Aids for Sea Scout Leaders

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AIDS FOR SEA SCOUT LEADERS

Published by
Boy Scouts *of* America
Park Avenue Building
2 Park Avenue — 32nd and 33rd Streets
New York City
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INTRODUCTION

Owing to the increase in the registration of Sea Scout Ships, and Sea Scout Patrols in Land Scout Troops, it has been found impossible to keep up with the individual correspondence with each Sea Scout Skipper and Mate that is needed in addition to the present literature of Sea Scouting. During the past year a series of mimeographed sheets have been appearing with the National Sea Scout News Bulletin called "Aids to Sea Scout Leaders." These were an attempt to help the Skipper in directing his Crew Leaders in a method of passing the tests for advancement in Sea Scouting.

All of this material has been brought together in this pamphlet, including the fourteen necessary requirements for advancing from Apprentice to Ordinary Sea Scout. These are the results of the work of one or two men actually connected with Sea Scout Units, and it is hoped that the present Sea Scout Skippers, or other leaders, who can suggest better and fuller methods for passing these tests will send them to the Sea Scout Department so that they may be incorporated in future editions of this pamphlet.

After some of the chapters a set of sample questions and answers is attached. These questions can be increased in number by the individual Skipper.

It is hoped that this is the beginning of a "Handbook for Skippers" which will eventually fill the same place in Sea Scouting that the Handbook for Scoutmasters does in Land Scouting.

THOMAS J. KEANE,
National Sea Scout Director.

THE LEADER

It must be clearly understood that one great object of Sea Scouting is character-development and citizenship-training. There are many schools of psychology, each with a different conception of character; each with a different method, or theory, for the development of character, and it would be difficult to give an all-inclusive definition of one method that would cover all; but, regardless of this, there is no doubt in the minds of leading psychologists that the greatest factor in the development of character is the leadership of a man of character.

Therefore, in order to make a success of this Sea Scout Program the first essential is a man of high ideals and honor, with leadership ability. The second essential is a program of activities which will be of interest to boys of the Sea Scout age, that is, fifteen to nineteen.

This question of leadership is one that must always be left to the local leaders of the Movement, who, through their experience and long acquaintance with the prospective leader, can tell if he has the proper qualities, and of this it is not necessary to write further.

The program of activities, however, is of great importance because if it is not interesting enough to hold the boy's attention it will be difficult for the leader to give them training in character development.

The Sea Scout Program with its activities is proving more and more that it holds the interest of these older boys and the method of applying these activities is described herein.

Although the National requirements say that any boy fifteen years of age may become a Sea Scout, it is advisable, where possible, that they should also be at least First Class Scouts.

The first step is to have all the candidates meet the requirements to become Apprentice Sea Scouts. These requirements are as follows:

1. In order to become a Sea Scout, a boy must be fifteen years of age and furnish satisfactory evidence that he has put into practice in his daily life the principles of the Scout Oath and Law. ("How to Organize a Sea Scout Ship," Page 16.)

2. Take the Sea Promise. (Sea Scout Manual, Page 4.)

3. Demonstrate the proper method of using the life belt and the life buoy. (Reference—"How to Organize a Sea Scout Ship," Page 16.) The type of buoy recommended is described on Page 92 of the "Swimming and Water Safety Pamphlet."

Life belts for demonstration purposes can be secured from any shipping company in the vicinity. In territory where there are no ships, it is recommended that the Skipper write to Atlantic and Pacific Manufacturing Company, Atlantic Avenue, Brooklyn, New York, who will send a catalogue of prices in regard to these life belts. Where this is impracticable, it is suggested that the Sea Scouts themselves be required to make a life belt for this purpose.

4. Write an article of at least 200 words on the Sea History of the United States. (Chapter I, Sea Scout Manual.)

5. Present the written consent of his parents and make application to join a Sea Scout Ship or Patrol. It is very essential that these be required and kept in the Ship's files for future reference in case of necessity.

All candidates having met the requirements, it is recommended that the Troop secure quarters where they can meet. A description of how to fit out such a place will be found on Page 12 of the pamphlet "How to Organize a Sea Scout Ship." In that same pamphlet a list of the essential material necessary for the running of the ship will be found.

Before conducting any meetings, it is a very good policy to divide the Ship's Company into two groups, called boat's crews. These boat's crews may be made up from four to nine, depending upon the number of men in the Ship. From each of these groups one boy should be selected who will be the Crew Leader, and considerable time should be given by the Skipper to the training of these boy leaders. They should be taught how to instruct their crews in the requirements, so that at the meeting they may conduct the entire instruction work. Any time devoted to the instruction of these Crew Leaders will be a good investment, because the most successful way to run a Sea Scout Ship is on this system of having the boy leaders give the instructions, and be the actual leaders of their groups.

In other words, the most successful Sea Scout Ships will be run on the Patrol System.

Requirement No. 1—Apprentice Sea Scout to Ordinary Sea Scout is: "Know Sea History from the earliest time to the close of the 15th Century, and submit charts showing course traveled by any of the navigators."

The material will be found in chapter I, section A of the Sea Scout Manual, pages 7-29. In giving this test, the Crew Leader at the blackboard should instruct the members of his crew how to make a chart or map. On it he will draw the longitudinal lines and latitude parallels, draw a rough outline of the continents and then show how to plot the course of whatever navigator is selected. For instance, in selecting the cruise made by the Phoenicians in 600 B. C., on the authority of Necho (shown in the last paragraph on Page 12 of the Sea Scout Manual), a line will be drawn on the map from Aden down to the Red Sea, down around the East Coast of Africa, past the Island of Madagascar, westward around the Cape of Good Hope, up the South Atlantic, past the Island of Elba, Cape Verde Islands, through Straits of Gibraltar and back to Alexandria. Or take the cruise of Leif Ericson on Pages 17-18; or of Marco Polo, Page 19; or the voyage of Columbus.

