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# BSA LIFEGUARD COUNSELOR GUIDE



BOY SCOUTS OF AMERICA

# BSA Lifeguard Counselor Guide

## Introduction

BSA Lifeguard certification has been established to provide units (packs, troops, teams and posts) with qualified members who can give knowledgeable leadership for activities on or in the water. The first standards in the Safe Swim Defense and Safety Afloat guidelines establish a need for quality supervision. An adult currently certified as a BSA Lifeguard, or an adult assisted by a Scout or Explorer holding this certification, meets this requirement.

The purpose of this guide is to help explain the requirements of BSA Lifeguard. This certification fills a gap in our aquatic progression from merit badges to BSA Aquatics Instructor.

**BSA Lifeguard certification is open to any registered member of the Boy Scouts of America who can meet the requirements; boy or girl, man or woman; the emphasis is on being able to do the required skills.**

Your job as counselor is primarily one of reviewing, testing, and making sure the standards are met, with some coaching and training to improve on weaknesses. If it is obvious that the candidate needs major work or practice on skills, the candidate should be encouraged to practice on these skills and return at a later date for testing.

While you may pursue a training program with the candidate, if you wish, this is not your immediate responsibility. A training outline for such purposes can be found in Section 4, Aquatics, in *Camp Program and Property Management*, No. 20-920, pages 4-15.

As a BSA Lifeguard counselor your major responsibility is to make sure the candidate meets the standards of BSA Lifeguard, both in skills and attitudes. In addition to this manual you will need current printings of the following merit badge pamphlets: *Swimming, Lifesaving, Rowing, Canoeing, and First Aid*.

The BSA Lifeguard certification was developed by the National Camping School Aquatics Section Directors Workshop and the BSA national Aquatics Subcommittee in the early 1980s as successor to the Scout Lifeguard award. Scouting is indebted to workshop and subcommittee chairman K. Gregory Tucker for developing requirements and preparing text materials, Albert Cahill for his efforts in establishing state recognition, and David Bell for research and information on current procedures. BSA Lifeguard certification is generally recognized as a basic qualification for water-safety employment by many public and private employers.



## Section I—Aquatics Skills

### Requirements:

- A. Swim 800 yards (½ mile).** The candidate should be able to swim continuously the distance in a strong manner. The candidate should demonstrate his or her ability by doing this requirement under your supervision. Candidates are not exempt from doing this requirement even if they hold the Mile Swim, BSA, or other distance swimming awards.
- B. Demonstrate skill and knowledge of current requirements in the following merit badge subjects: Swimming, Lifesaving, Rowing, Canoeing, and First Aid.** Review all requirements from the *current* editions of these merit badge pamphlets. Scouts and former Scouts who hold the merit badges are *not* exempt from this requirement. The candidate must be able to perform the skills as listed in the latest editions of these merit badge pamphlets. You may be able to determine their proficiency in some of the skills through discussion, but if there is any doubt, have them actually demonstrate. The following requirements *must* be demonstrated to the counselor:

**Swimming merit badge:** Surface dive headfirst into water over your head but not to exceed 8 feet, and bring an object from the bottom.

Show proper inflation of shirt and pants for emergency flotation.

Demonstrate ability to float motionless.

Swim 150 yards continuously, including 50 yards of side-stroke and 50 yards of crawl, backcrawl, trudgen, or breaststroke. This may be combined with the 880-yard swim in requirement I-A.

**Canoeing Merit Badge:** Show proper handling, carrying, and launching of canoe and demonstrate ability to maneuver in the water, while paddling tandem and solo. Demonstrate canoe rescues.

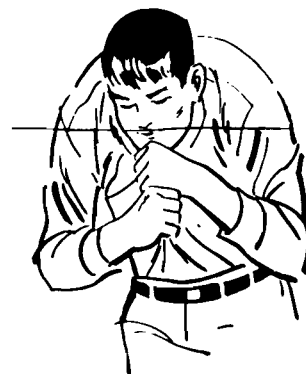
**Lifesaving merit badge:** Show twice that you can remove street clothes in 20 seconds or less in preparation for a rescue.

