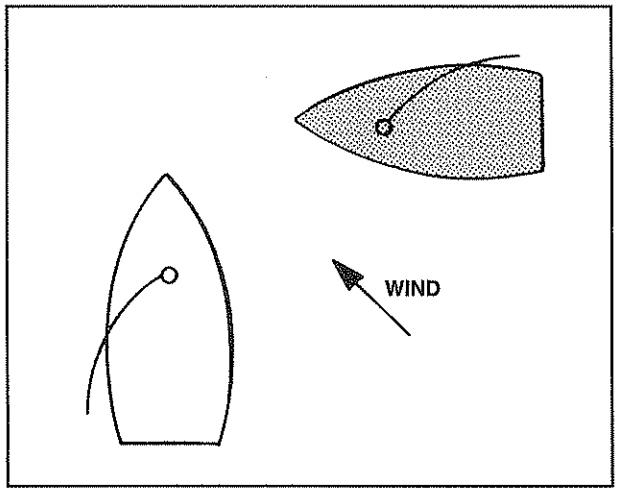
Powerboat to Sailboat



Powerboat to Sailboat

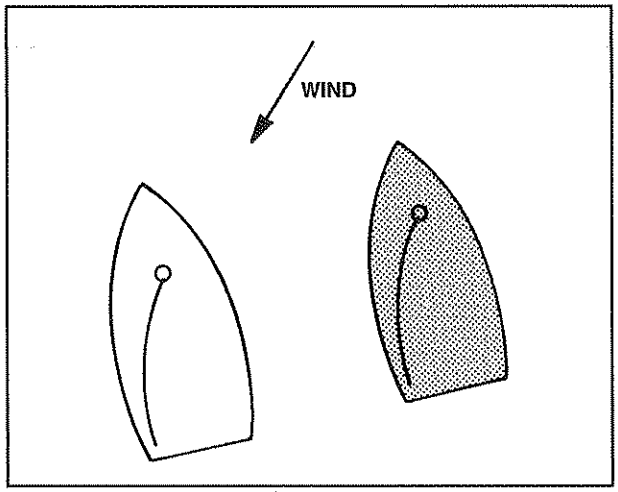


Same Tack (Leeward Rule)



Opposite Tacks (Starboard Rule)

Give-Way Vessel
Stand-On Vessel



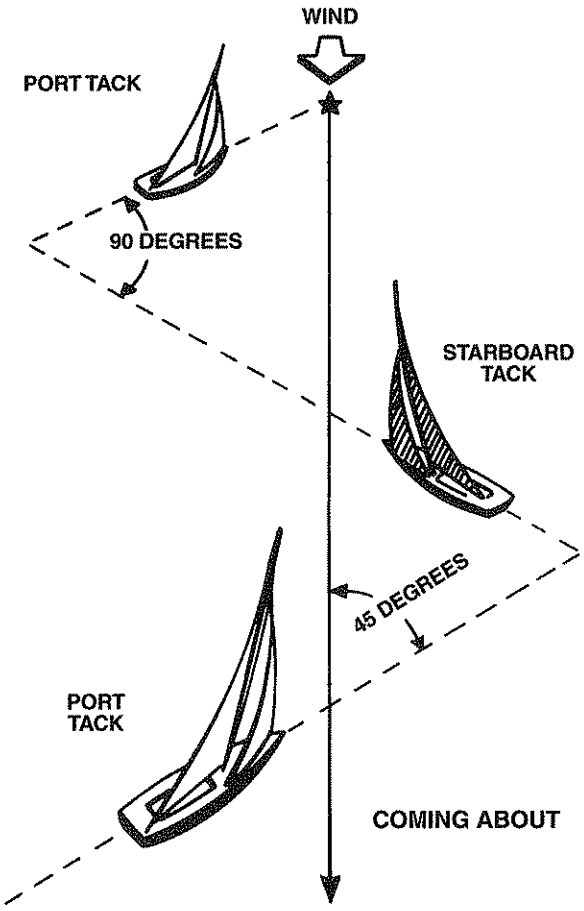
Same Tack (Leeward Rule)

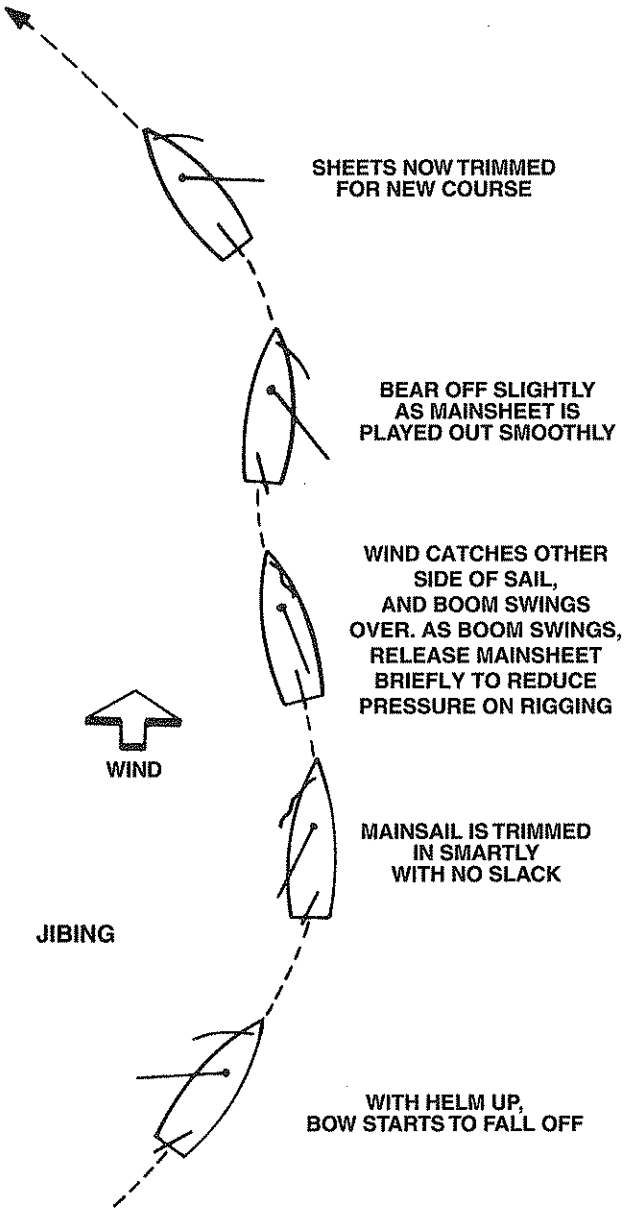
Give-Way Vessel must make a clear and decernable course change that keeps "well clear" of the Stand-On Vessel.

Stand-On Vessel must maintain course and speed.

APPENDIX H

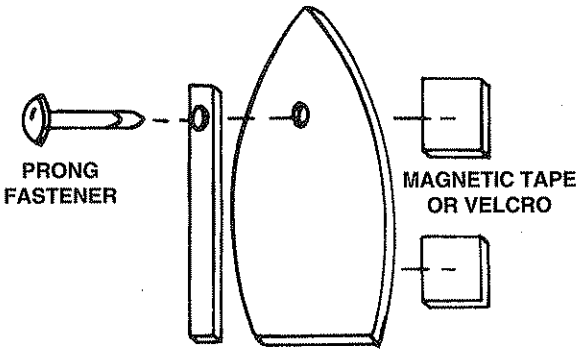
COMING ABOUT AND JIBING



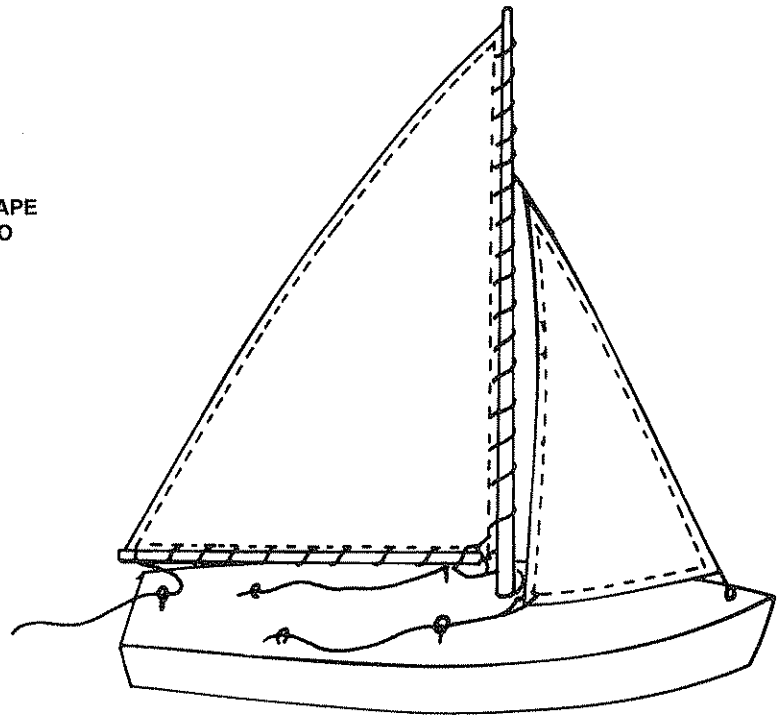


APPENDIX I

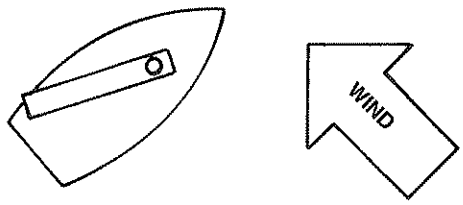
TEACHING AIDS AND HELPS



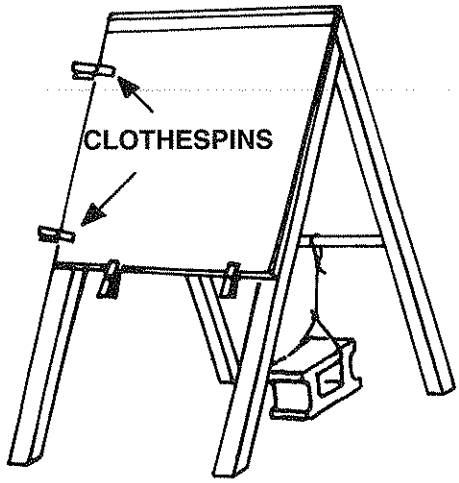
TEACHING AIDS (CUT FROM CARDBOARD)



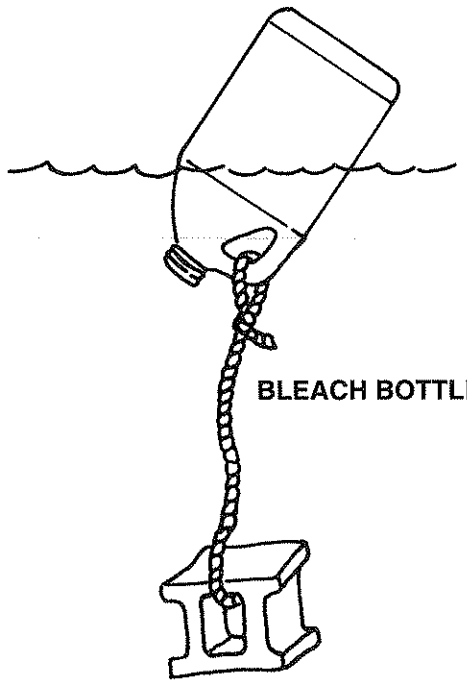
TABLETOP TEACHING MODEL



USE MAGNETIC TAPE ON SHEET METAL
VELCRO ON FLANNEL GRAPH



WINDPROOF YOUR CHARTS



BLEACH BOTTLE BUOY

APPENDIX J

Board Sailing

The Boy Scouts of America recognizes and endorses the recreational sport of board sailing. Whenever Scouts or Venturers participate in board sailing activity, the following rules and procedures should be followed:

1. A responsible adult must supervise all board sailing activity. The supervising adult must be experienced and qualified in water safety (BSA Lifeguard, Red Cross Lifesaving, YMCA Senior Lifesaver, or U.S. Sailing Level I Board Sailing Instructor) and must be an experienced board sailer, or use assistants with such qualifications and experience.
2. Only persons classified as swimmers may participate in board sailing activity.
3. All participants must present evidence of fitness assured by a complete health history from a physician, parent, or legal guardian. Adjust all supervision, discipline, and protection to anticipate any potential risks associated with individual health conditions. In the event of any significant health condition, an examination by a physician (recommended BSA form No. 34412A) should be required by the adult supervisor.
4. All participants must receive instruction in board sailing skills and safety from an experienced board sailing instructor.
5. All persons must wear an approved personal flotation device at all times while participating in board sailing activity.
6. No one sails alone; always have a buddy on the water (in a boat or on another board).
7. No board sailing at night, at dusk, or in rough weather. Weather and water conditions must be known and understood in advance of any board sailing activity, and weather forecasts should be studied. Exposure suits are recommended for cool water or cool weather.
8. Avoid swimming areas, fishermen, and underwater diving activity. Use designated board sailing beaches when available.
9. Equipment should be checked and repaired as needed before each use. Equipment should meet applicable state and federal requirements.
10. When in difficulty, persons should stay with the board and not attempt to swim to shore.
11. All participants should know, understand, and follow the rules and procedures for safe board sailing. Supervisors should encourage the individual exercise of good judgment and self-discipline, and assure that safety rules are fairly and consistently enforced.

Hypothermia

A major hazard of persons on or about outdoor waters is the disaster of falling into such waters of a temperature of 70° F or lower. A great amount of research has developed a number of charts detailing survival time at various temperatures. Hypothermia is no joke; it is a life-threatening situation.

If someone goes overboard in cold water, fish them out as soon as possible—minutes count. The victim should shed all wet clothes and shoes and be placed in a warm sleeping bag or be wrapped in a warm blanket. Do not abrade frozen

skin by rubbing the victim; this is of little use. Use hot water bottles or a heating pad (not too hot) for additional warmth. If the victim's life is in danger from hypothermia, you could save a life by crawling into the sleeping bag with the victim (presuming you are warm and dry) and sharing your warmth.

The reheating process may take hours. No liquids should be given to the victim by mouth until the victim is able to handle them alone.

If the victim is not breathing, forget all the above and concentrate on mouth-to-mouth resuscitation and CPR. Never give up. Stay calm and stay with it; you may save a buddy's life.

Follow these precautions to prevent hypothermia on your outings:

- Always wear your PFD when on deck. The PFD will not keep you warm, but it will keep your head out of the water if you get dunked.
- Never cross an icy deck without a lifeline secured to your person.
- If you go overboard, assume the HELP (Heat Escape Lessening Posture) and float. This requires you to hold your arms and knees close to your chest and keep your head out of the water. (You must be wearing a PFD to assume this position).
- If there are others overboard with you, form a tight group and huddle together. This conserves body heat.
- Never remove clothing or shoes in the water, because this is a form of insulation from the cold.
- Get as much of your body out of the water as you can using flotsam or an overturned boat.

Learn the rules of avoiding and treating hypothermia. You may save a life—it may be your own. Learn first aid procedures—this makes you an important part of any crew.

As your victim recovers you may increase the temperature of the applied heating device, but in the case of water do not heat beyond your elbow temperature gauge.

