



SMALL-BOAT SAILING

Merit Badge Requirements

- 1) Show that you know first aid for injuries or illnesses that could occur while small-boat sailing, including hypothermia, heatstroke, heat exhaustion, dehydration, sunburn, insect stings, tick bites, blisters, and hyperventilation.
- 2) Do the following:
 - A) Identify the conditions that must exist before performing CPR on a person. Explain how such conditions are recognized.
 - B) Demonstrate proper technique for performing CPR **using a training device approved by your counselor.**
- 3) Before doing the following requirements, successfully complete the BSA swimmer test. Jump feet-first into water over your head in depth, swim 75 yards or 75 meters in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; then swim 25 yards or 25 meters using an easy resting backstroke. The 100 yards or 100 meters must be swum continuously and include at least one sharp turn. After completing the swim, rest by floating as motionless as possible.
- 4) Describe the boat you will be using for the sailing requirement, naming all of the major parts and the functions of those parts.
** The skills may be demonstrated on any boat available to the Scout. While no specific plan is recommended, it is suggested that the craft be under 20 feet. The boat must have the capability of sailing to windward.*

Tell the difference between keel, centerboard, dagger board, bilgeboard, and leeboard. Explain the purpose of each.
- 5) Before going afloat do the following:
 - A) Discuss the nine points of the BSA Safety Afloat plan.
 - B) Discuss the rules of the road in general and any specific rules or laws that apply to your area or state.
 - C) Discuss with your counselor how the hazards of weather and heavy water conditions can affect both safety and performance in sailing.
 - D) Prepare a typical float plan.
- 6) With the help of a buddy, show you can sail a boat properly by doing the following:
 - A) Prepare the boat for sailing, include a safety inspection.
 - B) Get under way from a dock, mooring, or beach.
 - C) Properly set sails for a course that will include running, beating, and reaching -- the basic points of sailing.
 - D) Change tack by coming about; by jibing.
 - E) Anchor Properly.
 - F) Demonstrate the rescue of a man overboard and capsize procedures.
** Capsize procedures should be conducted under the close supervision of the counselor. A rescue boat should be standing by to assist, if necessary, and to tow the capsized craft to shore. Self-bailing boats are acceptable for this requirement. Extreme care should be taken to avoid personal injury and damage to the boat or its equipment.*
 - G) Demonstrate the procedure to use in the following: helping others, bad weather, running aground.
 - H) Upon returning to your dock, mooring, or beach, properly secure all equipment, furl or stow sails, and prepare the craft for unattended docking, mooring, or beaching for overnight or longer.
- 7) Have a working knowledge of marlinspike seamanship and do the following:
 - A) Show how to tie the square or reef knot, clove hitch, two half hitches, bowline, figure-eight knot, and mooring hitch. Demonstrate the use for each.
 - B) Show how to heave a line, coil a line, fake down a line.
 - C) Whip the ends of a line; tell why whippings are used.
 - D) Discuss the kinds of lines used on sailboats and the types of fibers used in their manufacturer. Tell the advantages and disadvantages of each.
- 8) Describe how you would care for and maintain a sailboat and its gear throughout the year.
- 9) With the counselor, review sailing terminology; include points of sailing. Discuss various types of sailboats in use today; tell their differences.
- 10) give a short history of sailing in the United States, including its importance in the growth of our nation. Discuss commercial and recreational sailing, including racing and the America's Cup. This requirement may be completed in written or oral form.

Requirement 1

Show that you know first aid for injuries or illnesses that could occur while small-boat sailing.

Hypothermia: _____

Heatstroke: _____

Heat Exhaustion: _____

Dehydration:

Sunburn: _____

Insect Stings: _____

Tick Bites: _____

Blisters: _____

Hyperventilation: _____

Other: _____

Requirement 2

What conditions must exist before performing CPR on a person? _____

How are such conditions recognized? _____

Demonstrate to your leader or counselor, the proper technique for performing CPR on an adult mannequin (or other approved training device) for at least 3 minutes.

