



## ABLE

### 1. Ideals

- a. Organize and conduct two impressive opening and closing ceremonies for your ship
- b. Explain how our nation's maritime history has contributed to our way of life. Note: Explain" means to convey information to one or more people using any of the following methods (or something similar approved by your Skipper): video, computer slide show (PowerPoint), story board (project board display), diorama, model, annotated photo album, verbal report, or written report. For comparison purposes, a written report of 500 to 1,000 words would form an appropriate explanation.

### 2. Active Membership

- a. Meet your ship's bylaws requirement for active participation in your ship's meetings and activities for six months.
- b. Prepare and present a program on Sea Scouts for a Boy Scout troop, Venturing crew, Venturing Officers' Association meeting, school class, or other youth group. Your presentation should last a minimum of 15 minutes and describe the activities of your ship and Sea Scouts

### 3. Leadership

Either serve and fulfill the responsibilities of a crew leader or an elected officer of your ship, or serve as an activity chair for two major ship events. Responsibilities should include planning, directing, and evaluating the event. (These events are in addition to the Ordinary requirement.)

or

With a boat operator plan a boat dive trip and include all equipment, provisions and location. Using navigation charts to determine course to the location and topographical charts of the sea floor create a dive plan for the participants making the dive.

### 4. Swimming

Pass all requirements for the BSA's Lifesaving merit badge.

### 5. Safety

- a. Develop and use a customized vessel safety checklist for a boat used by your ship.
- b. Demonstrate your understanding of fire prevention on vessels.
- c. Know the classes of fires and the substances that will extinguish each type of fire.

d. In a safe place, under adult supervision, demonstrate your ability to successfully extinguish a class A and a class B fire with an approved fire extinguisher. If required, see that the fire extinguisher used is properly recharged or replaced.

e. Conduct a fire safety inspection of the vessel normally used by your ship or of your ship's meeting place. Note any fire hazards and report them to your ship's adult leaders.

f. Complete the certification for standard first aid through the American Red Cross, the American Heart Association, or other approved organizations' standard first aid course.

g. Complete the certification for CPR through the American Red Cross, the American Heart Association, or other approved organizations' course.

or

Obtain certification from DAN®'s Professional Diver first aid course or an equivalent USCG approved course.

### **6. Marlinspike Seamanship**

a. Complete a back splice, eye splice, short splice, long splice, and a palm-and-needle whipping.

b. Sew a flat seam, round seam, and grommet eye in canvas or sail material. Describe how each is used in construction of and the care of sails.

c. Describe the parts of a block and explain how blocks are sized. Describe the following types of tackle: luff, gun, double purchase, single whip, and runner. With the help of another shipmate, reeve a double purchase tackle or establish a 2 point load distributing anchor point and a 3:1 mechanical advantage system (e.g., Z-drag) used to unpin paddlecraft. Use the system to haul a weight at least five feet across the ground. The system must include a progress capture system and a damper.

### **7. Boat Handling**

a. Demonstrate your ability to properly operate a small boat equipped with a motor. Included should be fueling, starting, leaving a dock, maneuvering, docking and coming alongside.

b. Know the names and functions of lines used to secure a vessel to a wharf or pier.

Understand and execute docking commands used in handling lines on your ship's primary vessel.

### **8. Ground Tackle**

a. Describe the various kinds of anchor rode and the advantages and disadvantages of each type.

b. Identify the parts of the anchor cable starting with the anchor and ending at the vessel.

c. Describe the methods of marking chain or rode and demonstrate that you know the chain or rode markings on your ship's vessel.

d. While on a cruise assist in the construction of an anchor watch schedule and stand one watch.

e. Identify a capstan or windlass and explain its use in handling line, wire rope, or chain.

### **9. Navigation Rules**

a. Demonstrate a working knowledge of *Navigation Rules, International and Inland*.

b. Explain vessel lights and day shapes for the following: towing (astern, alongside, pushing ahead, and cannot deviate), fishing, trawling, restricted maneuverability, not under command, underwater operations, constrained by draft, dredging, aground, and sailing vessels under power.

c. Understand the system of aids to navigation employed in your area. Include buoys, lights, and daymarks, and their significance and corresponding chart symbols.

d. Read in detail a National Ocean Service (NOS) chart, preferably for the area normally cruised by your ship, identifying all marks on it.

### **10. Piloting and Navigation**

- a. Supervise the proper keeping of a complete deck log for three days of cruising (one cruise or a combination of day cruises). Submit the cruise logs to your Skipper. Or, keep a journal of paddling trips that includes names of participants, access points, waterway description and notable events. Record at least three trips in the journal and submit to your Skipper.
- b. Lay a course of at least three legs and execute it using dead reckoning.

or

Make a scuba dive, navigating three legs underwater using a compass, measuring distance and time, and logging all information. Use a chart to plan depth and topography.

- c. Demonstrate your ability to fix your position by the following methods: taking bearings from two known objects, running fix, and estimated position.
- d. Establish distance from a known object using “double the angle on the bow” and explain how to set a danger bearing.
- e. Enter three waypoints into an electronic navigation device (i.e. GPS, chartplotter) and navigate your vessel to each point. Demonstrate the use of the MOB function of your electronic navigation device.
- f. Discuss how radar is used in situational awareness and the method of taking a radar fix.
- g. Explain the use of tide tables, current tables, light lists, and how to update a chart using the Notice to Mariners.

### **11. Practical Deck Seamanship**

- a. Demonstrate your knowledge of personal safety equipment needed while cleaning, maintaining, or repairing your vessel.
- b. Know the names, uses, sizes, and proper care of the common hand tools used by your ship.
- c. Identify and explain the use of the following: thimble, shackle, turnbuckle, pelican hook, and other ship’s hardware and fittings commonly used aboard your ship’s vessels.
- d. Demonstrate proper surface and coating preparation, coating techniques, care of stored coatings, and cleaning of brushes and tools used to maintain surfaces on your ship’s vessel.
- e. Explain techniques used for the maintenance, protection, and repair of hulls and decks on your ship’s vessel.

### **12. Environment**

- a. Demonstrate your knowledge of local environmental laws related to the proper storage, disposal, and cleanup of maritime coating materials, fuels, and other environmentally sensitive materials.
- b. Discuss with an adult leader the dumping of garbage in the marine environment. Review the contents of the MARPOL placard and locate it aboard your ship’s vessels if applicable.
- c. Explain the importance of protecting marine endangered species, using a representative species as an example (mammal, bird, fish, or reptile). As a minimum, include a description of the species, its habitat, history, current population numbers, and current steps being employed to help its recovery. Note: Refer to the definition and expectation for “explain” in Able 1b.

### **13. Weather**

Demonstrate your ability to read a barometer, thermometer, anemometer, and weather vane. Be familiar with the Beaufort Wind Force Scale.

### **14. Cruising**

Earn the Long Cruise badge.

**15. Electives**

Choose any four level 2 or higher electives from the options listed following Quartermaster rank requirements.