Hypothermia Resources

Safety merit badge pamphlet, No. 33347A
First Aid merit badge pamphlet, No. 33301B
How to Survive on Land and Sea, U.S. Naval Institute, Annapolis, MD 21402
Lifesaving merit badge pamphlet, No. 33297A
Swimming merit badge pamphlet, No. 33352B
River Rescue, Ohio Department of Natural Resources, Div. of Watercraft Fountain Square, Bldg. C-2, Columbus, OH 43224
The Drowning Machine (20-min. 16-mm film or video), for rent, Filmspace, 615 Clay Lane, State College, PA 16801
A Pocket Guide to Cold Water Survival, COMDTPUT P3131.6 (March 1990), available through Coast Guard Headquarters, Auxiliary, Boating and Consumer Affairs Division, Information, toll-free 800-368-5547
Cold Water Kills, pamphlet, Pennsylvania Fish Commission, Bureau of Waterways

Additional Resources

U.S. Coast Guard Auxiliary

This is a civilian arm of the Coast Guard that concerns itself principally with safety promotion in small boats. It goes back to 1939 and has a membership exceeding 37,000 volunteers. Its organization substantially follows the Coast Guard districts.

Navy Youth Programs Organization

Recently, the Navy greatly increased the number of personnel involved with youth programs. Youth programs field representatives and petty officers are now assigned throughout the country for the purpose of Navy youth program/Boy Scouts of America liaison.

Youth programs field representatives are officers in the Navy whose primary duties consist of making arrangements for tours and visits to Navy shore bases, aircraft squadrons, ships, and submarines. In addition, they coordinate daylight and overnight shipboard orientation cruises and aircraft orientation flights. They are currently located in the following areas:

- Long Beach, California
- San Diego, California
- San Francisco, California
- Jacksonville, Florida
- Charleston, South Carolina
- Norfolk, Virginia

Youth programs petty officers are Navy petty officers located in 41 major cities throughout the continental United States. They can assist local councils in the same manner as the youth programs field representatives.

COUNCIL ACTION. By contacting Navy youth programs field representatives, councils can determine if any Navy youth programs petty officers serve their area. Consideration might be given to meeting with those people to review council or unit use of Navy programs and facilities.

National Ocean Service

This is a scientific and technical bureau of the National Oceanographic and Atmospheric Administration of the U.S. Department of Commerce. President Thomas Jefferson created its predecessor, the U.S. Coast and Geodetic Survey, in 1807. Its purpose is to assist marine and air commerce by creating nautical and aeronautical charts and related publications.

The Service produces most of the nautical charts in the United States, more than the combined output of the Army Corps of Engineers (inland waters) and the U.S. Naval Oceanographic Office (offshore and foreign waters). These charts cover more than 85,000 miles of coastline and offshore areas.

About 2,000 mathematicians, geophysicists, cartographers, photogrammetrists, draftsmen, and others are supervised by about 185 commissioned officers who are graduate engineers. The latter range in rank from ensign to admiral.

The Service's headquarters are near Washington, D.C. It has 13 district offices, four computing and processing offices, nine observatories, and a seismological laboratory. It maintains about 40 survey parties in the field and has a fleet of 15 survey vessels.

You can get a catalog of publications listing prices and the addresses of more than 500 authorized agents. It is available free if you write the National Ocean Service, Riverdale, MD 20735.

National Imagery and Mapping Agency

This is a unit of the U.S. Navy—until 1962 called the U.S. Navy Hydrographic Office. It produces nautical charts and related material for naval and merchant vessels on the high seas and in foreign waters.

This material is similar to the material that the National Ocean Survey and U.S. Coast Guard produce for coastal and harbor areas. Much of it is available to any Sea Scout ship.

The Hydrographic Center, which goes back to 1830, has headquarters in Maryland, outside Washington, D.C., and branch offices in seacoast cities around the country.

Besides nautical charts, sailing directions, and light lists for the high seas and foreign waters, the Hydrographic Center issues pilot, plotting, loran, consolan, and other charts, and essential books for mariners, including Radio Navigational Aids, Radio Weather Aids, International Code of Signals, American Practical Navigator (Bowditch), and Navigation Dictionary; and the weekly Notice to Mariners, prepared in part with the Coast Guard.

Navigational Charts

Navigational charts for North American waters are issued by three U.S. government departments and one Canadian agency.

The National Ocean Survey (formerly the U.S. Coast and Geodetic Survey) produces more than 800 charts. It distributes more than a million copies a year. These are for all U.S. coastal waters (including tidal rivers).

The U.S. Army Corps of Engineers is responsible for important inland rivers. These include the Mississippi system and the Gulf Intracoastal Waterway. Its U.S. Lake Survey covers the Great Lakes and connecting waters.

Offshore charts are produced by the Defense Mapping Agency Hydrographic Center. It also republishes foreign charts of navigable waters around the world.

The Canadian Hydrographic Service is the official body that charts the Dominion's important waters.

Nautical chart catalogs are available from National Ocean Survey, Riverdale, MD 20737. Catalog 1 lists the Atlantic and Gulf coasts, Catalog 2 covers the Pacific Coast. The catalogs also list publications such as Light Lists, Coast Pilots, Tide Tables, and Current Charts.

Chart No. 1 is a 26-page booklet that lists all symbols and abbreviations used on nautical charts issued by the U.S. government. It is available from all U.S. chart-issuing agencies.

Rules of the Road

The U.S. Coast Guard enforces the rules of the road in U.S. waters and contiguous international waters. Its pamphlet Navigation Rules, International—Inland includes both the International Rules and the Inland Rules. They are printed side by side for easy comparison. This pamphlet includes the pilot rules and other related information. It is available from the Superintendent of Documents and at most marine dealers and book stores.

The Coast Guard Auxiliary assists the regular Coast Guard in safety patrols and search and rescue operations. Its members offer courtesy marine examinations to boaters to assist them in being sure their boats are properly equipped for safe operation.

For information write the U.S. Coast Guard Auxiliary, Washington, DC 20593.

U.S. Navy

The U.S. Navy is the branch of the armed forces of the United States that acts to maintain command of the seas. The Navy includes ships, aircraft, and the men who operate them. It involves shore bases, training stations, and reserve centers—all equipped with facilities and knowledgeable people who can help Sea Scout ships carry out their programs.

No doubt there is a naval facility in your area. Look in the white pages of your telephone directory under "U.S. Government."

U.S. Power Squadrons

These are nonprofit, educational organizations of amateur boatmen. They promote safety afloat, skill in boat handling, piloting, and navigation. They cooperate with federal agencies concerned with boating laws and regulations.

They have well over 50,000 members organized into more than 300 local squadrons in 25 geographic districts. Their training course in piloting and small-boat handling is offered free through local squadrons.

For further information, write the U.S. Power Squadrons, National Headquarters, P.O. Box 30432, Raleigh, NC 27622.

US Sailing Association

US Sailing, a member association, is chartered by the U.S. Congress as the national governing body and the national authority on the sport of sailing. US Sailing's mission is to encourage participation and promote excellence in sailing. It is charged with developing, training, coaching, and administering the US Sailing Team and managing the team members as they work toward competing in the Olympics; maintaining, applying, and administering the Racing Rules of Sailing; conducting national championship competition for all age groups from junior sailors through masters; and establishing and maintaining the standards of sailing skill and instruction by developing training material and examining and certifying sailing instructors, coaches, and officials. For information: www.ussailing.org or phone 1-800-USSAIL-1 or 401-683-0800, 15 Maritime Drive, P.O. Box 1260, Portsmouth, RI 02871.

VENTURING ACTIVITY INTEREST SURVEY

(Completed by Venturing members)

Complete the following. Your responses will be used to help develop the program of activities throughout the year, so it is very important that you provide complete responses.

Name:_____

Date:_____

1. What specific interests do you have that you would like to see our crew pursue during this year?

_____

_____

_____

_____

2. Do you have any ideas or suggestions for activities that would address these interests?

_____

_____

_____

_____

3. Consider for a moment the experience areas (citizenship, service, leadership, social, outdoor, and fitness). How would your interests fit into any of these areas?

_____

_____

_____

_____

VENTURING ACTIVITY INTEREST SURVEY—ALPHA LIST

Please check those activities, tours, projects, and seminars that you would like the crew to plan as part of its program for the year.

- ____ Airport tour
- ____ Auto mechanics
- ____ Automobile plant/ dealership
- ____ Backpacking
- ____ Barbecue party
- ____ Beach party
- ____ Bike hike
- ____ Block party
- ____ Bowling
- ____ Buy a car, how to
- ____ Camping trip
- ____ Canoeing
- ____ Car wash
- ____ Career clinic
- ____ Cave exploring
- ____ Child care
- ____ Christmas party
- ____ Civil defense
- ____ College or university visit
- ____ College panel discussion
- ____ Communications
- ____ Community cleanup activity
- ____ Conservation project
- ____ Cooking
- ____ Court session
- ____ Crew reunion party
- ____ Cruise, sailing
- ____ Cycling/mountain biking
- ____ Dance
- ____ Diet and nutrition
- ____ Disabled citizens, assistance to
- ____ Drug abuse/alcoholism
- ____ Easter egg hunt for children
- ____ Emergency preparedness
- ____ Family picnic
- ____ Family sports day
- ____ Fashion show
- ____ Fire safety
- ____ First aid training
- ____ Fishing
- ____ Gourmet cooking
- ____ Government official
- ____ Halloween party
- ____ Ham radio
- ____ Hiking trail cleanup
- ____ History, study the town's
- ____ History, trace family
- ____ Hobby smorgasbord
- ____ Horseback riding
- ____ Hunter education
- ____ Ice-skating party
- ____ Industry, local
- ____ Intercrew activities
- ____ Job interviewing skills
- ____ Leadership skills
- ____ Lifesaving, swimming
- ____ Military base trip
- ____ Morality, ethics
- ____ Mountaineering
- ____ Movies
- ____ Music listening
- ____ Newsletter writing
- ____ Orientation flight
- ____ Orienteering
- ____ Outdoor living history
- ____ Pancake breakfast/supper
- ____ Parents' night
- ____ Part-time jobs clinic
- ____ Photography
- ____ Physical fitness
- ____ Planetarium
- ____ Plants and wildlife
- ____ Play, produce a
- ____ Power station
- ____ Progressive dinner
- ____ Project COPE
- ____ Public speaking
- ____ Recognition dinner
- ____ Recycling center
- ____ River rafting
- ____ Road rally
- ____ Rock climbing/rappelling
- ____ Sailing
- ____ Saving money
- ____ Scholarships
- ____ Scuba
- ____ Senior citizens, assistance to
- ____ Shooting sports meet
- ____ Skating
- ____ Ski weekend
- ____ Slide show, plan a
- ____ Snorkeling/scuba diving
- ____ Spaghetti dinner
- ____ Sports medicine
- ____ Sports safety
- ____ Sports tournament
- ____ State capitol, visit
- ____ Summer jobs clinic
- ____ Swim meet
- ____ Swimming party
- ____ Television station
- ____ Tennis clinic
- ____ Train trip
- ____ United Way, support the
- ____ Watercraft
- ____ Weather bureau
- ____ Wilderness survival
- ____ Winter camping trip
- ____ Winter sports
- ____ Other

_____

_____

_____

_____

FOR OFFICE USE ONLY			
REGION	COUNCIL NO.	DISTRICT NO.	SHIP NATIONAL NO.

QUARTERMASTER AWARD APPLICATION

BOY SCOUTS OF AMERICA

Ship No. _____ Date _____

Council _____ No. _____

Name _____

Address _____

City _____ State _____ ZIP _____

Date of Birth _____

The Following Approvals Are Required:

1. **Approval by Ship Petty Officers** (Quarterdeck)
   We certify that this Sea Scout has satisfactorily completed the requirements for Quartermaster and lives up to the ideals of Sea Scouting.

   Signed _____
   Boatswain

2. **Approval by Ship Committee**
   We certify that this Sea Scout has satisfactorily completed the requirements for Quartermaster and lives up to the ideals of Sea Scouting.

   Signed _____
   Ship Committee

3. **Approval by Skipper**
   We certify that this Sea Scoout has satisfactorily completed the requirements for Quartermaster and lives up to the ideals of Sea Scouting. He or she has been an active, registered Sea Scout for at least 18 months and has earned the Able rank.

   Signed _____
   Skipper

4. **Council Approval**
   We certify that this Sea Scout appeared before a review board appointed by the Council Advancement Committee on _____ (date). We approve this application and recommend that the Boy Scouts of America authorize the Quartermaster Award for this Sea Scout.

   Signed _____ Signed _____
   For Council Advancement Committee Council Scout Executive

Complete information on Quartermaster requirements is found in the *Sea Scout Manual,* No. 33239C.

I certify that this Sea Scout has satisfactorily completed the following requirements for the Quartermaster Award:

1. **Ideals**—Has led a discussion on "Participating Citizenship" and has submitted a paper on the world fellowship of Scouting or a written analysis of ships' articles.
2. **Membership**—Has attended at least 75 percent of ship meetings and activities for a period of 18 months. Has presented a talk on Sea Scouting and carried out a service project.
3. **Special Skills**—Has completed the 10 special skills required for Quartermaster:
   1. Boats
   2. Marlinspike Seamanship
   3. Ground Tackle
   4. Piloting
   5. Signaling
   6. Swimming
   7. Cruising
   8. Safety
   9. Rules of the Road
   10. Weather
4. **Electives**—Has completed four of the following electives for Quartermaster:

___ Sailing	___ Navigation
___ Engines	___ Drill
___ Radio	___ Piloting
___ Boat Maintenance	___ Yacht Racing Crew
___ Electricity	___ Rigging

Signed _____
Skipper

REFERENCES

List the following people who know you. Give address and telephone number.

	NAME	ADDRESS	TELEPHONE
Parents			
Clergyman			
School Principal or School Teacher			
Employer (if any)			
List Two Other References			

REVIEW OF APPLICATION

Upon completion of all requirements, the Sea Scout completes this application and gives it to his or her Skipper, who presents it to the quarterdeck, then the ship committee for approval. Once approved, this application is sent to the local Boy Scouts of America council service center for review and approval by the council advancement committee which will appoint a review board to interview the Sea Scout. Once approved, and signed by the council Scout executive, this application is sent by the council to the national office, which will confer the Quartermaster Award.

RECOGNITION ITEMS

The national office will send a Quartermaster card and certificate to the council. The following recognition items can be ordered by the council from the Boy Scouts of America Venturing Division:

- Quartermaster Award medal (restricted)
- Quartermaster Award lapel pin (restricted)
- Quartermaster Award charm (restricted)

The following recognition items can be ordered by the council from the BSA Supply Division:

- Quartermaster pocket patch, No. 04100
- Quartermaster sleeve emblem (on blue), No. 04121
- Quartermaster sleeve emblem (on white), No. 04122
- Quartermaster knot, No. 05009

SEA SCOUT SHIP STANDARD SCOUT UNIT SCORESHEET

The Standard Scout Unit Award is designed to recognize the achievement of a national standard by Sea Scout ships. This scoresheet may be submitted to the local council when the ship recharters. The achievements must be met during the ship's past charter year.

Ship No. _____ Ship name _____

Chartered organization _____

District/Division _____ Charter renewal date _____

Requirements

1. The Skipper has completed Venturing leader basic training and Sea Scouting specialized training.
   Yes _____ No _____
2. The ship has at least one mate (21 years of age or older) who has completed Venturing leader basic training and Sea Scouting specialized training.
   Yes _____ No _____
3. The ship rechartered on time. Yes _____ No _____
4. The ship's elected petty officers were trained by the Skipper. Yes _____ No _____
5. The Skipper and elected petty officers held a quarter-deck meeting at least nine times during the year.
   Yes _____ No _____
6. The ship has held regular monthly meetings at least twice a month for nine months during the year.
   Yes _____ No _____
7. The ship has conducted a monthly acitivity at least nine times during the year. Yes _____ No _____
8. The ship has conducted a long cruise or superactivity during the year. Yes _____ No _____
9. The ship has included at least one meeting or activity based on each of Venturing's six experience areas during the year (career, social, citizenship, service, outdoor, and fitness). Yes _____ No _____
10. The ship has a mobilization plan for emergency service.
    Yes _____ No _____
11. The ship members wore Sea Scout uniforms or some form of ship identity (jacket, T-shirt, etc.).
    Yes _____ No _____
12. At least 40 percent of Sea Scouts have advanced one rank during the year (excluding Quartermasters). For ships not using the Sea Scout advancement plan, an alternative program featuring safe-boating training, scuba training, or other course may be substituted; at least 50 percent of ship members must complete the program.
    Yes _____ No _____
13. The ship has participated in at least one council, area, region, or national activity during the year (if available).
    Yes _____ No _____
14. The ship has reregistered with the same number or more members than last year's reregistration.
    Yes _____ No _____

We certify that Ship _____ has met the above requirements and request that the council grant the Standard Venturing Unit Award for _____ (year).