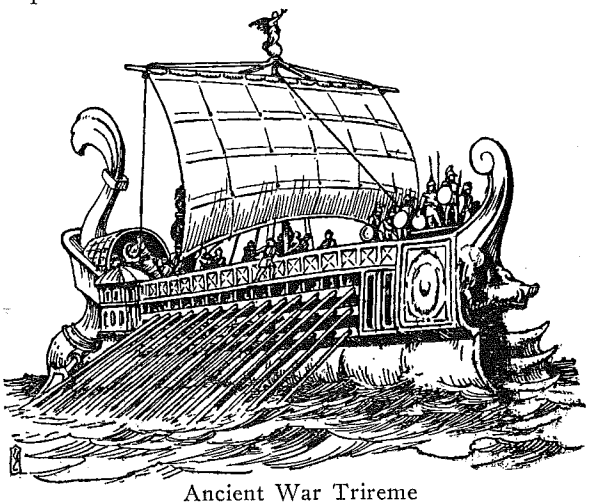
On these charts should be marked the important events that happened on the voyage at indicated places, the dates of departure and arrival, and other details found in the Manual. The charts turned in by the Sea Scouts should be on paper about 11 inches by 22, and the map itself may be traced from an Atlas with carbon paper, or blank maps of this size may be bought from any of the various map companies throughout the country. They can be had at a few cents each. (If you cannot secure them locally we would suggest Rand & McNally Co., 270 Madison Avenue, New York City.) The maps may be colored if desired. They should be signed by the Sea Scout and turned into the Crew Leader who will give them to the Skipper and, if satisfactory, the Sea Scout will be credited with having met the practical part of the requirement. The map may be made either at a meeting or at home.

The Crew Leader, having shown his crew how to do this, will then assign to each one a certain part of this chapter of the Sea Scout Manual to read; for instance, if there are five in the Patrol, each of them may be asked to take one of the

five parts into which this section of the chapter is divided. The first division is from Page 7 to top of Page 13; the second from Page 13 to middle of Page 16; the third from the middle of Page 16 to the middle of Page 18; the fourth from the middle of Page 18 to top of Page 21; and the fifth from top of Page 21 to top of Page 29, or if there are seven men in the crew each one of them may be asked to read three pages.

They may read them aloud at the Crew meeting, or else read them at home and each give a description at the next meeting of what they have done. Then a general discussion of the whole subject matter should be gone into and all of the countries and cities mentioned in the chapter should be pointed out, either by the Sea Scout or the Crew Leader, on the map which should be provided.

When the Crew Leader is satisfied that each one of the Sea Scouts has a thorough knowledge of this first section of the chapter, he will then notify the Skipper and all of them will be passed on that test from Apprentice to Ordinary. This should be noted on their individual record advancement cards and on the Ship Record advancement card, which is placed on the bulkhead of the meeting place, so that all members of the Crew will see who has passed this requirement.



Ancient War Trireme

SPECIMEN QUESTIONS ON TEST NO. 1

(For use of Leaders only)

1. According to mythology, who invented the oar?
   Ans.—Atlas.
2. What were the dimensions of Noah's Ark?
   Ans.—Length 600 feet. Beam 100 feet. Depth 60 feet.
3. Who were the first great seagoing people? What great city did they establish and in what year?
   Ans.—The Phoenicians. Cadiz in Spain. 1300 B. C.
4. When was the continent of Africa first circumnavigated and by whom?
   Ans.—600 B. C. Phoenicians, in the employment of Necho, Pharoah of Egypt.
5. What type of ships did the ancient Greeks use?
   Ans.—Large ships propelled by oars—called triremes, quinqueremes, etc. (See Sea Scout Manual, Pages 13 and 14.)
6. What was the name of the first great lighthouse?
   Ans.—The Pharos of Alexandria in Egypt.
7. Who were the Vikings? What kind of ships did they use?
   Ans.—A race of men who lived in the Scandinavian countries. They used long boats called Longships propelled by oars and carried a square sail when the winds were favorable.
8. Who was Leif Ericson?
   Ans.—He was a Viking who sailed across the North Atlantic Ocean and arrived, (it is said) in Newfoundland.
9. Who was the first European to hear of the Island of Cipango?
   Ans.—Marco Polo.
10. Where was Christopher Columbus born?
    Ans.—In Genoa in 1435.
11. From where did he sail on his greatest voyage?
    Ans.—Palos, Spain.
12. What were the names of the ships of his squadron?
    Ans.—Santa Maria, Nina, Pinta.

Requirement No. 2.—Apprentice Sea Scout to Ordinary Sea Scout. "He must know the names of the different types of rowboats, and the parts of a boat, as well as the parts of an oar; and be able to make a recognizable sketch of any one of the types of boats called for."

The material to be read for this will be found on Pages 59-69 of the Sea Scout Manual. In giving this test the Crew Leader should begin by describing in detail the building of a small boat, from the keel up. Having drawn on the blackboard a line on the boat to represent the keel, he should ask each member of the crew in turn to tell him what parts should be added in their proper order, and place the name on the part of the boat on the board, so that when it is entirely built up it will show a complete sketch of the boat with the parts all named.

The descriptions and sketches of this given in the Manual are complete and absolutely accurate, and as it is very important to every Sea Scout to have a thorough knowledge of the types of small boats and their parts, this test should be given in great detail.

When the Crew Leader has made this sketch he should have each member of the Patrol make two sketches on a piece of paper 11"x22" of the boat as shown on Page 63 and as shown in the middle of Page 66.

A thorough instruction on the parts of an oar and the rudder, which is shown on Page 67, should then be given, and a sketch of an oar and a rudder made on the same piece of paper with the boats. When these sketches are all handed in and each of the Sea Scouts have been examined orally on the parts of a boat, they should be given credit for having passed Test No. 2.

Skippers who have available other books on the design and building of boats should use them in the instruction of the Patrol Leaders, so the crew will know of many other types of boats, besides those shown in the Manual. It is not necessary that all Sea Scouts know these extra ones to pass the tests, but it will be to their advantage to round out their knowledge of small boats as much as possible.

SPECIMEN QUESTIONS ON TEST NO. 2

(For use of Leaders only)

1. What are boats as distinguished from ships?
   Ans.—Small craft carried by larger vessels.

2. What are garboard strakes?
   Ans.—The first strakes next to the keel on the port and starboard sides.

3. What does the framing of a wooden boat consist of?
   Ans.—Keel, stem, stern post and ribs.

4. What are the seats in a boat called?
   Ans.—Thwarts.

5. What is a painter?
   Ans.—The rope in the bow of a boat for towing or making fast to pier or dock.

6. Name the parts of an oar?
   Ans.—Handle, leather, loom, blade, tip.

7. What is the difference between a rowlock and an oarlock?
   Ans.—The *row*ing oars work in the *rowlocks*. The steering *oar* in the *oarlock*.

