



S.S.S. Northland Able Requirements



1. Ideals	Date	SO
a. Organize and conduct two impressive opening ceremonies and two impressive closing ceremonies for the ship 52.		
b. Submit an essay of 500 to 1000 words on how our nation's maritime history has contributed to our way of life.		
2. Active Membership		
a. Attend at least 75 percent of ship 52's meetings and special activities for one year.		
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 the S.S.S Northland and Sea Scouts.		
3. Leadership		
Either serve and fulfill the responsibilities of a crew leader or an elected officer of the S.S.S. Northland 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)		
4. Swimming		
Pass all requirements for the BSA's Lifesaving merit badge. (BSA Lifesaving merit badge book)		
5. Safety		
a. Develop and use a customized vessel safety checklist for a boat used by your ship. (pg. 78 SSM)		
b. Demonstrate your understanding of fire prevention on vessels. (pgs. 80, 81 SSM)		
c. Know the classes of fires and the substances that will extinguish each type of fire. (pgs. 81, 82 SSM)		
d. In a safe place, under adult supervision, demonstrate your ability to successfully extinguish a class A and class B fire with an approved fire extinguisher. See that the fire extinguisher used is properly recharged or replaced. (pg. 82 SSM)		
e. Conduct a fire safety inspection of the S.S.S. Northland or of the landship. Note any fire hazards and report them to ship 52's adult leaders.		
f. Complete the American Red Cross Standard First Aid course.		
g. Obtain CPR certification from a certified agency.		
h. Demonstrate the Heimlich maneuver and tell when it is used. (pg. 98 SSM)		
6. Marlinspike Seamanship		
a. Complete a back splice, eye splice, short splice, long splice and a palm-and-needle whipping. (pgs. 114-118 SSM)		
b. Sew a flat seam, round seam, and a grommet eye in canvas sail material. Describe how each is used in the construction and care of sails. (pgs. 120-122 SSM)		
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. (pgs 122-124 SSM)		
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, and coming alongside. (pgs. 137-139 SSM)		
b. Know the names and functions of lines used to secure a vessel to a dock. Understand and execute docking commands used in handling lines on the S.S.S. Northland. (pg. 139, 140 SSM)		

8. Anchoring		
a.	Describe the various kinds of anchor rode and the advantages and disadvantages of each type. (pg. 150 SSM)	
b.	Identify the parts of the anchor cable starting with the anchor and ending at the vessel. (pg. 150 SSM)	
c.	Describe the methods of marking chain and demonstrate that you know the chain markings on the S.S.S. Northland. (pg. 151 SSM)	
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. (pgs. 154, 155 SSM)	
9. Navigation Rules		
a.	Demonstrate a working knowledge of the Navigation Rules, International and Inland. (pgs. 157-164 SSM)	
b.	Explain vessel lights for the following: towing (astern, alongside, pushing ahead, and cannot deviate), fishing, trawling, restricted maneuverability, underwater operations, constrained by draft, and aground. (pgs. 162, 221 SSM)	
c.	Describe special lights and day shapes deployed on the following vessels: not under command, restricted in ability to maneuver, constrained by draft, fishing (trawling), and sailing under power. (pgs. 162, 163, 221 SSM)	
d.	Understand the system of aids to navigation employed in your area. Include buoys, lights, and daymarks and their significance and corresponding chart symbols. (pgs. 165-171 SSM)	
e.	Read in detail a National Ocean Service (NOS) chart, preferably for the area normally cruised by your ship, identifying all marks on it. (NOAA Chart 18649 and Chart No. 1)	
f.	Explain the use of tide tables, current tables, light lists, and how to update a chart using the Notice to Mariners.	
10. Piloting and Navigation		
a.	Describe the deck log kept aboard the S.S.S. Northland. Keep a complete log for three cruises. (pgs. 181-183 SSM)	
b.	Lay a route of at least three legs and execute it using dead reckoning. (pgs. 183-185 SSM)	
c.	Demonstrate your ability to fix your position by the following methods: taking bearings from two known objects, running fix, and estimated position. (pgs. 185-187 SSM)	
d.	Establish the distance from a known object using "double the angle on the bow" and explain how to set a danger angle. (pgs. 187, 188 SSM)	
e.	Discuss how Global Positioning System (GPS) operates and the purpose of waypoints. While underway, demonstrate your ability to use a GPS using three different waypoints. (pg. 189 SSM)	
f.	Discuss the method of establishing a RADAR fix. (pg. 190 SSM)	
11. Practical Deck Seamanship		
a.	Demonstrate your knowledge of personal safety equipment needed while cleaning, maintaining or repairing the Northland's vessels. (pg. 207 SSM)	
b.	Know the names, uses, sizes and proper care of the common hand tools used by your ship. (pg. 208 SSM)	
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 ships vessels. Describe how each is sized. (pgs. 208, 209 SSM)	
d.	Demonstrate proper surface and coating preparation, coating techniques, care of stored coatings, and cleaning of brushes and tools used to maintain surfaces on the S.S.S. Northland. (pg. 210 SSM)	
e.	Explain techniques used for the maintenance, protection and repair of hulls and decks on the S.S.S. Northland. (pg. 211 SSM)	