Signed: _____ Skipper _____ Boatswain

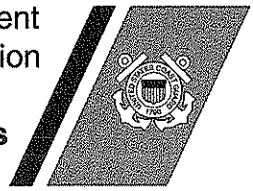
Service Approval: _____ District Member or Commissioner

Council Approval: _____ For the Council Venturing Committee

Upon approval, the ship may order the Standard Venturing Unit Award, No. 5601A, from the local council. It may be worn on the right sleeve of the Sea Scout uniform by ship members and leaders until the ship recharters the following year.

U.S. Department
of Transportation

United States
Coast Guard



Commander
U.S. Coast Guard Recruiting Center

Phone: (209) 267-0938
FAX: (209) 267-4737

1133
22 September 1999

Chief Scout Executive
Boy Scouts of America
1325 West Walnut Hill Lane
P.O. Box 152079
Irving, TX 75015-2079

Dear Chief Scout Executive:

I am pleased to advise you of a U.S. Coast Guard enlistment program that authorizes the advanced pay grade enlistment of active and qualified members of the Sea Scouts who are high school graduates. Instead of enlisting as a Seaman Recruit (pay grade E-1), a currently qualified Able Seaman Sea Scout may be enlisted as a Seaman Apprentice (E-2), and a currently qualified Quartermaster Sea Scout may be enlisted as a Seaman (E-3).

I think your members will find this an attractive enlistment option, and I believe the Coast Guard will benefit by enlisting highly qualified, motivated, and mature individuals to our service. If you have any questions regarding this service, please contact my staff at (202) 267-6659.

Sincerely,

W.G. SCHNEEWEIS
Captain, U.S. Coast Guard
Commanding Officer,
Coast Guard Recruiting Center
by direction of the Commandant

SEA SCOUT LEADER PROGRESS RECORD

☐ Skipper's Key ☐ Sea Scout Leader's Training Award

Name _____

Address _____

City _____ State _____ ZIP _____

Position in Sea Scouting _____

Ship no. _____ District/division _____

Skipper's Key

Training:

1. Complete the sessions in *Venturing Leader Specific Training*, No. 33491D.
2. Complete Sea Scout Leader's Specialized Training, No. 23-400.
3. Complete a boating safety course offered by the U.S. Coast Guard Auxiliary, U.S. Power Squadron, or similar organization.

Tenure:

Complete three years of registered tenure as a Skipper within a five-year period.

Performance:

At least twice during the three-year period, serve as the Skipper of a ship earning the National Quality Unit Award or its equivalent.

_____ _____
Commissioner Date

Certification:

The ship committee chair and commissioner must approve the Skipper's application for a Skipper's Key.

_____ _____
Ship committee chair Date

_____ _____
Commissioner Date

Sea Scout Leader's Training Award

Training:

1. Complete the sessions outlined in *Venturing Leader Specific Training*, No. 33491D.
2. Complete Sea Scout Leader's Specialized Training, No. 23-400.
3. Complete a boating safety course offered by the U.S. Coast Guard Auxiliary, U.S. Power Squadron, or similar organization.

Tenure:

Complete three years of registered tenure in any adult capacity in Sea Scouting.

Performance:

Perform to the satisfaction of the Skipper your assigned leadership duties.

Certification:

The Skipper and commissioner must approve all applications.

_____ _____
Skipper Date

_____ _____
Commissioner Date

Uniform Supply for Sea Scout Leaders and Youth Members

The Department of the Navy, Navy Recruiting Command, has identified the following procedure for members of Sea Scouting to obtain uniforms from the U.S. Navy. Councils are asked to share this information with Sea Scout ships and chartered organizations.

1. Skippers should write the Navy Uniform Support Center at the address shown or fax to 1-800-551-6289. Ask for a *Navy Uniform Catalog* and a Uniform Price List. The letter should indicate that the use is for Sea Scouting, BSA.

   Navy Uniform Support Center
   1545 Crossway Blvd.
   Suite 200
   Chesapeake, VA 23320

   Prices are to be determined by calling the toll-free number. Prices will not be listed in the catalog.

2. Uniform orders require the approval of the local council Scout executive. Approval must include verification of current registration. A suggested approval memo is shown below. A copy should be attached to the uniform order.

3. Questions concerning individual orders may be addressed to the program manager, Navy Uniform Support Center, 1-800-368-4088, ext. 6.

4. A copy of the request should be forwarded to the National Sea Scout Committee.

Date: _____

From: _____ Council, No. _____

Boy Scouts of America

To: Navy Uniform Support Center
1545 Crossway Blvd., Suite 200
Chesapeake, VA 23320

Subject: Verification of Registration

Ship No. _____ is currently chartered in our council. The uniform(s) being ordered are for youth and/or adults currently registered in Sea Scouting.

Signed: _____

Scout Executive

Sea Scout _____

of Ship No. _____ is in good standing and is recommended for the rank of ABLE.

Signed _____
Crew leader

Signed _____
Skipper

Approved by ship's petty officers at a quarter-deck meeting for certificate and badge.

Signed _____
Boatswain

Date _____

ABLE SEA SCOUT SCOREBOARD

Name _____

Ship _____

District _____

Council _____

BOY SCOUTS OF AMERICA

Sea Scout _____

of Ship No. _____ is in good standing and is recommended for the rank of QUARTERMASTER.

Signed _____
Crew leader

Signed _____
Skipper

Approved by ship's petty officers at a quarter-deck meeting for certificate and badge.

Signed _____
Boatswain

Date _____

QUARTERMASTER SEA SCOUT SCOREBOARD

Name _____

Ship _____

District _____

Council _____

BOY SCOUTS OF AMERICA

Sea Scout _____

of Ship No. _____ is in good standing and is recommended for the rank of APPRENTICE.

Signed _____
Crew leader

Signed _____
Skipper

Approved by ship's petty officers at a quarter-deck meeting for certificate and badge.

Signed _____
Boatswain

Date _____

APPRENTICE SEA SCOUT SCOREBOARD

Name _____

Ship _____

District _____

Council _____

BOY SCOUTS OF AMERICA

Sea Scout _____

of Ship No. _____ is in good standing and is recommended for the rank of ORDINARY.

Signed _____
Crew leader

Signed _____
Skipper

Approved by ship's petty officers at a quarter-deck meeting for certificate and badge.

Signed _____
Boatswain

Date _____

ORDINARY SEA SCOUT SCOREBOARD

Name _____

Ship _____

District _____

Council _____

BOY SCOUTS OF AMERICA

ORDINARY SCOREBOARD

IDEALS	INITIAL	DATE
1. Emblems	____	____
2. Flag History	____	____
MEMBERSHIP		
3. 75 Percent Attendance	____	____
4. Quarterdeck Training	____	____
5. Recruit New Member	____	____
SPECIAL SKILLS		
6. Boats	____	____
7. Marlinspike Seamanship	____	____
8. Ground Tackle	____	____
9. Piloting	____	____
10. Communications	____	____
11. Time	____	____
12. Swimming	____	____
13. Cruising	____	____
14. Safety	____	____
15. Galley	____	____
16. Sailing	____	____
17. Work	____	____

18. ELECTIVES: Three required (put initials and date) __/__ Drill, __/__ Signaling, __/__ Compass, __/__ Yacht Racing, __/__ Sailing, __/__ Ropework, __/__ Engines

QUARTERMASTER SCOREBOARD

IDEALS	INITIAL	DATE
1. Lead Discussion	____	____
2. Submit Paper	____	____
MEMBERSHIP		
3. 75 Percent Attendance	____	____
4. Present Program	____	____
5. Service Project	____	____
SPECIAL SKILLS		
6. Boats	____	____
7. Marlinspike Seamanship	____	____
8. Ground Tackle	____	____
9. Piloting	____	____
10. Signaling	____	____
11. Swimming	____	____
12. Cruising	____	____
13. Safety	____	____
14. Rules of the Road	____	____
15. Weather	____	____

16. ELECTIVES: Four required (put initials and date) __/__ Sailing, __/__ Engines, __/__ Radio, __/__ Maintenance, __/__ Electricity, __/__ Navigation, __/__ Drill, __/__ Piloting, __/__ Yacht Crew, __/__ Rigging

APPRENTICE SCOREBOARD

IDEALS	INITIAL	DATE
1. Admission Ceremony	____	____
2. Discussion of Ideals	____	____
MEMBERSHIP		
3. Dues	____	____
4. Uniform	____	____
SPECIAL SKILLS		
5. Seamanship	____	____
6. Safety	____	____
7. Customs	____	____
8. Swimming	____	____
9. Work	____	____

ABLE SCOREBOARD

IDEALS	INITIAL	DATE
1. Conduct Ceremonies	____	____
2. Sea History	____	____
MEMBERSHIP		
3. 75 Percent Attendance	____	____
4. Leadership	____	____
5. Present Program	____	____
SPECIAL SKILLS		
6. Boats	____	____
7. Marlinspike Seamanship	____	____
8. Ground Tackle	____	____
9. Piloting	____	____
10. Swimming	____	____
11. Cruising	____	____
12. Safety	____	____
13. First Aid	____	____
14. Rules of the Road	____	____
15. Navigation	____	____
16. Maintenance	____	____

17. ELECTIVES: Three required (put initials and date) __/__ Sailing, __/__ Boats, __/__ Radio, __/__ Drill, __/__ Engines, __/__ Yacht Racing, __/__ Sea History, __/__ Ropework, __/__ Specialty Proficiency

STATION BILL

				COLLISION	FIRE	ABANDON SHIP	
				General alarm Word passed—piped	General alarm Rapid ring of bell	General alarm Bugle—siren	
No.	Name	Rank	Billet	Stations	Duty	Boat	Will provide

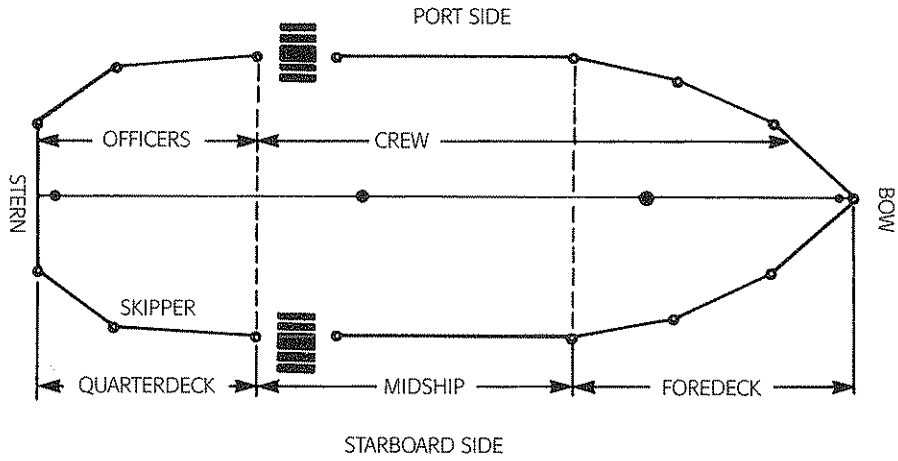
APPENDIX K

LANDSHIP CEREMONIES

Landship Deck Plan

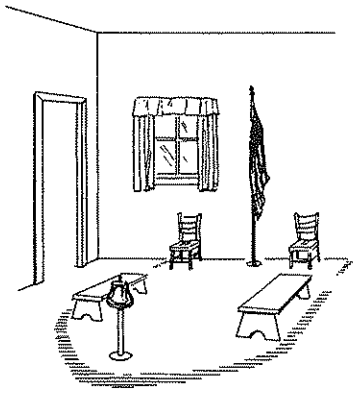
The overall deck plan for a landship is based on the customs and traditions of the U.S. Navy. All members should learn the proper terminology as well as the basic layout.

Deck plan of a landship



Landship Layouts

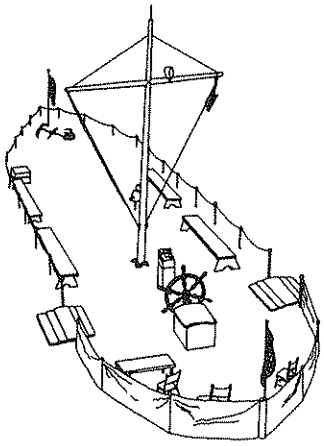
A layout involving minimum equipment is possible for every ship but is recommended only for use until a more serviceable landship can be secured.

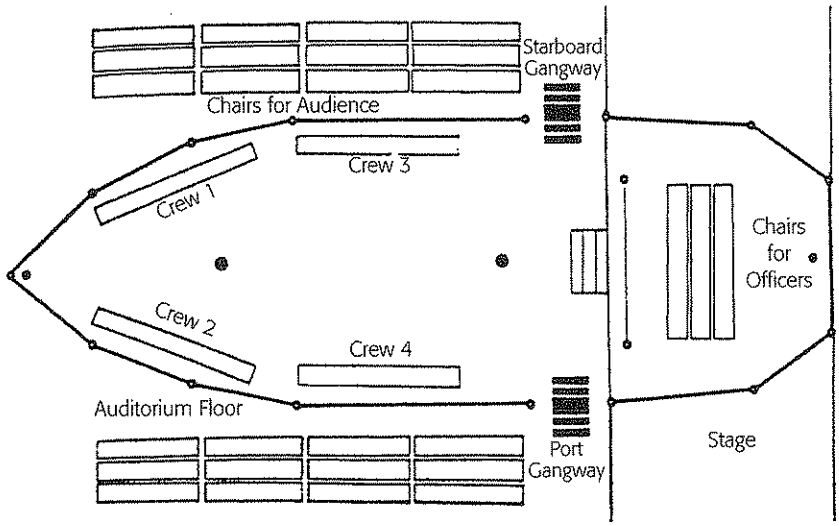


Ship Training Equipment

A good landship needs to have some or all of the training equipment listed here. Store it in sea chests or lockers, but have it available for use when you need it. At times the activity at your ship meeting may take precedence over any ceremonies. You may not want to set up your landship.

- Life jackets
- Ring buoy and line
- Rope for knot tying and splicing
- A fid, or marlinspike
- Signaling equipment
- Sailmaker's palm and needle
- Pilot rules
- Coast and geodetic charts and tidetables
- Parallel rules and protractor
- Lead line
- Compass (liquid type)
- First aid kit
- Models of anchors and buoys
- Models of sextant
- Pelorus or model of one
- Patent log or chip log
- International code flags
- Photos or pictures of various types of boats
- Reference books





Bridge of Honor

Preliminary

(Five minutes before start of ceremony the ship's bell is rung five times; three minutes before start of ceremony the ship's bell is rung three times; two minutes . . . two times; one minute . . . one time.)

(Officer of the deck boards ship from starboard gangway, boatswain boards ship from port gangway. At the rail they render the double salute, then exchange salutes before laying aboard. Upon boarding, the OOD enters the quarterdeck from the port side and takes his or her station on the port side of the bridge, just off the keel-line, facing the bow; the bos'n faces the OOD one step forward of the bridge.)