8. What are the two common devices used for steering small boats?
   Ans.—Rudder and steering oar.

9. What is a tiller?
   Ans.—A bar of iron or wood connecting with the rudder head by which the rudder is moved.

10. What is the other name for the tiller?
    Ans.—Helm.

11. Where is the stern sheets?
    Ans.—The after part of the boat.

12. What direction will the bow of the boat turn when you port the helm?
    Ans.—To starboard.

Requirement No. 3.—Apprentice Sea Scout to Ordinary Sea Scout is: "Submit a knot board of the following knots: Overhand, French Bowline, Bowline on a Bight, Figure of Eight, Rolling Hitch, Carrick Bend, Double Carrick Bend, Single and Double Blackwall Hitches, Midshipman's Hitch, Stevedore's Knot, Marling Hitch, and know types of ropes, materials used, and the definition of lay, strand, hawser, cable." (Sea Scout Manual, chapter 3, section A, pages 110-125.)

In giving this test the Crew Leader should have samples of the various types of rope mentioned in the first part of the chapter to show to the Sea Scouts, so that they will recognize the types of rope from observation. They should also be shown what a lay, strand, hawser and cable are, and, if possible, build up part of a hawser or cable from pieces of rope belonging to the Ship. It is very important that they should know all of the definitions on this page, because most of the cruising done by Sea Scouts is on sailing vessels, and as all of the running and standing rigging is made of different types of rope, according to the purpose for which it is used, a thorough knowledge of the right rope for the particular work on the ship, is very essential.

The practical part of this test consists of the submitting of a knot board with the twelve knots on it. As each Sea Scout must submit this board it will be sufficient if they make the knots out of small line. They should be mounted on a board approximately 11x22 inches and underneath each knot, after it is mounted, should be placed the name of the knot (typewritten or printed so that is can be easily read).

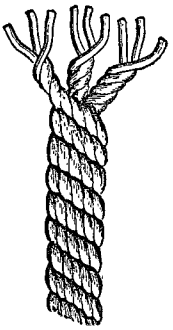
A very splendid specimen of this was submitted by the Skipper of the Sea Scout Ship "Essex." The knots were arranged in three rows of four each. They were made of white one-quarter-inch line. It is a very neat piece of work and shows very good workmanship on the part of the Sea Scout who made it. It is strongly urged that this type of line be insisted upon by each Skipper for the passing of this test. This, of course, does not exclude the making of large boards, where Sea Scouts like to do this work, and there is plenty of time and material for doing it. It is well,

however, that one standard should be set up for all Sea Scouts in one Ship; and for all the Ships in each squadron; all the squadrons in a Region; and eventually, all the Regions in the country.

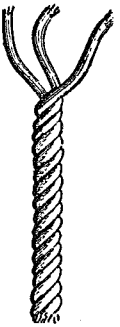
NOTE:—It is recommended that Skippers set up a prize to be given to the Sea Scout who submits the best knot board of the standard size. This creates a tremendous amount of enthusiasm and usually brings forth better work on the part of each Sea Scout. Suitable prizes could be the books recommended in the Bulletin, or else plans for the making of model boats, and sometimes a prize to be applied towards the payment of his Long Cruise fee might be given.

If any Skipper who inaugurates a prize competition will send the name of the winning Sea Scout and his record to the National Sea Scout Department, we will be glad to make mention of it in the Bulletin.

Plain laid



Cable laid



Four stranded Plain laid with heart

SPECIMEN QUESTIONS ON TEST NO. 3

(For use of Leaders only)

1. What are the two kinds of rope used on board ship?
   Ans.—Vegetable fibre and wire ropes.

2. Name the principal vegetable fibre ropes?
   Ans.—a. Manila. b. Sisal hemp. c. Coir.

3. What is a right-handed rope?
   Ans.—A rope in which the yarns are spun with right handed twist or turn.

4. What is the "lay" of a rope?
   Ans.—The twisting of the rope strands.

5. What is a hawser?
   Ans.—Any rope five inches or more in circumference.

6. What kind of knot is used in bending flags for hoisting?
   Ans.—Sheet, becket or signal halyard bend.

7. What knots are used in bending hawsers together?
   Ans.—Carrick and double carrick bends.

8. What is the sheepshank used for?
   Ans.—For temporarily shortening the bight of a rope.

9. What is the blackwall hitch used for?
   Ans.—To secure the end of a rope to the hook of a block.

10. What knot is used to secure a rope to a buoy or kedge anchor?
    Ans. Fisherman's bend.

11. What hitch is used in lashing a hammock?
    Ans.—Marling hitch.

12. What is the standing part of a rope?
    Ans.—The part of the rope made fast.

Requirement No. 4.—Apprentice Sea Scout to Ordinary Sea Scout is: "Make a sea bag, or submit a sample flat seam and round seam and grommet eye, sewed in canvas." (Sea Scout Manual, chapter 4, section A, pages 160 to 171.)

This requirement is one of the most interesting requirements in the whole Sea Scout Program. Although it is not mentioned in the text, this is a part of the chapter on Sales, Masts and Rigging, and before attempting to make the sea bag or do any sewing, all Sea Scouts should be well versed in section A of this chapter which begins on page 160. He should be very familiar with the various types of sails used on sailing ships, the canvas of which they are made, the names of the parts and what uses sails are put to. The information given in this section of the chapter is absolutely authoritative and no Sea Scout should be allowed aboard any sailing vessel until he is thoroughly familiar with all of the terms used in this section. The practical part of this test calls for the making of a sea bag, OR a flat seam, etc. It is strongly recommended that every Sea Scout be required to make the sea bag. The sketch showing this sea bag is found in this chapter on page 169. Following is a description of how to make the bag.

