# **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 sails bunched 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 recreational activities. It's fun, healthy, challenging, and not as expensive as one might assume. So, if sailing is where it's at, then Sea Scouts 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 Scouts is in an ideal position to satisfy their interests.

For many years, the Sea Scout program has been largely centered on 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. The costs of fuel, maintenance, and insurance have risen, and many Sea Scout adult leaders are looking to sail as an addition to their unit program or as an alternative 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.

Sea Scouts often 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.

This outline is dedicated to the experienced Sea Scout adult leader 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 instructional sailing programs for youth are currently being operated by yacht clubs as a service to the sons and daughters of club members; however, few high school students 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 Scouts 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.

Young people are often not initially interested in racing. They want to learn how to make the boat go through the water with some degree of facility, 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 with the goal of sailing for pleasure. If the student's pleasure is racing, they will certainly receive the skills leading to this sport. It has been found, however, that most students are interested in pure recreation. They want 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 U.S. Sailing Association, the national sailing authority for the United States, the National Sea Scout Support Committee reviewed several plans operated by sailing centers and recreation departments. Sailing instruction programs currently operated within Sea Scouts were investigated, and many excellent programs emerged. Suggestions from Skippers and Sea Scout adult leaders were solicited, and many good ideas were submitted. 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 whenever possible
- Maximum time on the water with a minimum amount of lectures
- Visual aids and simple instruction 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 at the ship's own normal meeting place. It may be more attractive, however, to move to a setting closer to 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 instruction 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, but 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 looking 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 many programs operate 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 nominal.

#### **Boats**

"What is the best boat to use for sailing instruction?" Ask that question among any group of people who sail 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. Your objective will be to get three to five Sea Scouts aboard, so something a little larger will be needed. You will also want to give the Sea Scouts the experience of handling a jib; therefore, a sloop somewhere between 12 and 18 feet in length would be recommended. Since the youth are not going to be racing yet, there is no need for the boats to all be 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, because if the tiller is released, a boat with a weather helm will head into the wind, the sails will luff, and the boat will come to a stop before it starts moving backward slowly.

### **Boat Gear**

Each boat *must* be equipped with a U.S. Coast Guard-approved life jacket, sometimes called a personal flotation device or PFD, for each occupant. Choose life jackets designed for sailboat crewing. The type selected should be designed to be worn. Don't use life jackets made as cushions—they're risky in a real emergency. It's pretty hard to wear a cushion. Be certain that the life jacket 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 or laundry detergent 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 a problem. An operator will be needed, as the instructor will be anxiously keeping his eyes on the students. A megaphone or loud hailer is also important so that everybody hears the instructions, while preserving the instructor's vocal cords.

#### **Instructional Materials**

A blackboard, flip chart, some homemade charts, teaching aids, and brief quizzes will be necessary. Lesson plans should 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 people who sail to offer instruction and assist with the program.

### **Coaches and Counselors**

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

Some preliminary training will be necessary, because the coaches and 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 be given a 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 or counselor will be needed for each boat used. Even better is a coach or counselor for each training crew of three to five Sea Scouts. That way, they 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 life jackets must be available for everyone in a boat. Before beginning instruction, all Sea Scouts and leaders must be given a swimming classification check. Each *must* qualify as a "beginner" or higher before boarding a boat. A "beginner" must be able to jump into the water feet first, surface, swim 25 feet, turn, and swim 25 feet back. It is non-negotiable that everyone, including adults, wear life jackets at all times while on a boat. There will be some grumbling, but there's nothing "chicken" about protecting your own life. One or more rings or horseshoe buoys, a floating heaving line, and a reach pole must be aboard the instructor's boat.

# Suggested Lesson Plans

# Getting Acquainted With the Boat

Perhaps the best way to conduct this session is with a real boat. Bring a boat on its trailer to the unit meeting and park it in a lighted area. The boat should be rigged, sails hoisted, and the trailer headed into the wind to avoid it possibly tipping over. 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 guide that shows parts of the boat to check off the parts as they are discussed.

The instructor should name the 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 gather around the boat on the trailer and inspect it in detail.

A. Basic Types of Boats	2. Fairleads
1. Catboat	3. Chocks
2. Sloop	4. Blocks
3. Cutter	5. Traveler
4. Ketch	F. Parts of the Sail
5. Yawl	1. Head
6. Schooner	2. Foot
B. Parts of the Boat	3. Luff
1. Hull	4. Leach
2. Mast	5. Roach
3. Boom	6. Tack
4. Gaff	7. Clew
5. Bow	8. Battens
6. Stern	9. Reef points (if any)
7. Rudder	G. Types of Sail Rigs
8. Tiller	1. Lateen
9. Keel/centerboard/	2. Jib-headed or Marconi
dagger board	3. Gaff-headed
C. Standing Rigging	4. Lug
1. Shrouds	H. Directions
2. Forestay	1. Aloft
3. Backstay	2. Below
4. Boom lift or topping lift	3. Forward
D. Running Rigging	4. Aft
1. Jib halyard	5. Ahead
2. Main halyard	6. Astern
3. Jib sheets	7. Port
4. Mainsheet	8. Starboard
5. Downhaul	9. Abeam
6. Outhaul	10. Abaft
7. Boom vang	11. Inboard
(if your boat has one)	12. Outboard
E. Hardware	13. Windward
1. Cleats (describe operation of	14. Leeward
jam cleats, cam cleats, and	15. Upwind
clam cleats)	16. Downwind

# What Makes the Boat Go

Starting this session, you might wish to have the Sea Scouts review the parts of the boat and sails. 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.

- 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 created. 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 go 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 the centerboard lowered, the leeway is reduced.
  - 3. Because of this combination 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 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. No boat can sail directly into the wind—a 45-degree angle to the wind is about the best that can be expected. This 90-degree 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 aft of the beam.
  - 5. Running free—sailing with the wind dead astern.

If the winds are light, 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.

## 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 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, the tiller is brought amidship, and the course is 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 amidship 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 sail handlers 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, and 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 to 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: sail bag 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 to the pier 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—and 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 crew members 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 head 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 taking out any twists.
  - 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, draw it moderately tight, and 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 boom lift.
  - 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 the jib halyard is clear and shackle it 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. 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 jib handler 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 course circuits 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 finished sailing, 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 hauling or storage.

### Sailing a Course

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

- A. Inland Rules of the Road: These are simple rules intended to keep boat traffic moving in an orderly manner and to 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.
  - 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 more than 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 that 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 other such action as may be necessary should a collision result if 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.

## B. Beating, Running, and Jibing

- 1. To sail the boat upwind, it is necessary to make a zigzag 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 just enough to 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 to 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. 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. It is a starboard tack 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 command, "STANDBY 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 leeward, windward, and reaching marks. This is a standard racing course, and while we won't be racing, it provides good practice. The course starts at the leeward mark, rounds the windward mark, then the reaching mark, leeward mark, windward mark, and runs to the finish. 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. 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 in the last session.
- 2. The boats start out 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 in 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 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 the entire course.
- 6. Boats are rotated as needed.
- 7. When everyone has sailed, all hands pitch in to secure the boats.

### **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 boring, but drills can be a lot 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 the group) 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 to indicate 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 last 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, 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!" is given. Someone is instantly appointed as lookout, and is responsible for keeping the "man overboard" in sight and pointing 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 or laundry detergent bottles work fine) are scattered in the water. 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.

### **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, while 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. A 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 youth officers. 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 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 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.