OOD:
"BOS'N, proceed with the opening ceremony."

BOS'N: (Salutes)
"Aye aye, sir." (OOD returns salute.)

BOS'N:
"CREW LEADERS, muster your crews." (As the crews are forming, the boatswain's mate marches to the port gangway.)

BOS'N'S MATE: (Salutes)
"BOATSWAIN'S MATE [last name], requests permission to lay aboard, sir."

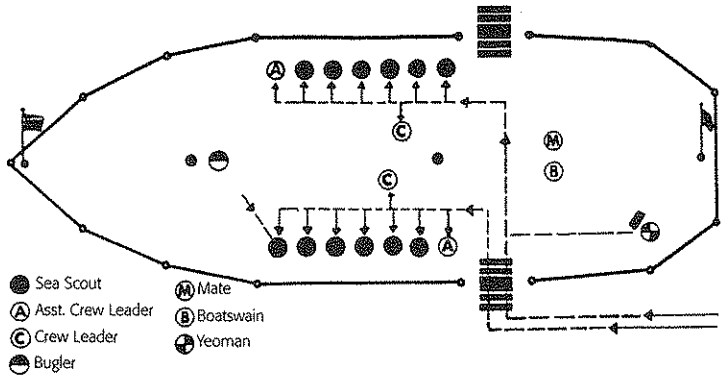
BOS'N:
"Permission granted." (Bos'n returns salute. Bos'n's mate drops salute, executes the double salute, then marches to a station just forward of the port gangway and comes to the position of at ease.)

(The first crew leader marches to the port gangway.

CREW LEADER: (Salutes)
"Starboard Alpha, request permission to lay aboard, sir."

BOS'N:
"Permission granted." (Bos'n returns salute.)

Crews Mustering on Shipboard



CREW LEADER: (Drops his salute, executes the double salute, then to the crew)

"Starboard Alpha, lay aboard." (Crews lay aboard in order. Each individual renders the double salute upon boarding. When the entire crew is on deck and at quarters, the crew leader commands:)

"Inboard face. At close interval, dress right, dress." (The crew leader verifies the alignment and then commands:)

"Ready, front."

BOS'N: (Salutes)

"Sir, the ship is at quarters."

OOD: (OOD returns salute.)

"Very well, receive the report."

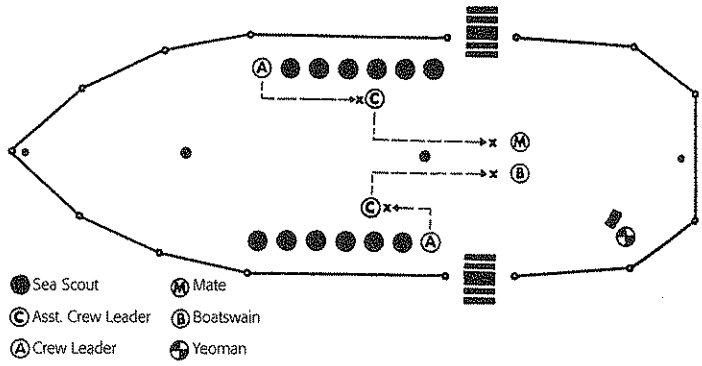
BOS'N: (Salutes)

"Aye aye, sir."

BOS'N: (Turns and faces crews)

"CREW LEADERS, report."

Crew Leaders Reporting



CREW LEADERS: (One at a time each takes one step forward, salutes)

"Starboard Alpha (Port Bravo, . . .), all present or accounted for, sir."

BOS'N: (Salutes OOD)

"Sir, all crews present or accounted for."

OOD*:

"Very well. Assign COLOR GUARD and [number] SIDE BOYS."

BOS'N:

"Aye aye, sir." (Faces crews)

"COLOR GUARD, Alpha 7 and 8; SIDE BOYS, Bravo 7 and 8."

BOS'N: (Bos'n turns to face OOD, salutes)

"Sir, COLOR GUARD and SIDE BOYS have been assigned."

OOD*:

"Very well, stand by for colors." (Passes the ensign to the bos'n and salutes the colors.)

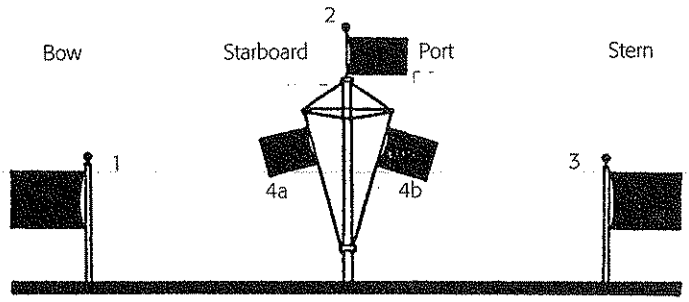
BOS'N:

"Aye aye, sir." (Receives the ensign with both hands, does not return the salute. Faces about to the ship.)

"COLOR GUARD, post." (The color guard lays aft and obtains the ensign from the bos'n, who passes it to the bearer and salutes. The color guard does not return the salute. When the bos'n drops salute, the color guard quickly proceeds to its post, and makes ready the Ensign on the halyard. When all is ready, the bos'n commands:) "Hand salute." (The ensign is run smartly aloft, and the bos'n pipes "Colors" on the boatswain's pipe. The ensign leaves the bearer's hands, and the bearer takes one step backward and salutes. Upon securing the halyard, the color guard takes one step backward and salutes. At the last note of the pipe, the bos'n commands:)

"Ready, two. COLOR GUARD, return to your crew." (The color guard returns to their crews. When they have returned to their stations, the bos'n turns and faces the OOD.)

Flag Placement on a Landship



1. Union Jack
2. Ship's Flag
3. U.S. Ensign

4a. Starboard spreader for guest officers
4b. Port spreader reserved for making signals

OOD:

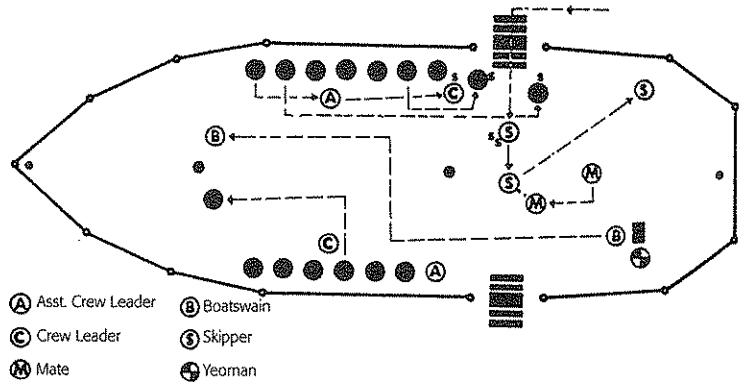
"Stand by to receive the SKIPPER."

BOS'N: (Salutes)
"Aye aye, sir."

BOS'N: (About face)
"Stand by to receive the SKIPPER. COLOR GUARD, SIDE BOYS, post." (Color guard and side boys take one step back and, walking behind their respective crews, report to their assigned duty stations. The bos'n, bos'n's mate, or a crew leader will take up station one step forward of the forward line of side boys and one step inboard to pipe the side.)

OOD:
"[Ship's name] arriving." (Two bells, with piping.)

Receiving the Skipper



BOS'N:
"COLOR GUARD, SIDE BOYS, return to your crews."

OOD: (Welcomes the Skipper aboard, and then facing the Skipper)
"Sir, do you wish to inspect the ship?"

SKIPPER:
"Not at this time. Carry on."

OOD:
"BOS'N, proceed with the scheduled ceremony."

BOS'N: (Salutes)
"Aye aye, sir." (Turns and faces bow of landship)

Inspection
(The Skipper has just informed the OOD that he or she wishes to inspect the ship. The bos'n is facing the OOD awaiting instructions.)

OOD:
"Prepare the ship for inspection."

BOS'N: (Salutes)
"Aye aye, sir." (The OOD returns the salute, the bos'n drops his or her salute, and faces about.)

"Prepare for inspection." (The crew leaders face about and quickly look over their crews. When satisfied, they face inboard and in ascending order by crews, each turns his or her head and eyes toward the bos'n, salutes,

reports, and when the salute is returned, drops the salute and brings his or her head and eyes front.)

CREW LEADER: (Salutes)

"Starboard Alpha, ready for inspection, sir." (The bos'n will return the salute without comment. The remaining crew leaders report in like manner. When the last salute is returned, the bos'n faces above to the OOD.)

BOS'N: (Salutes)

"Sir, the ship is ready for inspection."

OOD: (Returns the salute)

"Very well, put the ship at ease and take your post."

BOS'N: (Drops his salute, faces about to the ship)

"[Ship name], at ease." (The bos'n remains at attention and stands ready to be inspected. As the bos'n puts the ship at ease, the OOD turns to the Skipper and salutes.)

OOD:

"Sir, the ship is ready for inspection."

SKIPPER: (Returns the salute)

"Very well." (The Skipper moves off the quarterdeck and inspects the bos'n. The Skipper may direct the OOD or the bos'n to join him or her and take notes during the inspection. When so directed, the OOD or bos'n moves to the left rear of the Skipper and accompanies the Skipper throughout the inspection. As the Skipper approaches the bos'n's mate's station at the port gangway, the bos'n's mate comes to attention. The Skipper halts, centered one step from the bos'n's mate and facing him or her.)

BOS'N'S MATE: (Salutes)

"BOATSWAIN'S MATE [last name], ready for inspection, sir." (The Skipper returns the salute. The bos'n's mate drops his or her salute. The Skipper inspects the bos'n's mate; he or she may comment, but normally the Skipper reserves any criticism, informing the bos'n of any discrepancies at the conclusion of the inspection. When the Skipper is finished, he or she and the bos'n's mate exchange salutes. Then the Skipper moves to the after crew on the port side. As the Skipper departs, the bos'n's mate comes to the position of at ease.)

CREW LEADER DELTA: (As the Skipper approaches, comes to attention and to his or her crew)

"Port Delta, attention." (The Skipper halts centered one step from and facing the crew leader. The crew leader salutes.)

"Port Delta, ready for inspection, sir." The Skipper returns the salute. The crew leader drops his or her salute. The Skipper inspects the crew leader, moves around to the left of the crew leader, and halts in front of the first person to be inspected. At this time, the crew leader executes an about face and moves to the right rear of the Skipper and accompanies him or her throughout the inspection of the crew. The party passes down the front of

the crew, beginning at the right of the line. When the party has cleared the end of the crew line, the crew leader commands:)

"One step forward, march." (The party then passes behind the crew. When the party has cleared the rear of the line, the crew leader commands:)

"One step backward, march." (The crew leader then marches to a position in front of the seaman at the right of the crew line, faces inboard and awaits the Skipper. The Skipper may comment briefly on the results. After concluding his or her remarks to the crew leader, the Skipper and crew leader exchange salutes, then the Skipper moves to the next crew. As the Skipper departs, the crew leader commands:)

"At ease." (He or she then marches to his or her station, front and center of the crew, faces inboard, and comes to the position of at ease. The Skipper proceeds clockwise around the deck, inspecting each crew in a similar manner. After inspecting the after crew on the starboard side, the Skipper may wish to discuss the results with the bos'n, in which case the Skipper approaches the Bos'n's station forward of the bridge. The Skipper and bos'n exchange salutes and the Skipper comments on the results of the inspection. After concluding his or her remarks, they again exchange salutes and the Skipper returns to the quarterdeck. As the Skipper departs, the bos'n to the ship:)

BOS'N:

"[Ship name], attention." (As the bos'n brings the ship to attention, the Skipper enters the quarterdeck and after exchanging salutes, normally directs the OOD to proceed with the meeting program.)

OOD: (Faces the bos'n)

"Proceed with the scheduled activity."

BOS'N: (Salutes)

"Aye aye, sir." (The OOD returns the salute, the bos'n drops his or her salute and faces about. The commands given at this time will vary depending upon the activity. Normally, the bos'n will give the following command:)

"[Ship name], uncover, seats."

Opening

(If special opening ceremony is planned, the bos'n says:)

"SEAMAN [last name], proceed with the opening."

Pledge of Allegiance

BOS'N:

"SEAMAN [last name], lay aft."

SN: (Salutes)

"SEAMAN [last name] reporting, sir." (Bos'n returns salute.)

BOS'N:

"Lead the ship in the Pledge of Allegiance."

SN: (Salutes)

"Aye aye, sir. Face the American flag. Hand salute. 'I pledge allegiance . . . .' Two. Inboard face."

BOS'N:
"SEAMAN [last name], return to your crew."

SN: (Salutes)
"Aye aye, sir."

BOS'N:
"BOS'N'S MATE [last name], lay aft."
(Option: Change-of-Command for Skippers, see page 371.)

BOS'N'S MATE: (Salutes)
"BOS'N'S MATE [last name], reporting, sir."

BOS'N:
"BOS'N'S MATE [last name], take command of the ship for the admission ceremony."

BOS'N'S MATE: (Salutes)
"Aye aye, sir."

Sea Scout's Admission Ceremony

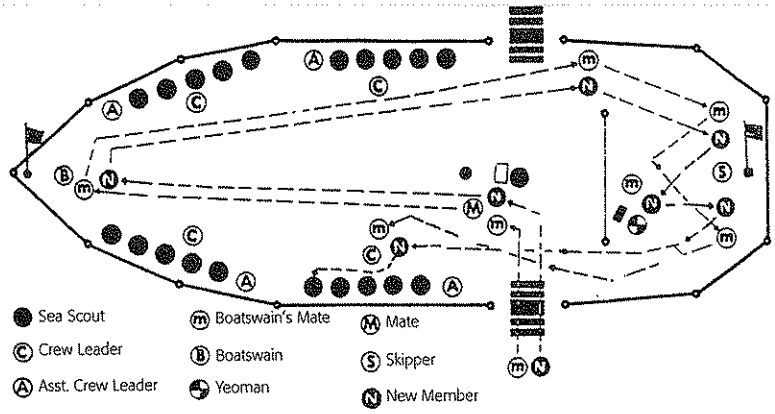
The boatswain's mate for administration is in charge of the ceremony, under the guidance of the first mate. The ceremony is carried out aboard a landship or in a room with chairs set to outline a landship.

The boatswain's mate for administration instructs the candidate beforehand in his or her part of the ceremony. If there is more than one candidate, they are handled as a group and speak out in unison. Chairs should be set up on the outside of the landship for parents and guests. They should be sent invitations and be ushered to their seats by Sea Scouts before the ceremony begins.

The following items are necessary for the admissions ceremony:
The national ensign
Venturing Code poster
Venturing emblem
Sea Promise poster
Small table
Ship's logbook placed on table
Ship's code
Sea Scout Manual
Recruit's membership certificate

Sea Scout ships can add a special touch to their admission ceremony by using lighting effects and recorded sound effects (e.g., sound of breaking

Conducting the Admission Ceremony



waves). They can use their imagination so long as they remember that the purpose of the admission ceremony is to give both the candidate and parents a serious look at the ideals and responsibilities of Sea Scouting as well as the program opportunities.

The admission ceremony generally follows the regular opening ceremonies of a Sea Scout ship. It is a short and impressive ceremony with the entire membership standing in formation (either at ease or at attention, as directed by their petty officers). The yeoman and crew leader of the crew to which the candidate is assigned take part.

The boatswain's mate for administration begins the ceremony by inviting the parents of the recruit to come aboard. The honor guard then escorts them over the port gangway to the quarterdeck, where they are introduced to the Skipper and then taken to their seats for the ceremony.