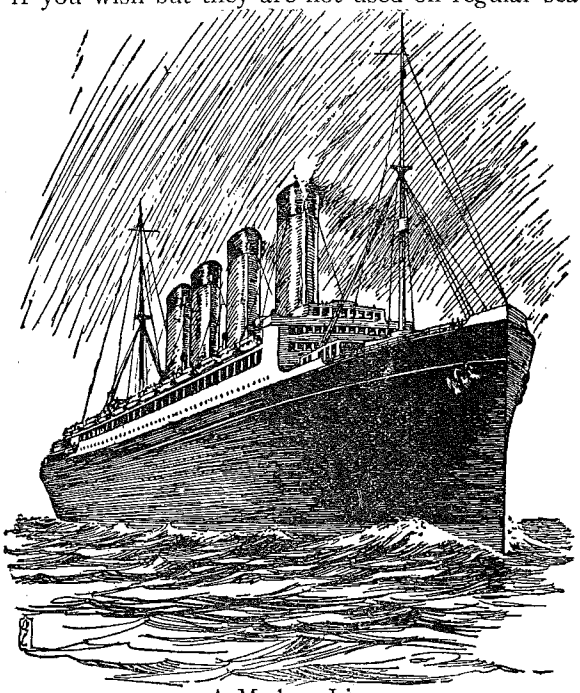
To make a sea bag the Sea Scout will need a piece of about No. 8 canvas (if canvas is hard to get, old awnings, tents, cement sacks, etc., are suggested), 5 feet long and 34 inches wide; a palm and sail needle (about No. 12 or 14); twine, beeswax, fid, sail-hook (either a swivel-headed one, purchased, or a buttonhook or a piece of wire bent into shape); blue marking pencil; a sharp knife (Scout knife is O. K.), and a rubber (a flat piece of wood, bone or steel for rubbing down seams, or you can use the back of your knife handle); a little grease horn or cup, and a pricker (sharpened nail).

Take the pricker, tie the pencil to it with a six-inch string, draw a circle twelve inches in diameter, then inside this a circle ten inches in diameter. This will form the bottom of your bag (ten inches across with one inch selvedge around it). Cut a piece of canvas thirty-eight inches long and thirty-four inches wide. This allows for a bag ten inches in diameter, with an inch overlap at seam, and thirty inches

long with three inches folded at top for the grommet holes, and one inch allowed for the bottom seam.

Fold your bag top over as shown in sketch, and sew down with an overhand stitch. Hold the work taut with the sail-hook. Make the eyelets for the bag lanyard ("Draw String") by cutting four small holes at equal distances apart. Wind several turns of twine around the edges of these holes, and sew as shown in sketch. Sew the sides of your bag together; selvedged edge in, and outer edge turned over. Sew this edge down with a flat seam, then sew the two parts together with a flat seam; about five stitches to the inch. You should now have a canvas cylinder about thirty-one inches long. Turn it inside out.

Turn back one inch of the bottom, as shown, and sew on the bag bottom with a round stitch. Reeve a lanyard thru the eyelet holes to close the top. You may make the tote strap if you wish but they are not used on regular sea bags.



A Modern Liner

SPECIMEN QUESTIONS ON TEST NO. 4

(For use of Leaders only)

1. What are the two types of sails?
   Ans.—Square sails, fore and aft sails.
2. Give the names of the top, sides, and bottom parts of a square sail?
   Ans.—Head, leeches and foot.
3. What is a bolt rope?
   Ans.—A rope sewed to the edge of a sail to give it strength.
4. What is the difference between a sheet and a tack (with reference to a lower square sail)?
   Ans.—The sheet is made fast to the leeward clew and is hauled aft. The tack is made fast to the weather clew and is hauled forward.
5. When the tack is made fast on the port side, on what tack is the ship sailing?
   Ans.—The port tack.
6. What is the name of the rope that is used in hoisting sails and yards.
   Ans.—Halyards (Haul-yards) (also written Halliards).
7. Under what two general heads do fore and aft sails come?
   Ans.—(a) Those hoisting to stays. (b) Those hoisting to masts.
8. What two types of palms are there?
   Ans.—(a) Seaming palms used in sewing canvas. (b) Roping palms used in sewing on bolt rope.
9. What two types of seams are there?
   Ans.—(a) Flat seam. (b) Round seam.
10. What is a sail hook?
    Ans.—A small device to hold canvas while sewing a seam.
11. What is a sea bag?
    Ans.—A cylindrical canvas bag of various sizes in which sailors stow their clothes.
12. What is the name of the rope or line used in closing the sea bag?
    Ans.—Bag lanyard.

Requirement No. 5.—Apprentice Sea Scout to Ordinary Sea Scout is: "Know three types of anchors and submit a sketch of one type." (Sea Scout Manual, chapter 5, section A, pages 196 to 201.)

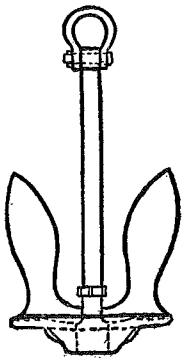
When instructing the Sea Scout Patrols in this subject it is absolutely essential that they know every part of the old fashioned anchor, as well as the parts of the patent and other types of anchors shown in the Manual. Although the test calls for making a sketch of one type only, it would be well to have all Apprentice Sea Scouts make a sketch of two or three of these anchors so that their appearance would be familiar to them for all time.

The sketch of the old fashioned anchor shown in the Manual is very complete in every way and should be copied exactly as it is shown there, with all the notations.

It is recommended that this sketch be made at least six inches long by two inches wide, so that all of the details will be brought out clearly.

This is a very simple test and should easily be passed by a Sea Scout in one evening.

In the theoretical side of the problem, the advantages and disadvantages of all these types of anchors should be pointed out very clearly and it should be clearly demonstrated to the Sea Scouts just what type of anchor should be used under various conditions; that is, the type of vessel used and the type of harbor in which the ship is to come to anchor.



Patent anchor

SPECIMEN QUESTIONS ON TEST NO. 5
(For use of Leaders only)

1. What is an anchor?
   Ans.—A device of iron so shaped as to grip the bottom and hold a vessel by the chain or rope attached.
2. What is the most important part of an anchor?
   Ans.—The shank, which is the main stem.
3. What is the name of the part of an anchor which is at the top of the stem at right angles to it and to the plane of the arms?
   Ans.—The stock.
4. In anchoring in six fathoms what scope of chain should be used?
   Ans.—30 fathoms at the water's edge.
5. Describe the action of an anchor when vessel is coming to anchor?
   Ans.—(See last paragraph Page 198 Sea Scout Manual. Sea Scout should give answer by illustrated sketch.)
6. What is an anchor buoy?
   Ans.—A small buoy made fast by a rope around the crown of an anchor that permits it to be seen on the surface of the water.
7. What is the name of the anchor now in most common use on large vessels?
   Ans.—The stockless anchor.
8. What is the best type of mooring anchor for a yacht?
   Ans.—The mushroom anchor.
9. What is a sea anchor used for?
   Ans.—It is used as a drag. In riding out a gale where it is impossible to set sails it tends to hold the bow into the sea, and thereby prevents falling into the trough.
10. What is an anchor pocket?
    Ans.—Recesses in the ship's sides at the bow into which the anchors are hauled.
11. What is a stem anchor?
    Ans.—A very heavy anchor carried on very large vessels and hauled right up into the hawse pipe in the stem.
12. Give the name of another common anchor, not mentioned before?
    Ans. A kedge anchor.