I have completed at least 3 min of CPR on an adult: Yes No

Requirement 3

I have completed the BSA swimmer test: Yes No *(This must be done before completing the following requirements)*

Do the following:

_____ Jump feet first into water over your head in depth.

The following 100 yard swim must be done continuously and include at least one sharp turn

_____ Swim 75 yards/meters in a strong manner using one or more of the following strokes: Sidestroke, Breaststroke, Trudgen, or Crawl

_____ Swim 25 yards/meters using an easy, resting backstroke.

_____ After swimming the 100 yards, rest by floating as motionless as possible.

Requirement 4

Describe the boat you will be using for the sailing requirement: _____

What is a Keel and what is its purpose? _____

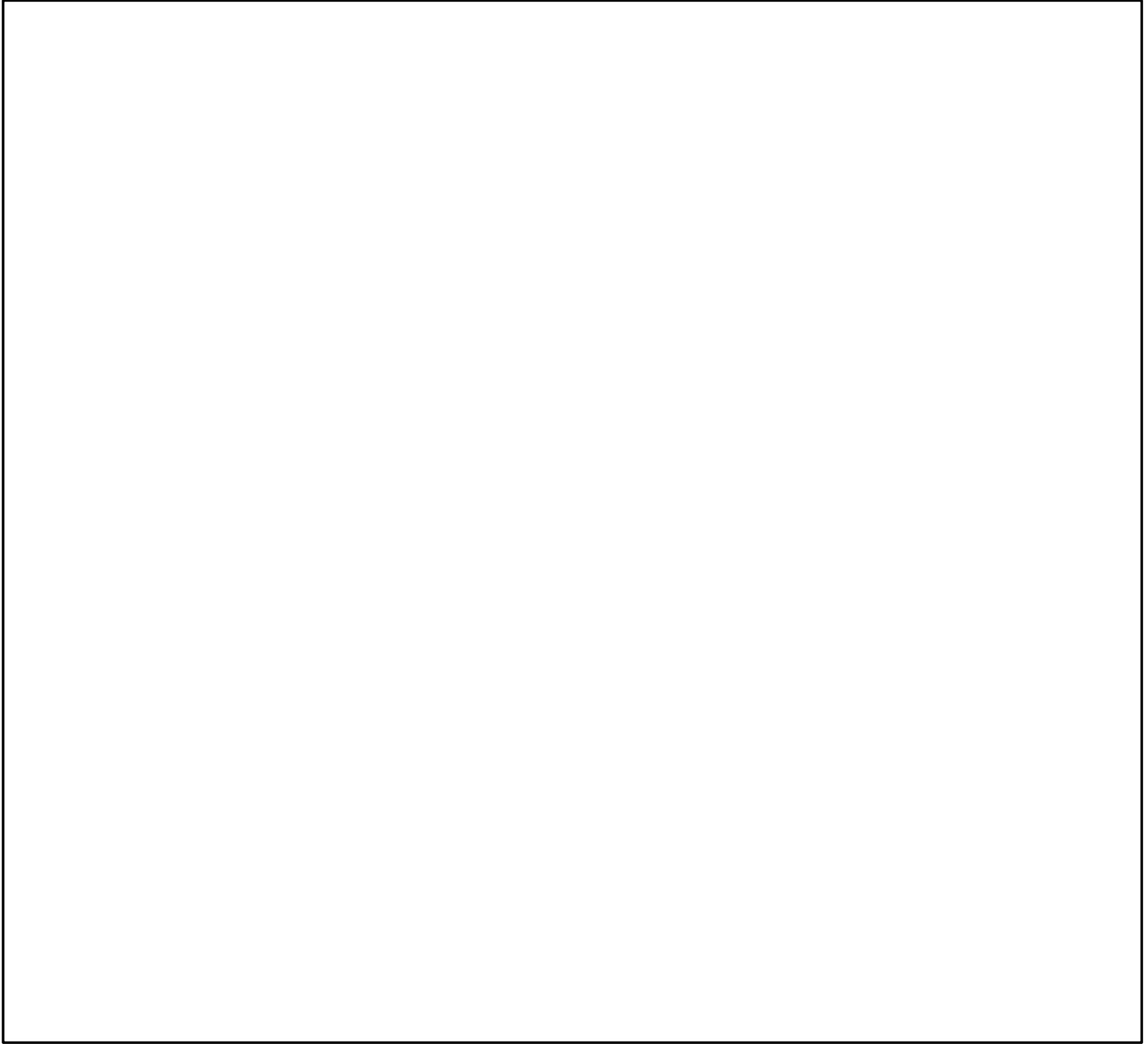
What is a Centerboard and what is its purpose? _____