The boatswain's mate for administration then calls for the recruit and meets and escorts the recruit from the port gangway to the first mate, who is stationed at the mainmast. Stationed also at the mainmast is the boatswain's mate for program, with the Venturing Code poster and the Venturing emblem poster rolled up underarm. As the recruit approaches, the boatswain's mate for program unrolls the Venturing Code poster and holds it in full view.

BOS'N'S MATE:

"HONOR GUARD, escort the RECRUIT's parents aboard ship." (The honor guard escorts them over the port gangway to the quarterdeck and introduces them to the Skipper, then offers them seats for the ceremony.)

BOS'N'S MATE:

"Will the new RECRUIT please come forward to the port gangway?" (The bos'n's mate meets the recruit at the port gangway and escorts him or her to the first mate, who is stationed at the main mast.)

BOS'N'S MATE: (Approaches and salutes the first mate)

"Sir, I present SEAMAN RECRUIT [last name] for membership in our ship."

FIRST MATE: (Shakes hand with the recruit)

"Welcome aboard. Sea Scouting as a part of the Venturing program has its guiding principles expressed in the Venturing Code, which I will read to you now." (The bos'n's mate for program unrolls the Venturing Code poster. The first mate reads the Venturing Code loud enough for the entire company to hear.)

FIRST MATE:

"SEAMAN RECRUIT [last name], will you subscribe to that code? If you will, say 'I do.' "

RECRUIT:

"I do."

(The bos'n's mate for program then unrolls the second poster and reveals the Venturing emblem for all to see.)

FIRST MATE:

"You now see before you the Venturing emblem. This is the dynamic emblem of Venturing that calls in turn for your dynamic support of Sea Scouting. BOS'N'S MATE, will you take the SEAMAN RECRUIT to the bow of the

ship?" (There, at the bow of the ship, the bos'n is stationed with a rolled-up copy of the Sea Promise poster under the left arm.)

BOS'N'S MATE: (Salutes the BOS'N)
"Mr. BOS'N, I present SEAMAN RECRUIT [last name]."

BOS'N:
"Welcome aboard, SEAMAN RECRUIT [last name]." (Bos'n unrolls the poster and reveals the Sea Promise.)

BOS'N:
"SEAMAN RECRUIT [last name], I now ask you to listen to the Sea Promise." (The Bos'n reads the promise from the poster.)

BOS'N:
"Do you subscribe to that promise, SEAMAN RECRUIT [last name]?"

RECRUIT:
"I do."

BOS'N:
"BOS'N'S MATE, take the SEAMAN RECRUIT to the SKIPPER on the quarterdeck."

BOS'N'S MATE: (Salutes the Skipper upon approach)
"Sir, I present SEAMAN RECRUIT [last name]."

SKIPPER:
"Thank you, BOS'N'S MATE. SEAMAN RECRUIT [last name], I welcome you aboard our ship." (Skipper turns to the ensign.)

SKIPPER:
"Loyalty to our nation and respect to the flag are basic parts of Sea Scouting. With that in mind, I would ask you to be ever mindful of the heritage and freedoms we share in this great country." (Improvising, the Skipper outlines to the recruit and his/her parents first the privileges of membership and second the responsibilities of membership.)

SKIPPER: (Turning to Bos'n's Mate)
"Take the SEAMAN RECRUIT to the YEOMAN's station."

BOS'N'S MATE: (Salutes)
"Aye aye, sir." (The bos'n's mate then presents the recruit to the yeoman.)

BOS'N'S MATE:
"YEOMAN, I present SEAMAN RECRUIT [last name] for membership in our Sea Scout ship."

YEOMAN:
"Welcome aboard, shipmate! Before you sign the ship's log, you must agree to act by our ship's articles, which we call our ship's code, minimum standards, and bylaws. I shall now read them to you." (In a loud, clear voice, the yeoman reads the articles to the recruit and to the entire ship's company and guests.)

YEOMAN:

"Do you subscribe to the code, minimum standards, and bylaws of Sea Scout Ship [number], the S.S.S. [name]?"

RECRUIT:

"I do."

YEOMAN:

"You will now sign your name in the ship's log."

RECRUIT: (Signs the ship's log, after which bos'n's mate guides the candidate back to the Skipper.)

BOS'N'S MATE: (Salutes Skipper)

"Sir, SEAMAN CANDIDATE [last name] has signed the ship's log."

SKIPPER: (Returns the salute and then shakes hands with the candidate)

"Welcome aboard, SEAMAN CANDIDATE [last name]. On behalf of the petty officers and crew of this ship and the Boy Scouts of America, I present you with your certificate of membership. The *Sea Scout Manual*, which you received earlier, should be your guide as you become a participating member of this ship's company. BOS'N'S MATE, take this seaman to [his/her] assigned crew."

BOS'N'S MATE: (Salutes the Skipper)

"Yes, sir. This way, SEAMAN CANDIDATE [last name]." (Bos'n's mate takes candidates to their assigned crews and presents candidates to their crew leaders.)

BOS'N'S MATE:

"CREW LEADER [last name], SEAMAN CANDIDATE [last name] is now a member of this ship and is assigned to your crew."

CREW LEADER: (Salutes the bos'n's mate. Then, facing candidate, says:)

"Welcome to our crew."

BOS'N'S MATE:

"HONOR GUARD, escort the parents of the CANDIDATE ashore." (Parents of the candidate are escorted ashore off the port gangway and the honor guard returns to their crew[s].)

BOS'N'S MATE: (Reports back to and salutes the bos'n)

"Sir, the CANDIDATE is now an official member."

BOS'N:

"Very well, BOS'N'S MATE, I am ready to relieve you of command."

BOS'N'S MATE: (Salutes)

"Aye aye, sir."

BOS'N: (Turns and faces the Skipper, salutes)

"Sir, the admission ceremony has been completed and the CANDIDATE is now an official member."

SKIPPER:
"Thank you. Carry on."

Awards and other business are conducted at this time.

Closing

OOD:
"BOATSWAIN."

BOS'N: (Marches by the most direct route to his or her station forward of the quarterdeck and salutes)
"BOATSWAIN [last name], reports."

OOD: (Returns the salute)
"Call all hands, stations for final muster."

BOS'N:
"Aye aye, sir." (Drops his salute, faces about, pipes 'All Hands' on the boatswain's pipe, and then commands:)

"All hands to stations for final muster." (When all crews are facing inboard, the bos'n faces about to the OOD and salutes.)

"Sir, the ship is at quarters."

OOD: (Returns the salute)
"Very well, proceed with announcements."

BOS'N:
"Aye aye, sir." (Drops his salute, faces about.)

"[Ship name], uncover, seats." (The bos'n proceeds with the announcements. When others are called upon to speak, the bos'n takes a seat at a post by the starboard gangway. When the announcements are completed, the bos'n stands and introduces the Skipper's Minute. When the Skipper is finished, he or she moves to the quarterdeck. As the Skipper enters the quarterdeck, the bos'n covers and takes his station forward of the bridge, facing aft.)

SKIPPER:
"Sir, I am about to leave the ship."

OOD: (Faces Skipper and salutes.)
"Aye aye, sir."

OOD*: (Left face toward Bos'n)
"BOS'N, the SKIPPER is about to leave the ship."

BOS'N: (Salutes)
"Aye aye, sir." (Faces about to the ship.)

"[Ship name], attention. Covers. The SKIPPER is about to leave the ship. COLOR GUARD, SIDE BOYS, post." (The members of the Skipper's party march to the starboard gangway, execute the double salute, and exit the landship. As each officer passes between the side boys, the petty officer "pipes the side." The OOD returns each salute to the quarterdeck. He or she then escorts the Skipper to the port side of the quarterdeck. As the Skipper leaves the quarterdeck, he or she shakes hands with the OOD, then walks to the starboard gangway.)

OOD:

"[Ship's name] departing." (Two bells, with piping. The Skipper's flag is hauled down. As the Skipper clears the gangway, the bos'n returns to his or her station forward of the bridge and faces forward.)

BOS'N:

"COLOR GUARD, SIDE BOYS, return to your crews."

BOS'N: (Turns and faces OOD, salutes)

"Sir, the side is secured."

OOD: (Returns salute)

"Stand by for colors."

BOS'N:

"Aye aye, sir." (Drops salute and faces about to the ship.)

"COLOR GUARD, post." (The color guard marches by the most direct route to its posts at the flagstaff. The color guard frees the halyard and stands by to lower the ensign. When all is ready, the bos'n commands:)

"Hand salute." (The crew leaders in unison "pipe the side," repeating the call once. The ensign is slowly run down in time to reach the hands of the color guard at the end of the call. At the last note, the bos'n faces about.)

"Ready, two. Inboard, face." (The color guard folds the ensign in the prescribed manner and when finished, quickly march to a position front and center of the bos'n, pass the ensign to him or her, take one step backward, salute, drop their salutes, and then return to their crews. The bos'n does not return the salutes but instead faces about, passes the ensign to the OOD, salutes, drops salute, and awaits instructions. The OOD secures the ensign on the bridge. The OOD does not return the bos'n's salute.)

OOD:

"BOATSWAIN, dismiss the ship."

BOS'N: (Salutes)

"Aye aye, sir." (Drops salute and faces about to the ship.)

"CREW LEADERS, dismiss your crews." (The crews face to the right and the crew leaders march to their post at the head of the crew. The crews leave the landship by the port gangway. Normally, the after crew on the port side exits first, then the remaining crews exit in clockwise order around the deck.)

CREW LEADER DELTA: (Leads his crew to the port gangway, halts, faces the bos'n and salutes)

"Port Delta, request permission to lay ashore, sir."

BOS'N: (Facing the crew leader, returns the salute)

"Permission granted."

CREW LEADER DELTA: (Drops salute, executes the double salute, then says to his or her crew:)

"Port Delta, lay ashore." (The crew leader exits the landship. Each crew member marches to the gangway, executes the double salute, then lays ashore. The OOD and bos'n return each salute to the quarterdeck. The remaining crews lay ashore in like manner. When the last crew has cleared the gangway, the bos'n's mate marches to the gangway, halts, and faces the bos'n.)

BOS'N'S MATE: (Salutes)

"BOATSWAIN'S MATE [last name] requests permission to lay ashore, sir."

BOS'N: (Returns the salute)

"Permission granted." (The bos'n's mate drops his salute, executes the double salute, then exits the landship. As the bos'n's mate clears the gangway, the bos'n faces the OOD and salutes.)

BOS'N:

"Sir, the ship is dismissed."

OOD: (Returns salute)

"Very well, stand by to lay ashore."

BOS'N:

"Aye aye, sir." (Drops his or her salute. OOD passes to the right of the bos'n. Proceeding toward respective starboard and port gangways, they exchange salutes, the double salute, and exit the landship.)

NOTE:

1. "Ma'am" is interchangeable with "Sir."
2. Side boys render salutes when piping aboard or when departure commences. The salutes drop when the piping stops.
3. If dignitaries are included, add into script "and dignitaries" wherever an asterisk (*) is shown.
4. Strokes of the ship's bell for arrival and departure of dignitaries:
   TWO BELLS—[Ship's name] Skipper, arriving or departing (and ship's officers, visiting ships' officers, ship committee members)
   FOUR BELLS—[Council name] Council commodore, arriving or departing; [council name] Council vice commodore, arriving or departing (any district and council officers)
   SIX BELLS—[Region name] Region commodore, arriving or departing; [region name] Region vice commodore, arriving or departing (any officers related to the regional office)
   EIGHT BELLS—National commodore arriving or departing; national committee person arriving or departing (any officers related to the National Council)

   It is suggested for expediency to have the number of side boys required for the senior-most dignitary line up all at once. As dignitaries come aboard together (junior first), and as their (above) titles are announced, let the ship's bell toll their status. Departure is in reverse order.

Change-of-Command for Skippers

OOD:

Introduction of outgoing Skipper. Outgoing Skipper makes appropriate comments as desired.

OOD:

Introduction of incoming Skipper/orders

"S.S.S. [Ship's name], Attention!"

INCOMING SKIPPER:

"I will now read 'The Skipper's Orders.' The SKIPPER's duties include, but are not limited to, the following:

As SKIPPER, you are

- To be the key adult leader of the Sea Scout ship, an Advisor, a friend, and a counselor to Sea Scouts
- To be the adult leader who gives direction to the ship program while carrying out the most important duty—advising and coaching the petty officers as they plan, organize, and conduct the activities of the ship
- To be the leader, though you make most of your significant efforts behind the scenes
- To coach and give leadership to your quarterdeck petty officers who, in turn, conduct the program of the ship
- Not expected to do and know everything (The crew will listen to your advice and carry out the program. They will count on you to help in recruiting people who have the skills and equipment that will enhance the ship program.)
- To accept the BSA Declaration of Religious Principle and be of the highest moral character

If you accept these terms and conditions of a Sea Scout SKIPPER, report to SKIPPER [first and last name] and relieve [him or her] as SKIPPER, Sea Scout Ship [Ship's name]."

OUTGOING SKIPPER: (Stands)

INCOMING SKIPPER: (Approaches outgoing Skipper, salutes, and states:)

"Sir, I am ready to relieve you."

OUTGOING SKIPPER: (Salutes and states:)

"I stand relieved."

INCOMING SKIPPER:

"I accept command." (Once outgoing Skipper is seated, Skipper commands:)

"[Ship name], be seated." (Makes comments as desired.)

Continue program.

APPENDIX L

CRISIS-AT-SEA SHIPBOARD EMERGENCY DRILLS

The following exercises are suggested for practice by all adult leaders, petty officers, and ship members. Emergency drills are very important, and new members should be trained as soon after joining as possible. Frequent unannounced practice should be standard protocol. Remember, safety at sea is a high priority in Sea Scouting. The term "officer of the deck" (OOD) as it relates to these drills refers to the person in charge of the vessel's operations while under way. The OOD may be the Skipper, the boatswain, or another qualified individual.

I. Man Overboard

Tie together two milk bottles that have been half-filled with water. In open water, toss the milk bottles into the water and announce, "This is a drill. Man overboard."

A. Sailing vessels

1. Officer of the deck's duties
   a. The OOD immediately gives the command, "Right (or left) full rudder." The vessel is turned so the bow turns toward the side where the victim entered the water (e.g., if the victim fell off the starboard side, the command would be for right full rudder).
   b. The OOD orders the vessel's engine started immediately. He then gives the command, "Man your rescue stations." If the vessel has a public address system, the alert, "This is a drill. Man overboard; man your rescue stations," should be repeated on the PA system.
   c. When the vessel is exactly 60 degrees from its original course, the OOD gives the command, "Left (or right) full rudder," and turns the vessel left (or right) until the vessel reaches the exact reciprocal of the original course. The OOD then orders, "Steady up on course _____."
   Example: If the vessel is heading north (000 degrees), the OOD would turn the vessel right to 060 degrees, then left to 180 degrees.
   d. The jib sheet is not immediately released. At the point where the vessel is about to beam reach on the reciprocal course, the OOD orders, "Release the mainsheet," and allows the mainsail to luff.
   e. Once on a reciprocal course, as the vessel approaches the victim, the OOD orders the rudder right or left full again, as though he were trying to turn the vessel back through the wind. Approach the victim to windward. This procedure causes the vessel to "heave to" or stop. The turn is called a Williamson turn and, if properly executed, will return the vessel to the spot where the victim entered the water.
2. Lookout's duties
   a. The lookout will immediately locate the victim in the water and will not take his eyes off the victim. The lookout will point a finger at the location of the victim in the water and give verbal location of the victim relative to the vessel's position.
   b. As the vessel approaches the victim, the lookout will give continuous updates as to the victim's location. Some vessels have electronic ship communications systems that make this operation easier.