Requirement No. 6.—Apprentice Sea Scout to Ordinary Sea Scout is: "Box the compass. Sketch relative bearings and be able to report ships on the horizon or wind directions with respect to the ship." (Sea Scout Manual, chapter 6, section A, pages 215-226.)

This is one of the very important tests from Apprentice to Ordinary Sea Scout. Every Sea Scout should be able to box the compass and know the approximate degrees on each point. This is shown very clearly on page 116 of the Manual. It is not necessary that the Sea Scout know how to box the compass by quarter points, but they should know what the quarter points mean and where they are measured from. This is given on page 219 of the Sea Scout Manual.

The sketch of the relative bearings, which is shown on page 221 is very complete. Every Sea Scout should make a copy of this on a piece of cardboard approximately 11"x22".

On page 222 are some compass problems. These problems are probably one of the finest games to test the mental alertness of the Sea Scout and to teach him quickly the compass and bearings. A very interesting evening can be had by having the Sea Scouts sit around in a circle and asking each one in turn one of these questions. It may be found difficult at first, but with practice it will be found to be of great interest and value. Although there are many questions in the Manual, a Skipper can easily write out a new set for himself.

It is suggested that this be used as a game, and that each Sea Scout be given a certain number of points for correctness in his answers, and that a rating sheet show who was first, second, third, and so on. It will also be a method of testing the efficiency of the Patrols.

It might be a very good suggestion that the Patrol that makes the lowest rating be given the duty of cleaning up the meeting place after the meeting is over, or other jobs, and some reward or badge be given to the Patrol that gets first place.

SPECIMEN QUESTIONS ON TEST NO. 6
(For use of Leaders only)

1. How many points on the compass?
   Ans.—32.
2. Name them.
   Ans.—(See Page 217 Sea Scout Manual.)
3. How many degrees in the compass?
   Ans.—360.
4. How would you report the direction of a wind?
   Ans.—It blows *from* the south, etc.
5. How would you report the direction of a tide?
   Ans.—It sets *in* an easterly, northerly, etc., direction.
6. What are relative bearings?
   Ans.—A system of directions taking their names from the ship itself.
7. How many are there?
   Ans.—32.
8. What is the difference between a relative bearing and a compass bearing?
   Ans.—The latter is always a fixed geographical direction, the former is not a fixed geographical direction.
9. A ship is heading north, a vessel is sighted broad on the starboard bow, in what direction is it?
   Ans.—North east.
10. There is a lighthouse one point abaft the starboard beam, in what direction is it?
    Ans.—East by south.
11. There is a buoy bearing North north west. What is its relative bearing?
    Ans.—Two points on the port bow.
12. A ship following bears southwest by south. What is her relative bearing?
    Ans.—Three points on the port quarter.

NOTE.—Many other questions of this type will be found in the Sea Scout Manual, Pages *222-226*.

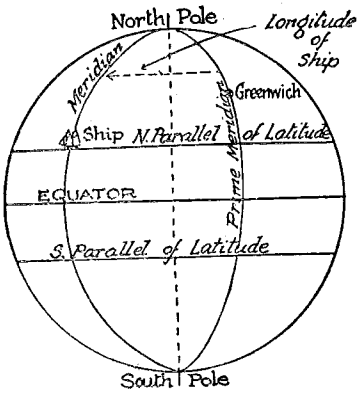
Requirement No. 7.—Apprentice Sea Scout to Ordinary Sea Scout is: "Explain Longitude and Latitude and know location of his home with respect to these." (Sea Scout Manual, chapter 7, section 8, pages 256-260.)

The theoretical part of this test consists of knowing the definitions of navigation, piloting, dead reckoning and day's work. Also explaining axis of rotation, poles, equator, meridians, etc. Longitude, Latitude, the prime meridian, difference of latitude, difference of longitude, departure, and sea mile.

These definitions are given with sufficient clearness in the Sea Scout Manual and should be clearly demonstrated to the Sea Scouts by means of maps; or, where possible, a globe.

The practical part of the test consists in making a chart about 22" long by 11" wide, showing the latitude from five degrees below the location of his city to five degrees above, and the longitude from five degrees east to five degrees west.

The meridians for each ten minutes and the parallels of latitude for each ten minutes should be drawn and the city located as closely as possible from these lines.



SPECIMEN QUESTIONS ON TEST NO. 7
(For use of Leaders only)

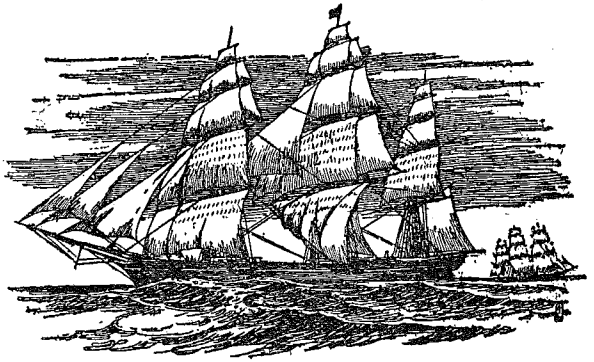
1. What is the difference between piloting and navigation?
   Ans.—Piloting is determining position of ship by means of terrestrial observations. Navigation is determining of ship's position by celestial observations.
2. What are the elements considered in plotting a dead reckoning position?
   Ans.—a. Course; i. e. direction.
   b. Distance; i. e. distance covered as shown by log or estimated from speed.
3. From what line are the degrees of latitude reckoned?
   Ans.—The equator.
4. What is the latitude of the North Pole?
   Ans.—90 north.
5. Is there any other North Pole?
   Ans.—Yes, the North Magnetic Pole?
6. Towards which Pole does the North Point on the ordinary compass point?
   Ans.—The North Magnetic Pole.
7. From what line is longitude measured?
   Ans.—From the Prime Meridian, which is a Great Circle running around the earth through the North and South geographical poles and passing through Greenwich, which is near London, England.
8. How is the longitude of a place measured?
   Ans.—The angle at the Pole between the Prime Meridian and the meridian drawn through the place is the longitude.
9. What is the longitude of your home town?
   Ans.—(Consult Atlas.)
10. How is the latitude of a place measured?
    Ans.—The angle at the center of the earth subtended by the part of the meridian between the place and the equator. (Show on globe or by drawing on board.)
11. What is a sea mile?
    Ans.—6,080 feet. Also called nautical mile.
12. How is the length of the sea mile determined?
    Ans.—If a great circle of the earth is divided into 360 and one of these parts divided by 60, the result is a sea mile.