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. [pg. 214 SSM]	
b.	Discuss with an adult leader the dumping of garbage in the marine environment. Review the contents of the MARPOL placard and located aboard the S.S.S. Northland. [pgs. 214, 215 SSM]	
c.	Write a 500 word report on a marine endangered species (mammal, bird, fish, or reptile). The report should include a description of the species, its habitat, history, current population numbers, and current steps being employed to help its recovery.	
13. Cruising		
Earn the Long Cruise badge.		
14. Electives: Do any three of the following:		
a.	Sailing: While leading a crew of not less than two other persons, demonstrate your ability to sail a sloop or another suitable boat correctly and safely over a triangular course (leeward, windward, and reaching marks) demonstrating beating, reaching, running, and the proper commands.	
b.	Vessels: Teach and lead a crew under oars using a boat pulling at least four oars single- or double-banked. Perform the following maneuvers: get under way, maneuver ahead and back, turn the boat in its own length, dock, and secure.	
c.	Drill: Demonstrate your ability to give and execute commands in close-order drill.	
d.	Engines: I. Understand the safe and proper procedures for gasoline and diesel inboard engines, including: fueling, pre-start checks, ventilation, starting, running, periodic checks while running, securing, postoperative checks, and keeping an engine log. II. Using the type of engines found aboard the S.S.S. Northland, demonstrate your understanding of basic troubleshooting and the preventative maintenance schedule recommended by the manufacturer,	
e.	Yacht Racing: I. Demonstrate your understanding of the shapes, flag hoists, gun and horn signals used in sailboat racing as well as a working knowledge of the racing rules of the International Sailing Federation. II. Serve as helmsman, with one or more additional crew members, of a sloop-rigged or other suitable boat with a spinnaker in a race sailed under ISAF racing rules.	
f.	Maritime History: Know the highlights of maritime history from the earliest times to the present. Include the evolution of boat construction and propulsion, important voyages of exploration and development, the origin of maritime traditions and the achievements of notable maritime leaders in U.S. sea history.	
g.	Ornamental Ropework: Demonstrate your ability to fashion the following items of ornamental ropework: four-strand turk's head, coach whipping, cockscombing, round braid, flat sennit braid, wall knot and crown knot. Make a useful item such as a boatswains lanyard, rigging knife lanyard, bell rope, etc. or decorate some portion of your ship's equipment such as a stanchion, rail, lifeline, tiller, etc.	
h.	Fiberglass Repair and Maintenance: Demonstrate your proficiency and knowledge of fiberglass repair and gel coating while working on one of ship 52's vessels.	
i.	Specialty Proficiency: Become a certified scuba diver or become proficient in windsurfing, surfing, kayaking or whitewater rafting/canoeing.	
j.	USPS: As an apprentice member of the United States Power Squadrons complete the Seamanship and Piloting courses.	