3. Navigator's duties
   a. The navigator will immediately determine exactly where the victim fell into the water by whatever means are available. If the vessel has GPS or loran, write the exact latitude and longitude of the position on the log. Some GPS and loran systems have a man-overboard feature that allows the device to retain the exact position of the victim by simply pushing a button. Read the instructions carefully on the GPS or loran.
   b. If the crew cannot immediately spot the victim, the navigator determines the current position and continuously plots a course to the presumed location of the victim. The navigator is usually near the VHF radio and should call the U.S. Coast Guard if the victim is not immediately found.
4. Helmsman's duties
   a. The helmsman must follow the exact instructions of the OOD. He must be familiar with what is about to happen. The helmsman must also fully understand the Williamson turn and how to heave to.
5. General crew's duties
   a. Throw some floating object overboard immediately to mark the site and to give the victim something to grasp for added buoyancy. Some vessels are equipped with a man-overboard pole that can be released by a crew member. At night, point a light on the victim and hold it there to help guide the helmsman.
   b. Crew members will put on their PFDs as soon as practical. The lookout should always be wearing his PFD if he is standing on the bow. It may be necessary to put a swimmer in the water, but do not put a member of the crew into the water immediately unless the victim is a small child or an elderly or handicapped adult. One member of the crew should be preparing a line to be attached to the swimmer if necessary. A first aid kit should be brought on deck as well as blankets, if conditions dictate.
   c. The procedure for getting the victim back on board varies with the vessel. If the victim cannot help himself, it may be necessary to rig a sling suspended from a block connected to the sail or cargo boom. Generally, lowering a ladder will work. Smaller vessels are more stable if the victim boards over the stern. Experiment with this procedure in a safe area with the vessel at anchor.
   d. If the vessel begins an extended search for the victim, the international signal flag "Oscar" should be hoisted on the port side of the vessel.

B. Power vessels

The procedure for power vessels is the same as under sail except for sail-handling procedures.

II. Fire

A crew member or the OOD announces, "This is a drill. Fire in the forward paint locker."

A. All vessels

1. OOD's duties
   a. The OOD gives the order, "All stop," if the vessel is under power.
   b. The OOD sends a crew member forward to note the exact origin of the fire. If there is breathing equipment on board, the crew

member should wear it. While moving forward to locate the fire, the crew member should carry a fire extinguisher. If the vessel has a public address system, the alert, "This is a drill. Fire in the forward paint locker; all hands man your fire-fighting stations," should be broadcast.

   c. The OOD orders another crew member to collect all other fire extinguishers and carry them to the fire's location.
   d. The OOD will prepare the crew to abandon ship.
2. Navigator's duties
   a. The navigator will immediately fix the exact location of the vessel.
   b. The navigator will simulate a call to the Coast Guard giving the vessel's position and description, the number of people on board, and the nature of the emergency.
3. Crew's duties
   a. Crew members will put on their PFDs.
   b. No unnecessary talking.
   c. Bring the first aid kit topside.
   d. Prepare to abandon ship.
4. Advanced training
   a. Be sure all crew members know general fire-fighting techniques. In a safe area ashore, light a fire in a container using charcoal lighter fluid and have crew members extinguish the fire using extinguishers.
   b. Be sure all crew members know the types and classes of fire extinguishers, and understand the ABCs of fire chemistry (i.e., fuel + oxygen + heat).
   c. Be sure all crew members understand the damage that smoke and heat cause when inhaled.
   d. Plan a trip to a fire station or a Coast Guard station, and arrange for a lecture on fire fighting. The Coast Guard and Navy have simulators to practice fire fighting.

III. Damage Control Drill

Your ship must establish a damage control procedure for each vessel it uses. This procedure will vary widely from vessel to vessel. Here are some basics for damage control drills:

- Require that each ship member know the location and proper operation of all through-hull fittings. To practice, blindfold ship members one by one and require them to find and secure certain through-hull fittings.
- Know the location and operation of all bilge pumps. Have the crew man the pumps and make them operational. Practice bilge pump replacement in case a pump fails.
- Simulate a hole in the hull at a particular point and ask crew members what they would do. Ensure that you have damage control materials on board (plywood, underwater mastic, etc.). Large vessels should have damage control lockers.
- As you begin damage control, have a crew member simulate a call to the Coast Guard, giving them the same information as in a fire drill.

- Prepare to abandon ship.
- Don't take chances with your crew. If the situation is grave or life-threatening, abandon ship. Note though that you are better off floating on the vessel than in a life raft or PFD. Knowledge and practice will ensure a successful outcome in emergencies.

IV. Abandon Ship Drill

In a safe area while riding at anchor, the OOD gives the command, "This is a drill. Prepare to abandon ship."

A. All vessels

1. Preparation
   a. An abandon ship bag should be prepared ahead. It should contain at a minimum a portable VHF radio, compass, flares, waterproof charts, signal mirror, knife, fishing equipment, first aid kit, and a waterproof flashlight.
   b. All crew members must be briefed on the abandon ship procedure and know their duties and stations.
   c. Everyone must know how to operate a VHF marine radio.
2. OOD's duties
   a. Order the ship to abandon ship stations.
   b. Have the abandon ship bag placed in life raft and assign a ship member to be responsible for it.
   c. Direct the navigator to determine the vessel's position and simulate a radio call to the Coast Guard, giving the vessel's position and description and detailed information about the emergency.
   d. Confirm that all hands are wearing PFDs. Then launch the life raft.
   e. Direct a crew member to place food and water in the life raft. If there is a portable water maker, be sure it works and is placed in the life raft.
   f. Confirm that all crew members are off the vessel. The OOD and the Skipper are the last to leave.
3. Crew's duties
   a. All crew members will put on their PFDs and other gear needed for weather or sea conditions.
   b. Each crew member will man his or her assigned abandon ship station.

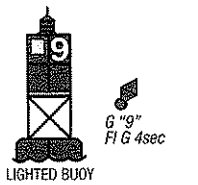
U.S. AIDS TO NAVIGATION SYSTEM

on navigable waters except Western Rivers and Intracoastal Waterway

LATERAL SYSTEM AS SEEN ENTERING FROM SEAWARD

PORT SIDE
ODD NUMBERED AIDS

GREEN LIGHT ONLY
- FIXED
- FLASHING (2)
- FLASHING
- OCCULTING
- QUICK FLASHING
- ISO



G "9"
Fl G 4sec

LIGHTED BUOY

G
C "7"

CAN

SG

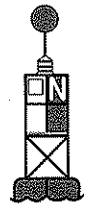
DAYMARK

G
"1"

SAFE WATER
NO NUMBERS—MAY BE LETTERED

WHITE LIGHT ONLY MORSE CODE

Mo (A)



RW
SP "G"

SPHERICAL

RW "N"
Mo (A)

LIGHTED
AND/OR SOUND

RW
"A"

MR

PREFERRED CHANNEL
NO NUMBERS—MAY BE LETTERED

COMPOSITE GROUP FLASHING (2+1)

GREEN LIGHT ONLY

RED
LIGHT ONLY

GR "C"
Fl (2+1) G

RG "B"
Fl (2+1) R

LIGHTED

PREFERRED
CHANNEL TO
STARBOARD
TOPMOST BAND
GREEN

GR
C "L"

CAN

PREFERRED
CHANNEL TO
PORT
TOPMOST BAND
RED

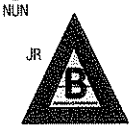
RG
N "W"

NUN

JG

GR
"A"

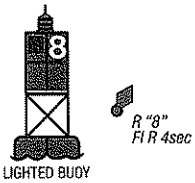
JR



RG
"B"

STARBOARD SIDE
EVEN NUMBERED AIDS

RED LIGHT ONLY
- FIXED
- FLASHING (2)
- FLASHING
- OCCULTING
- QUICK FLASHING
- ISO



R "8"
Fl R 4sec

LIGHTED BUOY

R
N "6"

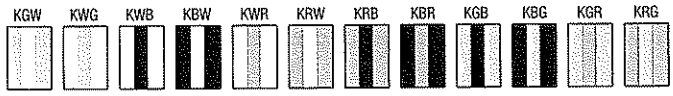
NUN

TR

DAYMARK

R
"2"

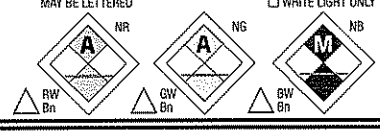
RANGE DAYMARKS—MAY BE LETTERED



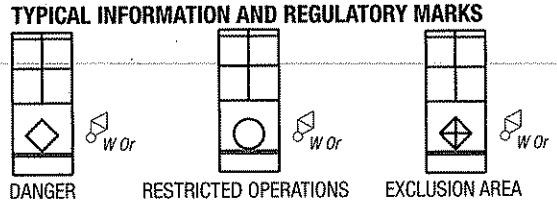
DAYMARKS HAVING NO LATERAL SIGNIFICANCE

MAY BE LETTERED

WHITE LIGHT ONLY



TYPICAL INFORMATION AND REGULATORY MARKS



W Or

DANGER

W Or

RESTRICTED OPERATIONS

W Or

EXCLUSION AREA

W
Bn

NW WHITE LIGHT ONLY

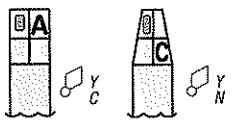
INFORMATION AND REGULATORY MARKERS

WHEN LIGHTED, INFORMATION AND REGULATORY MARKS MAY DISPLAY ANY LIGHT RHYTHM EXCEPT QUICK FLASHING AND FLASHING (2).

SPECIAL MARKS—MAY BE LETTERED

SHAPE: OPTIONAL—BUT SELECTED TO BE APPROPRIATE FOR THE POSITION OF THE MARK IN RELATION TO THE NAVIGABLE WATERWAY AND THE DIRECTION OF BUOYAGE.

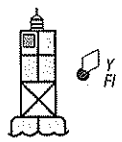
YELLOW LIGHT ONLY
- FIXED
- FLASHING



Y
C

Y
N

UNLIGHTED



Y
Fl

LIGHTED

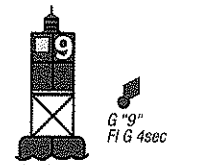
Y
Bn

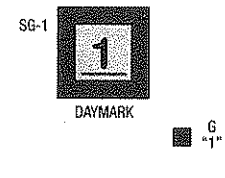
U.S. AIDS TO NAVIGATION SYSTEM
on the Intracoastal Waterway

AS SEEN ENTERING FROM NORTH AND EAST—PROCEEDING TO SOUTH AND WEST

PORT SIDE
ODD NUMBERED AIDS

GREEN LIGHT ONLY
- FIXED
- FLASHING (2)
- FLASHING
- OCCULTING
- QUICK FLASHING
- ISO

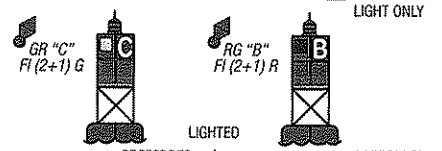


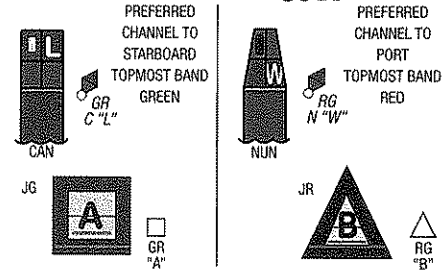


PREFERRED CHANNEL
NO NUMBERS—MAY BE LETTERED

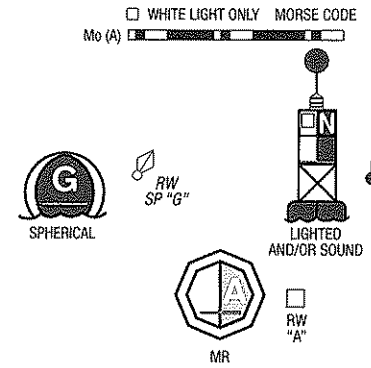
COMPOSITE GROUP FLASHING (2+1)

GREEN LIGHT ONLY — RED LIGHT ONLY



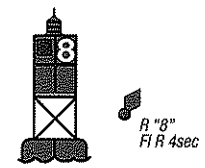


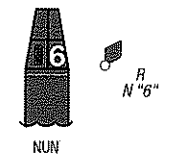
SAFE WATER
NO NUMBERS—MAY BE LETTERED

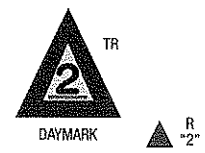


STARBOARD SIDE
EVEN NUMBERED AIDS

RED LIGHT ONLY
- FIXED
- FLASHING (2)
- FLASHING
- OCCULTING
- QUICK FLASHING
- ISO



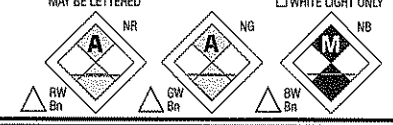




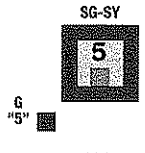
RANGE DAYMARKS—MAY BE LETTERED

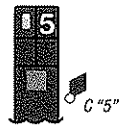
DAYMARKS HAVING NO LATERAL SIGNIFICANCE

MAY BE LETTERED — WHITE LIGHT ONLY

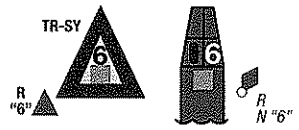


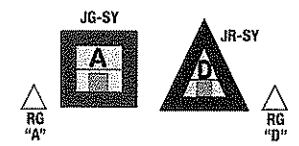
SG-SY



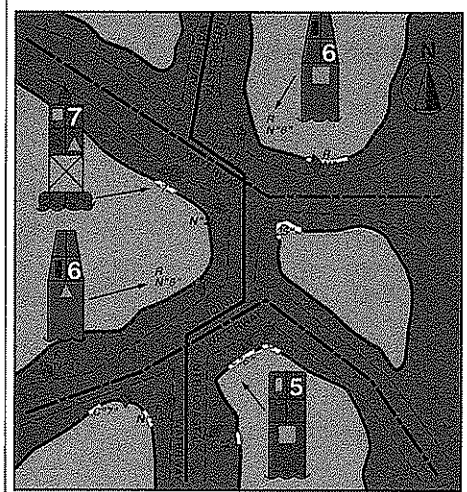


DUAL PURPOSE DAYMARKS — DUAL PURPOSE BUOYS

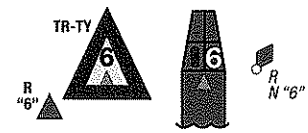




DUAL PURPOSE MARKING USED WHERE THE ICW AND OTHER WATERWAYS COINCIDE

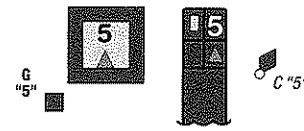


TR-TY

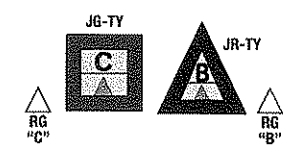


DUAL PURPOSE DAYMARKS — DUAL PURPOSE BUOYS

SG-TY



JG-TY — **JR-TY**



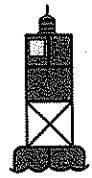
When following the ICW from New Jersey through Texas, a ▲ should be kept to your starboard hand and a ■ should be kept to your port hand, regardless of the color of the aid on which they appear. Information and Regulatory Marks and Special Marks may be found on Intracoastal Waterway. Refer to plate 1.