Requirement No. 8.—Apprentice Sea Scout to Ordinary Sea Scout is: "Name and explain the seven watches and know the bell time on board ship." (Sea Scout Manual, chapter 8, section A, pages 264 to 270.)

The first four pages of this chapter give examples of ship routine at sea, and should merely be read. They need not be memorized by the Sea Scouts. At the bottom of page 267 under the head "Bell Time on Ship Board," is the part that should be read by the Sea Scout and he should understand definitely when the watches begin and when they end; should know their names and whatever history there is attached. He should understand what the Captain's watch is and what the Mate's watch is. He should understand why the "dog watches" are so-called.

Then he should be made to draw up a table showing the "Bell Time." There are many opportunities for ingenuity in making a chart of this kind so that the boy will very clearly understand after looking at the chart just what the watches are and what the Bell Time is.

The practical side of this test is also the standing of the officer's watch. Every Apprentice Sea Scout should be made to stand this watch once before he is promoted, or at least before he is allowed to be given credit for having passed his test.



California Clipper Ship, "Flying Cloud"

SPECIMEN QUESTIONS ON TEST NO. 8
(For use of Leaders only)

1. How many watches is the day divided into on board ship?
   Ans.—Seven.

2. Name them.
   Ans.—(See Sea Scout Manual, Page 269.)

3. It is five bells in the mid watch. What time is it on the clock?
   Ans.—2:30 a. m.

4. It is three bells in the first dog watch. What time is it on the clock?
   Ans.—5:30 p. m.

5. How would you report 7:30 a. m.?
   Ans.—7 bells in the morning watch.

6. How is the captain told that the sun has crossed the meridian?
   Ans.—"It is twelve o'clock, sir."

7. Is eight bells made at twelve o'clock?
   Ans.—No, unless the captain orders it so.

8. What is the name of the Captain's watch?
   Ans.—The Starboard watch.

9. Does he stand it?
   Ans.—No, it is stood by the Second Mate.

10. When is the mid watch?
    Ans.—Midnight to 4 A. M.

11. Who stands the Port watch?
    Ans.—The First Mate.

12. Show by means of dashes how seven bells is made?
    Ans.— - - - - - - - -

Requirement No. 9.—Apprentice Sea Scout to Ordinary Sea Scout is: "Be able to execute and give commands in the School of the Sea Scout. This test is a very simple one and well described in the Sea Scout Manual, chapter 10, pages 370-374.

It is important that Sea Scouts execute all these commands smartly. Although it is put down as No. 9 in the Manual, it should be one of the first tests in which instruction is given the Apprentice Sea Scout when he comes into the Ship or Patrol. The Sea Scout should not, however, be given credit for having passed the test until he has shown by his conduct and actions during at least eight meetings, that he has put into practice what he has been taught in this test.

Although the School of the Crew (chapter 10, pages 374-380) is the test from Ordinary to Able, still all leaders should instruct their Sea Scouts in the School of the Crew, while they are Apprentice Sea Scouts because this is necessary formation in the movements of men.

Requirement No. 10.—Apprentice Sea Scout to Ordinary Sea Scout is: "Qualify for Swimming Merit Badge."

This is fully explained in the Swimming Merit Badge Pamphlet and no further expansion is necessary here.

Requirement No. 11.—Apprentice to Ordinary Sea Scout is: "Build a Model Boat."

It will be found among the average group of older boys that some will be very much interested in making model boats, some just mildly interested, and others may not like to do it at all; and a wise leader will not try to force a boy to do a distasteful job merely to pass a test in advancement. For this reason the requirement for building a model boat is left elastic.

For those who like model boat building, elaborate models such as are described by Capt. E. A. McCann in his series of books (Norman W. Henley Publishing Co., 2 West 45th Street, New York City—$2.50 for each volume), will appeal as an interesting activity which will hold their interest over a long period of time.

For those who are mildly interested, it is strongly recommended that they build a Tosebo Model Yacht, which is a sailing sloop and probably one of the most popular types of model boats in the country today. Plans and specifications for this, as well as the material to build her, can be purchased from the Tosebo Model Yacht Company, at Woodstock, Illinois.

The Stanley Rule and Level Company at New Britain, Connecticut, publishes a pamphlet on how to build a model yacht, giving a full description, complete plans and a list of all the tools and material necessary to build the boat model. This plan can be purchased for 10c by writing to this company at the above address.

For those who are not much interested in this type of work, it is suggested that they be assigned the job of making small models, four or five inches long, 2 inches wide, and about 1½ inches thick, showing the deck plan of a ship. These can be used later in studying Rules of the Road and playing maneuver games.

Interest can be stimulated in this work (the educational value of which cannot be questioned) by the offering of prizes for the best models of a certain type.

It may be of interest to know that there are many naval architects of the present day successful in their field, who received their first taste for the work in this profession by working on small ship models in Sea Scouting, and as a vocational guidance it has a very great value.

Requirement No. 12.—Apprentice to Ordinary Sea Scout is: "Make a week-end cruise along shore in a rowboat or canoe, *under instruction,* and make proper report of same in a log."

It should be distinctly understood that this involves at least a twenty-four hour trip. It does not require being on

the water at night. A good idea is to select a place for a camp, proceed to that place, camp there overnight and return to the base the next morning.

A very careful and detailed log of all happenings should be kept and this should be turned in, together with a chart showing the outline of the shore; the general direction taken by the boat; the place of the camp site; a log of what was done ashore, and a chart showing the return trip.

All items of general interest such as islands, ships passed, rocks noted, shoals noted, buoys picked up, buoys passed, lighthouses, etc., should be marked in a proper manner on this chart and no one should be given credit for having this requirement unless the log and chart show that the Sea Scout received a thorough knowledge of along-shore piloting from his cruise.