What is a Dagger Board and what is its purpose? _____

What is a bilgeboard and what is its purpose? _____

What is a Leeboard and what is its purpose? _____

Use the area below to draw a sketch of the boat you plan to use for the sailing requirement. Label all of the major parts of the boat and the functions of those parts:



Part Name: _____

Function: _____

Part Name: _____

Function: _____

Part Name: _____

Function: _____

Part Name: _____

Function: _____

Part Name: _____

Function: _____

Part Name: _____

Function: _____

Part Name: _____

Function: _____

Part Name: _____

Function: _____

Requirement 5

The following requirements are to be completed before going afloat.

Name and explain the 9 points of the BSA Safety Afloat plan:

Point 1: _____

Description/Meaning: _____

Point 2: _____

Description/Meaning: _____

Point 3: _____

Description/Meaning: _____

Point 4: _____

Description/Meaning: _____

Point 5: _____

Description/Meaning: _____

Point 6: _____

Description/Meaning: _____

Point 7: _____

Description/Meaning: _____

Point 8: _____

Description/Meaning: _____

Point 9: _____

Description/Meaning: _____

Requirement 6

With the help of a buddy, complete the following requirements. Demonstrate them to your counselor and have them mark of each one when completed. Give a brief description of how to do each or what each means.

_____ Prepare the boat for sailing, include a safety inspection.

Description of procedure: _____

_____ Get under way from a dock, mooring, or beach.

Description of procedure: _____

_____ Properly set sails for a course that will include running, beating, and reaching.

Description of procedure: _____

_____ Change tack by coming about; by jibing.

Description of procedure: _____

_____ Anchor properly

Description of procedure: _____

_____ Demonstrate the rescue of a man overboard and capsize procedures.

Description of procedure: _____

_____ Demonstrate the procedure to use in the following:

_____ Helping Others

Description of procedure: _____

_____ Bad Weather

Description of procedure: _____

_____ Running Aground

Description of procedure: _____

_____ Upon returning to your dock, mooring, or beach, properly secure all equipment, furl or stow sails, and prepare the craft for unattended docking, mooring, or beaching for overnight or longer.

Description of procedure: _____

Requirement 7

Have a working knowledge of marlinspike seamanship and complete the following requirements:

Demonstrate to your counselor the proper way of tying the following knots. Demonstrate/give the use of each knot.

_____ Square or Reef Knot Main Use: _____

_____ Clove Hitch Main Use: _____

_____ Two Half Hitches Main Use: _____

_____ Bowline Main Use: _____

_____ Figure-Eight Knot Main Use: _____

_____ Mooring Hitch Main Use: _____

Demonstrate to your counselor the proper way to:

_____ Heave a line

_____ Coil a line

_____ Fake down a line

_____ Demonstrate to your counselor how to whip the ends of a line.

Why are whippings used? _____

Use the area below to list a few of the lines used on sailboats. List the types of fibers used in their manufacture. Also, tell the advantages and disadvantages of each.

Line 1: _____ Types of fibers used: _____

Advantages: _____

Disadvantages: _____

Line 2: _____ Types of fibers used: _____

Advantages: _____

Disadvantages: _____

Line 3: _____ Types of fibers used: _____

Advantages: _____

Disadvantages: _____

Line 4: _____ Types of fibers used: _____

Advantages: _____

Disadvantages: _____