U.S. AIDS TO NAVIGATION SYSTEM
on the Western River System

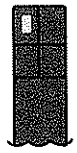
AS SEEN ENTERING FROM SEAWARD

PORT SIDE OR RIGHT DESCENDING BANK

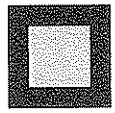
GREEN
FLASHING
ISO



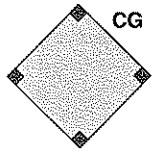
LIGHTED BUOY



CAN



PASSING DAYMARK



CROSSING DAYMARK

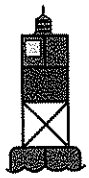
MILE BOARD

PREFERRED CHANNEL

MARK JUNCTIONS AND OBSTRUCTIONS
COMPOSITE GROUP FLASHING (2 + 1)

PREFERRED CHANNEL TO STARBOARD TOPMOST BAND GREEN	PREFERRED CHANNEL TO PORT TOPMOST BAND RED
Fl (2 + 1) G	Fl (2 + 1) R
☐ WHITE OR GREEN LIGHTS	☐ WHITE OR RED LIGHTS

LIGHTED



CAN

NUN

JG

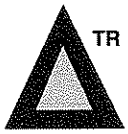
JR

PORT SIDE OR LEFT DESCENDING BANK

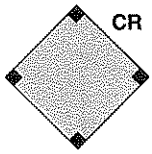
RED
FLASHING (2)
ISO

LIGHTED BUOY

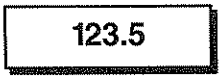
NUN



PASSING DAYMARK



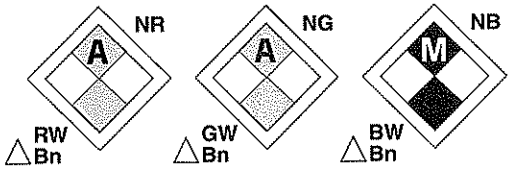
CROSSING DAYMARK



MILE BOARD

DAYMARKS HAVING NO LATERAL SIGNIFICANCE

MAY BE LETTERED ☐ WHITE LIGHT ONLY



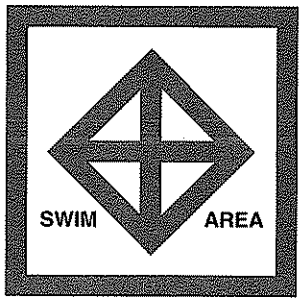
INFORMATION AND REGULATORY MARKS, AND SPECIAL MARKS, MAY BE FOUND ON THE WESTERN RIVER SYSTEM.

Refer to Plate 1

UNIFORM STATE WATERWAY MARKING SYSTEM

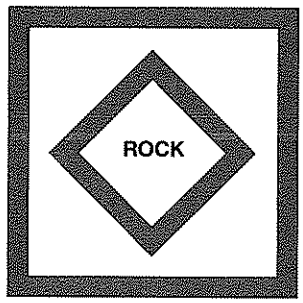
STATE WATERS AND DESIGNATED STATE WATERS FOR PRIVATE AIDS TO NAVIGATION

REGULATORY MARKERS



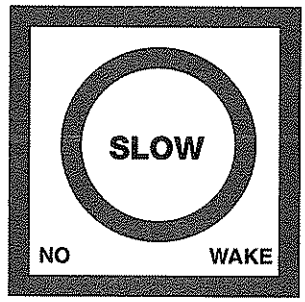
BOAT EXCLUSION AREA

EXPLANATION MAY BE PLACED OUTSIDE THE CROSSED DIAMOND SHAPE, SUCH AS DAM, RAPIDS, SWIM AREA, ETC.



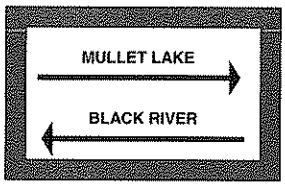
DANGER

THE NATURE OF DANGER MAY BE INDICATED INSIDE THE DIAMOND SHAPE, SUCH AS ROCK, WRECK, SHOAL, DAM, ETC.



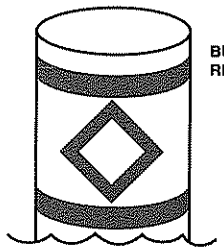
CONTROLLED AREA

TYPE OF CONTROL IS INDICATED IN THE CIRCLE, SUCH AS SLOW, NO WAKE, ANCHORING, ETC.



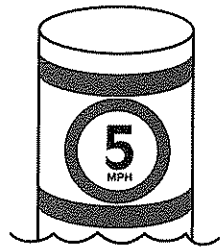
INFORMATION

FOR DISPLAYING INFORMATION SUCH AS DIRECTIONS, DISTANCES, LOCATIONS, ETC.

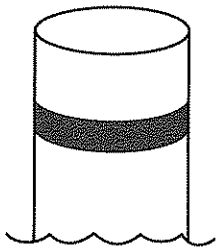


BUOY USED TO DISPLAY REGULATORY MARKERS

MAY SHOW WHITE LIGHT
MAY BE LETTERED



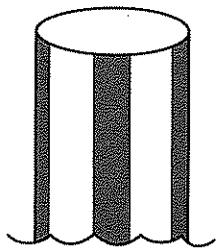
AIDS TO NAVIGATION



MOORING BUOY

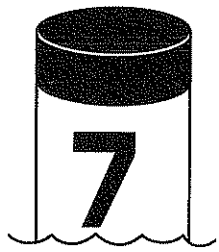
WHITE WITH BLUE BAND

MAY SHOW WHITE REFLECTOR OR LIGHT



RED-STRIPED WHITE BUOY

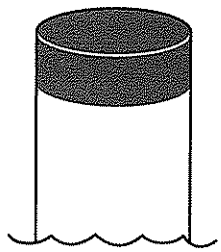
MAY BE LETTERED
DO NOT PASS BETWEEN BUOY AND NEAREST SHORE



BLACK-TOPPED WHITE BUOY

MAY BE NUMBERED

PASS TO NORTH OR EAST OF BUOY



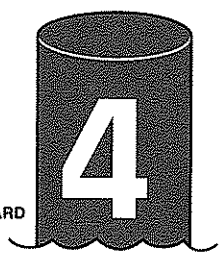
RED-TOPPED WHITE BUOY

PASS TO SOUTH OR WEST OF BUOY

CARDINAL SYSTEM

MAY SHOW GREEN REFLECTOR OR LIGHT

MAY SHOW RED REFLECTOR OR LIGHT



SOLID RED AND SOLID BLACK BUOYS

USUALLY FOUND IN PAIRS
PASS BETWEEN THESE BUOYS

PORT SIDE — LOOKING UPSTREAM — STARBOARD SIDE

LATERAL SYSTEM

INTERNATIONAL FLAGS AND PENNANTS

WITH MORSE SYMBOLS

ALPHABET FLAGS

Alfa •–
Have diver down, keep clear

Bravo –•••
Dangerous goods

Charlie –•–•
Yes

Delta –••
Keep clear, maneuvering with difficulty

Echo •
Altering course to starboard

Foxtrot ••–•
Disabled, communicate with me

Golf ––•
Require a pilot. Fishing: Hauling nets

Hotel ••••
Pilot on board

India ••
Altering course to port

Juliett •–––
On fire, have dangerous cargo, keep clear

Kilo –•–
Wish to communicate

Lima •–••
Stop instantly

Mike ––
My vessel is stopped, making no way

November –•
No

Oscar –––
Man overboard

Papa •––•
In harbor—All persons report on board. At sea-Fishing: Nets on obstruction

Quebec ––•–
Request free pratique

Romeo •–•
*

Sierra •••
Engines going astern

Tango –
Keep clear, engaged in pair trawling

Uniform ••–
You are running into danger

Victor •••–
Require assistance

Whiskey •––
Require medical assistance

Xray –••–
Stop your intentions, watch for signals

Yankee –•––
Dragging my anchor

Zulu ––••
Require a tug. Fishing: Shooting nets

SUBSTITUTES

1st Substitute

2nd Substitute

3rd Substitute

CODE
(Answering Pennant or Decimal Point)

NUMERAL PENNANTS

1 •––––

2 ••–––

3 •••––

4 ••••–

5 •••••

6 –••••

7 ––•••

8 –––••

9 ––––•

0 –––––

*ONLY used as a Procedure Signal meaning, "Received" or "I have received your last signal"—NOT to be used as a Single Letter Signal.

3 RD EDITION
DECEMBER 1977

Note: See Pub. 102, Page 22, for complete meanings

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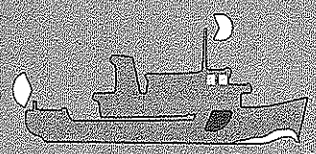
WASHINGTON, D.C. 20315

DMA STOCK NO.
WOXZC6

RULES OF THE ROAD

1. POWER DRIVEN



PILOT BOAT ALSO DISPLAYS (WITHOUT MASTHEAD LIGHT)

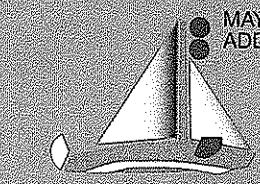
2. POWER DRIVEN UNDER 12 meters

MAY USE COMBINATION SIDELIGHT

INTERNATIONAL: UNDER 7M & 7 KNOTS SIDELIGHTS OPTIONAL

3. SAIL

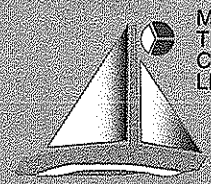
MAY BE ADDED



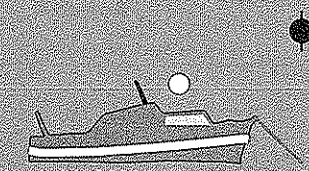
IF ALSO UNDER POWER: USE SAME LIGHTS AS #1—OR THIS DAYSHAPE

4. SAIL UNDER 20 meters

MAY USE THIS COMBO LIGHT

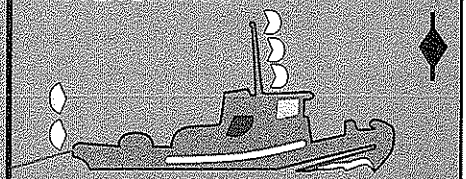


5. ANCHORED



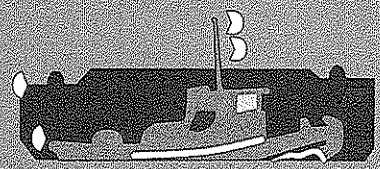
50 meters & OVER ADD LOWER LIGHT AFT 100m & OVER ADD DECK LIGHTS

6. TOWING ASTERN OVER 200 meters



TOW DISPLAYS SIDE & STERN LIGHTS 200M & UNDER—2 MASTHEAD LIGHTS

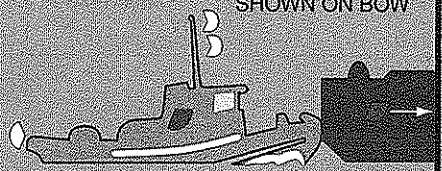
7. TOWING ALONGSIDE



INLAND: TUG DISPLAYS 2 YELLOW TOW LIGHTS AND NO STERN LIGHT

8. PUSHING AHEAD

SIDELIGHTS ARE SHOWN ON BOW

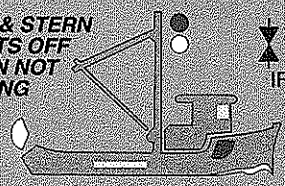


INLAND: 2 YELLOW TOW, NO STERN LIGHT; BARGE SHOWS FLASHING YELLOW ON BOW

9. FISHING

SIDE & STERN LIGHTS OFF WHEN NOT MAKING WAY

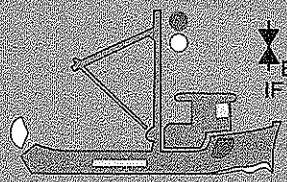
OR A BASKET IF UNDER 20m



GEAR OUT > 150m ○ or ▲ in DIRECTION OF GEAR

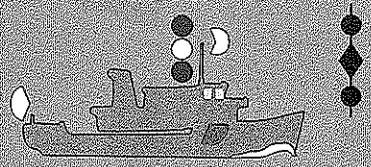
10. TRAWLING

OR A BASKET IF UNDER 20m

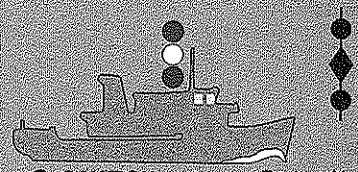


SIDE & STERN LIGHTS OFF WHEN NOT MAKING WAY

11. RESTRICTED MANEUVERABILITY



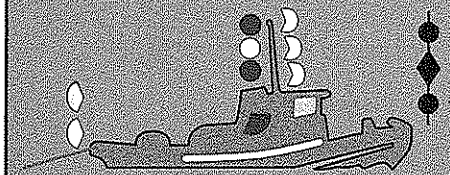
12. UNDERWATER OPERATIONS (DREDGING)



● or ● CAUTION SIDE

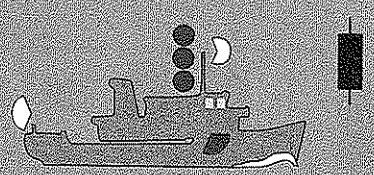
SAFE SIDE ● or ◆

13. TOWING CAN'T DEVIATE



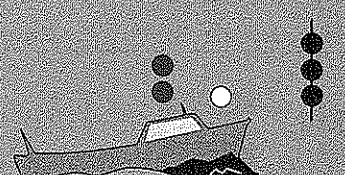
TOW 200m or less USE 2 MASTHEAD LIGHTS

14. CONSTRAINED BY DRAFT



INTERNATIONAL ONLY

15. AGROUND



NOT UNDER COMMAND ● or ●

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GLOSSARY

Sea Terms

The jargon of the sea began with seafaring men centuries ago. Many terms were added during the golden age of sail, and a few came about later with the advent of steam power and the internal combustion engine.

A few meanings were lost or changed as the basic source of energy was transferred from sail to mechanical power. But the flavor of this language was so strong that it has survived and probably will persist for ages.

You should become familiar with this brief but important list of sea terms. Use this terminology aboard your boat or landship and you will find that it will enrich your program.

ABAFT—Toward the stern; at the rear of a ship.

ABEAM—The direction at right angles to the keel of the boat.

ABOARD—On or in the boat.

ABREAST—Lying or moving side by side.

ADRIFT—Not made fast; lying around loose; at mercy of wind and wave.

AFT—In, near, or toward the stern or rear end of the boat.

AFTER—Toward the stern.

AGROUND—On the bottom; stranded (usually a miserable situation).

AHEAD—In a forward direction.

AMIDSHIPS—Midway between the bow and the stern; or the front and back of the boat.

ANCHORAGE—A sheltered area where boats can anchor in reasonable safety and not interfere with marine traffic.

APPARENT WIND—The wind felt aboard a boat. It is the combination of the true wind and the wind caused by the motion of the boat.

ASTERN—Behind a boat, or in a backward direction.

AUXILIARY—A boat equipped to be propelled by sail or power, or both used together.

AWEIGH—Said of an anchor when it is clear of the bottom.

BACKSTAY—A wire brace led aft to support a mast against the pressure of the wind.

BARK—Three-masted sailing vessel square-rigged on fore and main, with the mizzen fore-and-aft rigged.

BARKENTINE—Three-masted sailing vessel square-rigged on fore, with the main and mizzen fore-and-aft rigged.

BAROMETER—An instrument for measuring atmospheric pressure.

BEAM—The greatest width of a vessel.

BEAM SEA—A sea running at right angles to the boat's course.

BEARING—The direction of an object from a boat (expressed in compass degrees).

BEAT—A zigzag course against the wind.

BEAUFORT SCALE—A table describing 12 stages of the velocity of winds, from calm to hurricane.

BELAY—A command to stop; a line is belayed when it is made fast.

BELAYING PIN—A wooden or metal pin fitted into a rail; it is used for the securing of sheets and halyards.

BELL—Used aboard a boat as a warning signal, or as a means of announcing time.

BELOW—In the cabin or under the deck.

BEND—To connect two lengths of rope; a knot used for this purpose.

BIGHT—Any part of a rope except the ends; usually refers to a curl or loop in a rope.