The log and chart should be kept in the Troop Record Book for inspection by the Pilot or other Local and Regional Officials at any time.

Requirement No. 13.—Apprentice to Ordinary Sea Scout is: "Know 'Abandon Ship Drill.'"

This is probably one of the most important tests in the Sea Scout Program, because on the ability of a boy to go through this test by following the instructions given by the Leader, executing the orders promptly and with a level head, will depend the future safety of the Sea Scout, and the whole crew, should an accident occur at any time. It is really a precautionary measure to instruct the individual members of the crew what to do in case the boat in which he is embarked is capsized.

This test should be given on the very first or second day that the Sea Scouts go afloat in their boat, and should be given not only once, but several times until every member of the crew is proficient. This test is divided into three parts:

Part One.—Having ascertained that all of the Sea Scouts are good swimmers, and that they are in good physical shape, the boat, presumably a row boat with a lifebelt for each Sea Scout aboard, shoves off from the dock and at a short distance from the shore it is stopped. The order is

given to boat the oars, and is followed by an order for all Sea Scouts to take off their uniforms, including shoes, their bathing suits having previously been put on underneath. The lifebelts are thrown over the side, and orders given for the Sea Scouts, except the Leader and two others, to dive into the water, an equal number from each side. They immediately proceed to get the lifebelts and put them on while still in the water. They are then ordered to return to the side of the boat, an equal number on each side and all put their hands on the gunwale at the same time. Then, on the order being given, all come aboard together.

This should be done several times until proficiency in putting on the belts, returning to the boat and coming aboard together is attained.

Part Two.—This should be undertaken only after the Skipper is satisfied that all aboard have passed the previous part of this test. The same procedure is followed except that in this case all, including the Leader, abandon the boat and having put on their lifebelts, the boat is listed so that it fills with water. It must be understood that all Skippers must have a level head and that all Sea Scouts be instructed to be cool headed while this test is being performed.

Half of the crew will take their positions on either side with their hands on the gunwale, and an attempt made to bail her. As she lightens, the crew, one after the other, get aboard and help bail her, and finally when she is dry, all get aboard.

It is recommended that bailing buckets be made secure by a line to a thwart so that they cannot be lost if boat capsizes.

It should be the duty of two Sea Scouts to collect the oars as they float on the surface so that when the boat is righted, they can be returned aboard.

Part Three.—This part of the test should be done only when proficiency has been attained by all Sea Scouts from the previous two parts. This is the case of a boat under sail. The boat is taken some distance from the shore under sail. She is turned over on her side and made to lay on her beam ends. In this way, she will float with part of the keel out of the water. The lifebelts are put on as before. An attempt to right her will be found difficult until the masts are unstepped. In most small boats this is easy because the

shrouds are usually fastened to eyes on the gunwales, abeam of the mast, and it is quite practical to have a Sea Scout unloosen these shrouds, both those under the water and those above water. The masts are unstepped and then the boat is righted as in part two. She is then bailed out and the masts and sails taken aboard and set as before, and the boat proceeds back to its base.

In the event it is impossible to untie the shrouds they should be cut, so there will be no difficulty in unstepping the masts.

All Skippers seeing that these tests are passed properly by the Sea Scouts can be quite certain that if an accident does happen all hands will know what to do and the possibility of loss of life will be very greatly minimized.

Safety Precautions for Sea Scout Boats.

1. No Sea Scout or Scout is permitted to enter a Sea Scout boat afloat unless he has shown satisfactory evidence that he is a swimmer.
2. No rowing boat containing Sea Scouts is permitted to go further from the shore than the distance that the poorest swimmer in the crew can swim.
3. No whaleboat or cutter is permitted to leave the harbor unless there are at least four Sea Scouts aboard.
4. No Apprentice Sea Scout is allowed in a sailing boat.
5. No sailing vessel on which Ordinary Sea Scouts are embarked is permitted to go out of sight of land.
6. All Sea Scout sailing vessels must have a competent seaman aboard when under way.
7. Able and Quartermaster Sea Scouts should be given permission to make cruises out of sight of land only when Skipper considers that they are qualified to do so.
8. All Sea Scout sailing vessels must carry as a minimum equipment one life preserver for each crew member.
9. In addition to the Skipper every Sea Scout vessel on a cruise should have a Leader for each eight boys. In no case should there be less than two Leaders in addition to the Skipper.
10. All Sea Scout vessels during the cruising season should at the proper time, set an anchor watch consisting of one Leader and one Scout.

Requirement No. 14—Apprentice to Ordinary Sea Scout is: "Know six water fowl."

Although this test says "water fowl," the intent of it is that Sea Scouts, whether they are inland or not, should know something about the birds of the ocean. They are little known to most landsmen, but to those who have seen them and watched them in their native habitat, they are extremely interesting.

The test says "Know." By this is meant that the Sea Scout should not alone know the bird when he sees it or a picture of it, but should be able to describe it, tell where it can be found, and know something about its habits.

There are about twenty broad divisions of ocean birds, each one of these divisions made up of several species, but in this test it is only necessary to know one of the species of each division. The principal ocean birds are as follows:

Albatross, Petrels, Gulls, Terns, Skimmers, Skuas, Penquins, Auks or Puffins, Frigate birds, Pelicans, Gannets, Cormorants, Tropic or Bosun birds, Phalaropes.

The Sea Scout should be able to recognize and describe six of these birds.

The test should comprise two parts: First, a written essay describing the six birds selected; and second, the Sea Scout should be able, by looking at a picture, to give the name of the bird shown.

The Sea Scout Department is at present making up a little chart 22″x11″ showing pictures in colors of these various birds.

Requirement No. 15.—Apprentice to Ordinary Sea Scout is: "Present a service record of at least three months as an Apprentice Sea Scout and furnish satisfactory evidence that he has put into practice in his daily life the principles of the Scout Oath and Law."

When a man devotes the time and thought necessary to the successful handling of a group of older boys in the Sea Scout Program, he naturally hopes and expects that tangible results will come out of the work.

It may be that every one of his boys will pass all the previous tests perfectly; some of them develop into fine seamen, some of them into good oarsmen, some into good model builders, but these boys could have acquired pro-

ficiency in all of these things in other places, and if this were the only result, the time invested by the man and the boy in the meetings in Sea Scouting would be entirely wasted.