Demonstrate a swimming rescue using the proper entry, approach, tow, and removal from water. Rescue distance should be at least 30 feet one way.

**Rowing merit badge:** Show proper launching and ability to maneuver a rowboat. Show pivots, turns, straight line rowing, and backing water. Demonstrate rescues.

**First Aid merit badge:** Demonstrate how to control severe bleeding, how to treat for shock, and puncture wounds, and splint a fracture. Know how to handle back and neck injuries.

- C. Throw a line for accuracy 10 yards, three times in 1 minute.** The line may be weighted or unweighted, or ring bouy. The required distance is 10 yards. There do not have to be three consecutive throws in a minute. For example, the candidate may be able to throw five times in a minute. Three of those five must be on target.





## Section II—Safe Swim Defense

The candidate should be well-versed in the eight defenses prescribed for a unit swim by the Boy Scouts of America. These eight conditions must exist whenever and wherever a group swims as a Cub Scout den or pack, a Boy Scout patrol or troop, a Varsity Scout team, or an Explorer crew or post.

### A. Qualified Supervision

**Explain why qualified supervisors must be 21 years of age or older, what qualities are needed, and what certification is necessary.**

Lack of proper supervision is one of the leading causes of aquatic mishaps. Almost every accidental drowning can be attributed to the violation of one or more basic rules of water safety. Most incidents in Scouting occur in circumstances that easily could have been avoided if safe swim principles had been followed. “Qualified supervision” and “discipline” are the first and last elements of the Safe Swim Defense, for all of the other points depend upon them. All aquatic activities must be supervised and every Scout must know, understand, appreciate, and respect the rules of water safety.

The Boy Scouts of America has established that the minimum age for leadership in aquatic activities is 21 years. Although there may be many highly qualified persons who are less than 21 years old, several years of experience and maturity tend to help in making the right judgment call in a stressful emergency situation. Adult leaders should be able to remain calm under pressure, think logically in an emergency, and command the respect of the group. The adult leader in charge should be certified as a BSA Lifeguard or lifeguard or lifesaver certified by a recognized agency. If the leader is not so qualified, another person in the group must be so certified to assist him. The other person need not meet the 21-year age requirement, but it should be understood that he serves under the supervision of an adult who meets the age requirement.

### B. Physical Fitness

1. **Produce evidence of a recent physical exam (within 3 years).**
2. **Explain importance of information on fitness and health for swimming.** Ask the candidate for a copy of a complete health history. Note any potential problems. Discuss why it is important for the person conducting a swimming activity to know the health con-

ditions of participants. There was a time, not too many years ago, when people with health problems or physical disabilities were prohibited from aquatics because swimming was thought to be detrimental to a person’s well being or too great a risk. That attitude has changed to the point that many mentally and physically handicapped individuals are encouraged to participate in aquatics as therapy. Some people may have conditions that are not so obvious, such as heart conditions, diabetes, epilepsy, severe allergies, asthmatic conditions, ear conditions, or recent illness. The lifeguard and the person in charge need to be aware of the limitations of these individuals, and be prepared to cope with related conditions should they arise. For example, if you have an epileptic in the group you should know what action to take in the unlikely event of a seizure.

### 3. Explain “alert signs” and how to respond to them.

It is important to recognize the symptoms or “alert signs” of potentially dangerous conditions, and know what actions to take to prevent or at least reduce the amount of harm the victim experiences.

- Heart condition: Shortness of breath; pain in the chest, arm or jaw; general weakness; nausea; pallid skin.
- Epileptic seizure: Violent shaking, rolling of eyes, clenching of teeth, frothing at mouth.
- Diabetic coma: Disorientation, change of character, pallid color, incoherent speech.
- Asthma: Wheezing, shortness of breath.
- Allergies: Possible shortness of breath, possible swelling of face or fingers.

### C. Swimming Ability

#### 1. Explain swim ability groups and the need for them.

All persons participating in the aquatics program of the BSA are classified into three categories of swimming ability. This is done primarily to put individuals with similar ability together when they are at the beach or at a pool and to limit aquatics to a water depth in which the participants are safe.