BILGE—The lowest point of the inner hull of a ship; also, the internal part of a boat below waterline.

BINNACLE—Protective casing for the compass.

BITT—A stout vertical post used for taking the heavy strain of lines used in mooring or anchoring. Bitts may be bolted to the deck, or through the deck and stepped at the keel. Bitts are sometimes fitted with round metal pins (called "norman pins") near the bitt's head to aid in belaying a line.

BITTER END—The last part of a rope, or the last link in an anchor chain.

BLOCK—A mechanical device used for transmitting power or changing the direction of motion by means of a rope or chain passing around movable pulleys.

BOOM—A spar at the foot of a fore-and-aft sail to which the sail is secured.

BOOM CRUTCH—A notched upright board, or metal structure, into which the boom fits when the sails are furled or off the spars.

BOW—The forward or front end of a vessel.

BOW CHOCKS—Metal fittings on deck at the bow through which anchor and dock lines are fed.

BOWSPRIT—A spar to which the headsails are attached, extending forward beyond the bow.

BREAK OUT—To remove from a storage space.

BRIGHTWORK—Woodwork on a vessel which is varnished or finished to show its grain. Also refers to polished metal parts.

BRIG—Ship's jail; two-masted square-rigger.

BROACH TO—Said of a vessel under sail when running with the wind on the quarter when the ship's head comes up suddenly toward the wind in consequence of a sea striking the stern or through bad steering.

BULKHEAD—A wall or partition between compartments—often watertight for safety.

BUNK—Sleeping berth; also, something reported that is not done or not true.

BUOY—A floating marker anchored to the bottom.

BURDENED VESSEL—See "give way vessel."

CABLE—A rope or chain secured to the anchor.

CARRY—The forward momentum of a boat after it has come head to wind.

CAST OFF—To let go of a line.

CAULK—To make seams watertight by filling them with cotton, oakum, or caulking compound.

CENTERBOARD—A movable plate of wood or metal pivoted at its forward end that can be raised or lowered through the keel of a sailboat to prevent sliding to leeward.

CHAFING GEAR—A wrapping of canvas or rope around spars, rigging, or lines to prevent chafing.

CHART—Marine version of a road map showing aids to navigation, shoals, water depth, dangers, etc.

CHINE—The curved or angular part of the hull where the bottom and sides meet.

CLEAR—Free, not entangled.

CLEAT—A horned fitting of wood or metal to which lines are made fast.

CLEW—The aft lower corner of a sail.

CLOSE-HAULED—Sailing as close to the wind as possible.

COAMING—A protective rail higher than the deck to keep water out of the cockpit.

COCKPIT—Open part or well of the boat where passengers sit and the helmsman steers.

COIL—To arrange a line in easily manageable loops so that it can be stowed.

COLORS—The ceremony of raising or lowering the national ensign and other recognized flags.

COME ABOUT—To change the course of a ship when sailing by the wind so that it will sail at the same angle with the wind on the other side.

COURSE—The direction steered by the helmsman.

CRINGLE—A ring sewn into the sail so that a line can be passed through it, like a grommet in the edge of a tent.

CROSS BEARING—Two or more bearings of known objectives noted and plotted on a chart to determine the ship's position.

CURRENT—The movement of water in a horizontal direction.

DEAD RECKONING—A method of navigation by which the position of a ship is calculated from its last well determined position and its subsequent direction and rate of progress through the water.

DECKHOUSE—A cabin built on an upper deck which does not extend over the full breadth of the vessel.

DEVIATION—The change in the compass reading caused by the magnetic influence of the iron, steel or electronics aboard a boat and its equipment.

DISPLACEMENT—The number of tons of water displaced by a vessel afloat.

DITTY BAG—A small bag for carrying or stowing all personal articles.

DOWNWIND—To leeward.

DRAFT—Depth of a hull from waterline to lowest part of keel.

EASE—To slacken or loosen.

EMBARK—To go on board.

ENSIGN—The flag of the United States of America or other nation. Also the flag of the U.S. Power Squadron, U.S. Coast Guard Auxiliary, a yacht ensign flown by documented yachts.

FAKE—See "flake."

FAKE DOWN—A method of coiling rope so that each fake (flat coil) overlaps the preceding one and is free for running out rapidly.

FAST—A rope or chain by which a vessel is moored to a wharf, pier, quay, etc.

FATHOM—A unit of water-depth equivalent to six feet.

FENDERS—Portable bumpers hung over sides to protect the hull from contact with a pier, wharf, or other boat.

FID—A tapered wooden tool used to separate the strands of a rope before splicing.

FITTING—General name for ship's hardware.

FIX—A term denoting the determination of a ship's position by observation of celestial or terrestrial objects, or by a combination of both.

FLAKE—A method of loosely stowing line that is too thick or too long to coil. Flaking down a line involves laying it onto a deck in figure eights. Each figure eight is a "fake." A line with multiple fakes has been "flaked down."

FLEMISH DOWN—Line that has been secured on a deck in a tight, flat coil resembling a mat.

FLOTSAM—Floating trees, plants, driftwood, wreckage, etc. (any "stuff" floating).

FLUKE—The flattened end of an anchor arm.

FORE AND AFT—In line with the keel; from stem to stern; lengthwise.

FORESTAY—A stay leading from a mast forward.

FORWARD—Toward the bow.

FOUL—Not clear; jammed; tangled.

FRAME—A boat's rib.

FREEBOARD—The distance between the waterline and the main deck or gunwale.

GALLEY—Kitchen aboard a boat.

GEAR—Name applied to blocks, tackle, ropes, and other equipment used in operating a boat.

GIVE WAY VESSEL—The vessel which, according to the rules of the road for two approaching vessels, must keep out of the way of the other. Formerly called the "burdened" vessel.

GROUND TACKLE—The anchor and anchoring gear.

GUNWALE—"Gunnel"; upper edge of a boat's side.

HALYARD—A line used for hoisting sails.

HANDSOMELY—Gradually or carefully, as when slacking or easing a rope on which there is a strain.

HATCH—An opening through the deck to a cabin or area below.

HAUL—To tighten or pull in (like hauling the anchor, for instance). A change of wind in a counterclockwise direction.

HAWSE PIPE—Opening in the bow of a vessel from which the anchor line is passed.

HAWSER—Fiber rope 5 to 24 inches in circumference used for towing or working the ship.

HEAD—The toilet aboard a boat; the bow area of the boat.

HEADING—The direction in which a ship actually points or heads at any particular moment.

HEAVE—To throw; the rise and fall of a vessel at sea.

HEAVE IN—To pull (as on an anchor line).

HEAVE TO—To put a sailing vessel in the position of lying to, by putting the helm down and causing the sails to counteract each other.

HEAVING LINE—A light line, or messenger, attached to a heavier line and thrown to a pier or other vessel.

HEEL—A boat heels when it inclines to one side or the other. There is a transverse tilt when the hull is off the vertical.

HELM—The steering device; tiller, wheel.

HELMSMAN—The person who steers.

HITCH—To tie a rope to an object; a knot used for this purpose.

HOOK—Sailor's name for an anchor.

HULL—The main body or shell of a boat, exclusive of superstructure.

JACK—A flag showing the canton or union or the national ensign without the fly.

JETSAM—Those things which sink in the water—they don"t float like flotsam.

JIB—A triangular sail set ahead of the foremast on a sailboat.

JIBE—Bringing a sailboat from one tack to the other by swinging her stern across the wind, in order to bring the sails to the other side. To shift suddenly and with force from one side to another when running before the wind.

JIB SHEET—The line by which the angle of the jib is controlled.

JURY RIG—A makeshift rig.

KEEL—The backbone of the boat; the basic support extending from stem to stern.

KINGSPOKE—The upper spoke of the steering wheel when the rudder is fore and aft.

KNOT—A measure of speed; the velocity in nautical miles (6,080 feet) per hour.

LANDLUBBER—What you are not when you are a seaman.

LANYARD—A short line used for making anything fast.

LAY—The twist of a rope's strands.

LEAD—A weight attached to a line which is marked to show the depth of the water. To take soundings with the lead line is called "heaving the lead."

LEE—Pertaining to the part or side away from the wind, or which is sheltered from the wind.

LEEWARD— "loo-ard;" toward the lee side; away from the wind.

LEEWAY—A drift to leeward, or in the direction toward which the wind is blowing.

LIMBERHOLES—Holes in the floor timbers or frames to allow bilge water to drain into the lowest part of the hull.

LINES—Ropes used for various purposes aboard a boat.

LOCKER—A chest, box, cabinet, or closet used as a storage compartment.

LOG—A record of a vessel's activities; also, an instrument for measuring distance traveled.

LOGBOOK—A record of all the activities of a ship. This is a compulsory record in the Navy and on Sea Scout ships.

LUFF—The forward or entering edge of a sail.

LUFFING—The quivering of the sail when sailing almost directly into the wind.

MAINSAIL—The boat's main or principal sail. It is the sail set on the mainmast.

MAINSHEET—The line by which the trim (angle) of the mainsail is controlled.

MAKE FAST—To secure the belaying turns of a rope around a cleat or belaying pin by adding a single hitch.

MARLINSPIKE—A pointed steel tool used by seamen to separate the strands of rope when splicing; also, it can be used as a lever when putting on seizings, marline, etc.

MIDSHIPS—A term which describes the position of an object which is midway between the stem and stern, or midway between the sides of the hull.

MIZZENMAST—The aft and shorter of two masts on yawls and ketches; the aftermost of three masts on a three-masted schooner, ship, or bark.

NAUTICAL MILE—Known as a sea mile; it is 6,076.11549 feet long; usually rounded off to 6,080 feet.

NAVIGATION—Usually refers to celestial navigation, the determination of a ship's position by observation of celestial bodies (sun, moon, planets, and stars). Electronic navigation involves the use of electronic devices such as radio direction finders, radar, loran, omega, and satellite navigation aids.

OUTBOARD—Toward the sides of a vessel or outside of it.

OUTHAUL—A device or line used to haul out the clew (aft corner) of a sail along a boom.

OVERHANG—The projection of the bow and stern beyond the waterline.

PAINTER—A line at the bow of a small boat or canoe for securing it.

PAY OUT—To slack away (let out) a line made fast on board.

PEAK—The angle formed by the head and leech of a gaff sail. The greater the angle, the less peak the sail is said to have.

PILOTING—A near-shore navigation method by which the movements of a ship are directed by reference to landmarks, other navigational aids, and soundings.

PIPE DOWN—An order directing everyone to be quiet.

POINT—The ability to sail close into the wind.

PORT—The left side of a vessel looking toward the bow.

PRIVILEGED VESSEL—See "stand on vessel."

QUARTER—That part of a craft lying within 45° from the stern; starboard or port quarter, depending whether aft right or left corner is referred to.

QUARTERDECK—The stern deck area of the vessel; on Navy ships, the deck area at the head of the gangway.

RAIL—The boat's side above the deck line.

REEF—To reduce sail area.

REEVE—To thread a rope through a block.

RIGGING—A general term for all ropes, chains, and gear used for supporting and operating masts, yards, booms, gas, and sails.

RIGHT-OF-WAY—The legal right and obligation to hold one's course and speed.

RODE—The length of cable measured from the hawse hole to the anchor.

ROPE—A general term for cordage over 1 inch in circumference.

RUDDER—A device that is used for steering and maneuvering a vessel.

RULES OF THE ROAD—The rules and regulations accepted by international agreement and enforced by law in maritime countries, which govern the movements of ships when approaching each other.

RUNNING—Sailing with the wind astern.

RUNNING RIGGING—All rope or wire lines used to control sails.

SAIL—A piece of fabric of some kind spread to the wind to cause, or assist in causing, a vessel to move through the water.

SCOPE—The ratio between the anchor rode and the depth of the water. A vessel anchored in 10 feet of water with 70 feet of anchor cable out is riding at a scope of 7 to 1.

SEAM—The joint between adjacent planks.

SECURE—To make fast a line, or to leave a boat safely moored or tied up with everything aboard shipshape; also, to tie down a movable part.

SEIZE—To bind, lash, or make fast one rope to another, a rope to a spar, etc.

SERVE—To bind or wind a rope tightly with small cord, spun yarn, or marline, keeping the turns very close together.

SHACKLE—A wrought-iron or steel fitting with a pin across the throat, used as a connection between lengths of chain.

SHEAVE—A grooved wheel in a block, mast, or yard over which a rope passes.

SHEET—A rope or chain fastened to one or both of the lower corners of a sail or beam and used to extend it or to change its direction.

SHIPSHAPE—In correct fashion aboard a ship; everything orderly, secure, and in its place.

SHROUDS—Wire stays leading from the upper part of the mast to the deck on either side to provide lateral support.

SISTER HOOK—Two hooks opposed to each other and pivoted together on their shanks. Sister hooks are intended to allow materials (such as lines or cargo) to pass between the two hooks and then hold the materials fast under tension.

SNUB—To check a rope or line from running out by making a turn about a cleat, piling, or post.

SPARS—All booms, masts, gaffs, etc., to which a sail may be set.

SPREADERS—Short spars extending from each side of the mast to spread the shrouds and give them greater mechanical advantage to keep the mast straight.

STAND ON VESSEL—The vessel which, according to the rules of the road for two approaching vessels, has the right-of-way and is obligated to maintain course and speed. Formerly called the "privileged" vessel.

STARBOARD—The right side of a vessel, looking forward.

STAY—Rigging; a wire or line which supports a mast.

STEM—The vertical timber or leading edge of a boat.

STERN—The aft part or back end of a vessel.

SWAB—A seagoing name for a mop (one swabs down, not mops up).

TACK—To change the course of a ship by turning her through the wind, so that she will sail at the same angle but with the wind on the other side.

THWART—A transverse seat in a boat.

THWARTSHIPS—Crosswise of the deck; at right angles to the fore-and-aft line.

TILLER—The handle attached to the rudder by which the boat is steered if it is not equipped with a wheel.

TOPSIDES—The sides of hull above waterline.

TRANSOM—The framework of the stern; the boards forming the flat stern area of any boat not having a pointed stern.

TRIM—The way in which a boat floats; the set of a boat's sails.

TRUE WIND—The direction of the wind as observed from a stationary object.

UNDER WAY—A vessel is under way when it is neither anchored, moored, nor aground. It need not be in motion to be under way.

VARIATION—Difference in direction between true north as determined by the earth's axis of rotation and the magnetic north determined by the earth's magnetism.

VEER—To slack off and allow to run out (for instance, veering more anchor line). A change of wind in a clockwise direction.

WAKE—The track a vessel leaves astern.

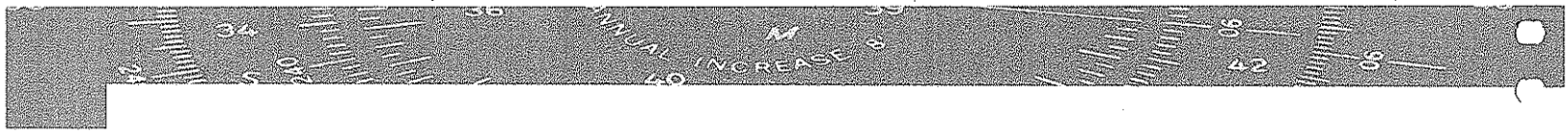
WATCH—The part of a ship's company which is employed in working it at one time.

WAY—The progress or motion through the water of a vessel. A vessel gathers way when its rate of sailing increases. Don't confuse "making way" (in motion) with "under way" (neither anchored, moored, nor aground).

WEATHER SIDE—The windward side; the side toward the wind.

WINDWARD—"win'ard;" the direction from which the wind is blowing.

YAW—A vessel yaws when it swings widely from one side of the course to the other—usually when running before heavy, quartering seas.



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