The measure of the value of the Skipper's leadership, the dividend he receives for the time invested, will be found in the improvement of the character of the boys in his Ship.

Have they become more trustworthy as a result of their contact with the Skipper? Is their loyalty to their shipmates, the Skipper, the Organization, the country, the state and home improved as a result of their contact with him? Have they become more helpful, more willing to do things more unselfishly? Have they become more friendly with others?—this is a severe test with boys of this age, because this is the age when they tend to restrict their friendships; to feel themselves superior to others, to acquire a touch of snobbishness and even a contempt for younger people, as well as for older people.

Have they, through their contacts with the ancient customs of the sea become more courteous, not alone to their shipmates and to the members of their family, but to all others—men, women and children that they meet in their daily contacts? Have they developed in sympathy? Have they become more kind?

What has he learned of prompt obedience to orders? Does he address his officers with the customary title of "Sir?" Does he execute all orders on the double, which is the manner in which they must be carried out on board ship? Does he obey the rules and regulations of the ship? When everything goes wrong does he complain? Does he rail against fate or does he take it with a smile? When he is wrongly accused and suffers injustice as a result, does he complain, or does he take it with a smile?

Has he learned to appreciate the value of property? Has he realized that on board ship there is small space for carrying materials and therefore materials of all kinds should not be wasted? Is he thrifty?

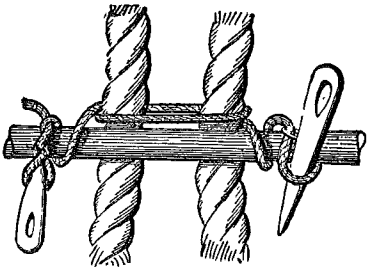
Does he cringe in the storm? Does he go below when the weather's foul? Is he afraid? Has he learned from you to be courageous always—spiritually, mentally and physically?

Is he clean? Has he learned one of the cardinal virtues of the sea—cleanliness of his person, of his ship, of his uniform, of his quarters? Cleanliness is mighty near to Godliness.

Is he reverent? Does he realize that through the universe there is a God who rules it benignly—justly? Does he know that he should worship that God reverently, quietly? Does he realize that others about him render that reverence, and is he tolerant for the method in which it is given?

These are the things that count, and it is strongly recommended that no boy, no matter how well he has passed the previous fourteen tests, be allowed to advance to the grade of Ordinary Sea Scout, unless the Skipper is satisfied that in his daily life he has tried to live up to the Scout Oath and Law.

In order to get some measure of the advancement of the boy in this test the following chart is submitted as a sample. One of these charts should be kept for each boy and he should be rated in it every three months or six months and the date placed on the chart each time the test is made. At the end of the year, or whatever period of time is considered advisable, it can be seen from looking over these charts just what improvement has been made in these qualities.



Spanish windlass

Requirement No. 15.—Chart.

	Poor	*Fair*	*Good*	*Very Good*
Sincerity				
Health				
Loyalty				
Ambition				
Refinement				
Courage				
Promptness				
Tolerance				
Unselfish service				
Team play				
Sympathy				
Adaptability				
Clear thinking				
Perseverance				
Public speaking				
Poise				
Scout technique				
Sense of humor				
Leadership of boys				
Imagination				
Energy				
Personality				
Initiative				
Judgment				
Resourcefulness				
Organizing ability				
Sociability				
Originality				
Tact				

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For the convenience of Sea Scout Leaders, and in the belief that it will save considerable time, correspondence and expense, this page is being devoted to the matter of Sea Scout supplies. It is requested that Sea Scout Leaders keep in mind the following:

1. Cash, check or money order should accompany all orders for supplies.

2. When ordering supplies it will expedite matters if the purchaser will be sure to give the catalogue number for each item.

3. All of the following items marked with an asterisk (*) come under the classification of "Restricted Insignia" and orders for the same must be referred to the Scout Executive of Local Council, under which the Sea Scout Unit is operating. A Scout Executive will approve the order, and either forward same direct from his own stock or refer the order to National Supply Department for necessary attention. This will insure prompt and efficient service and will enable the Local Council to maintain a record of all badges issued to Sea Scouts in its territory. Sea Scout units not under Local Council should forward all orders direct to National Supply Department, bearing the signature of the Skipper.

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* 201	Sea Scout Officers Embroidered Arm Badge, each	.25
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* 203	One-quarter-inch Silver Braid for Officials, each yard	.25
* 217	Sea Scout Metal Pin, each	.20
* 218	Sea Scout Metal Miniature Pin, each	.15
* 222	"Boy Scouts of America" (For blue uniform), each	.15
* 222-a	"Boy Scouts of America" (For white uniform), each	.15
* 223	Long Cruise Badge, each	.15
* 224	Boatswain's Badge (For blue uniform), each	.50
* 225	Boatswain's Mate Badge (For blue uniform), each	.40
* 226	Coxswain's badge (For blue uniform), each	.30
* 227	Able Sea Scout Badge (For blue uniform), each	.40
* 228	Ordinary Sea Scout Badge (For blue uniform), each	.40
* 229	Apprentice Sea Scout Badge (For blue uniform), each	.30
* 234	Boatswain's Badge (For white uniform), each	.50
* 235	Boatswain's Mate Badge (For white uniform), each	.40
* 236	Coxswain's Badge (For white uniform), each	.30
* 237	Able Sea Scout Badge (For white uniform), each	.30
* 238	Ordinary Sea Scout Badge (For white uniform), each	.40
* 239	Apprentice Sea Scout Badge (For white uniform), each.	.40
* 716	Silver Sea Scout Buttons for Officials (large size), each.	.12
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3110	Sea Scout Ship Achievement Record Card, each	.15
3151	Indiv. Sea Scout Record Card, Apprent. to Ordinary, each	.05
3152	Indiv. Sea Scout Record Card, Ordinary to Able, each	.05
3153	Indiv. Sea Scout Record Card, Able to Quartermaster, each (The last three when ordered in lots of ten or more, 4c each.)	.05
3728	"How to Organize a Sea Scout Ship," pamphlet, each (Lots of ten or more, 15c each.)	.20
3229	"The Sea Scout Manual"	.75
F687	Harbor Log Sheets, each	.01½

. . . Alexander Selkirk, the original Robinson Crusoe, marooned on the Island of Juan Fernandez, was rescued by Woodes Rogers in 1709. . . . *From Chapter on Sea History in*

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