*Nonswimmers* are those unable to pass the beginner test. They are restricted to areas no deeper than 3½ feet. This allows them to practice floating and swimming with the option always available to put their feet on the bottom and stand high enough in the water to breathe without difficulty.

A *beginner* must be able to do the following: Jump feet-first into water over the head in depth, level off, swim 25 feet on the surface, stop, turn sharply, resume swimming as before, and return to the starting place.

The entry and turn demonstrates the beginner's ability to reverse direction in deep water without assistance or pushoff from the side or bottom. The swimming can be done with any stroke, but no underwater swimming is permitted. The stop assures that the swimmer can regain his stroke if it is interrupted. This test demonstrates that the beginning swimmer is ready to learn deep-water skills and has the minimum ability required for safe swimming in a confined area in which shallow water, sides, or other support is less than 25 feet from any point on the water. This individual has minimum skills, but probably has the ability to get out of trouble if necessary. Reward this beginner with the opportunity to swim in deeper water. Give him the challenge of knowing that the surface is over his head when he stands on the bottom. The maximum depth of a beginners' area is 6 feet.

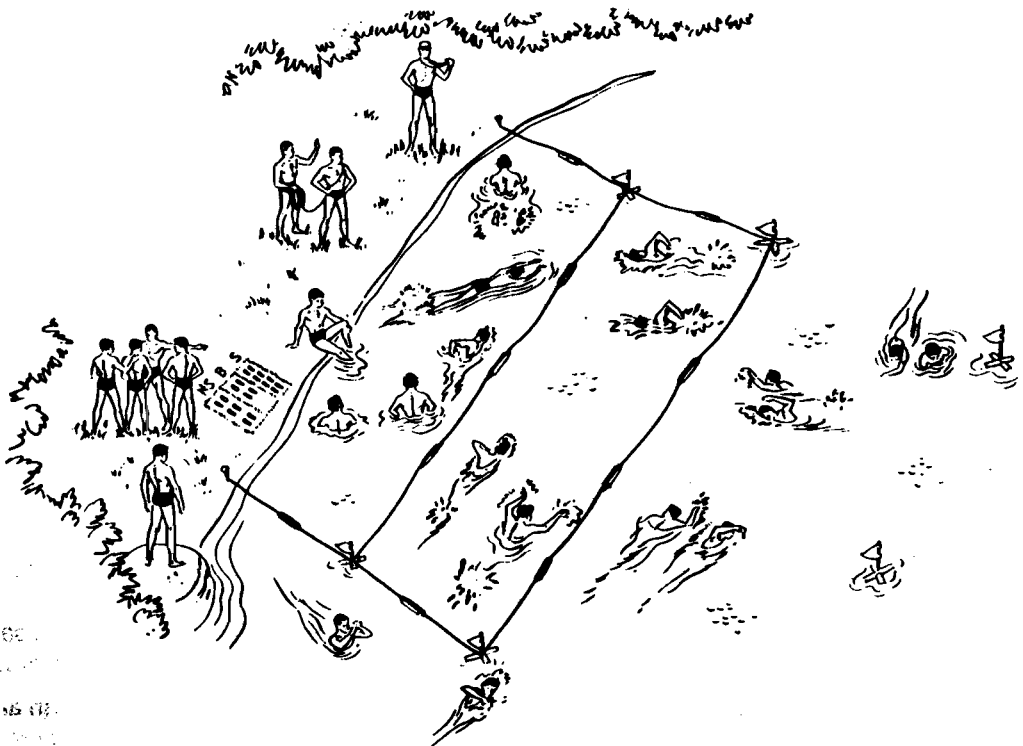
A person classified as a *swimmer* in the BSA must do the following: Jump feetfirst into water over the head in depth, level off, and begin swimming. Swim 75 yards in a *strong* manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; then swim 25 yards using an easy resting backstroke. The 100 yards must be swum continuously and include at least one sharp turn. After completing the swim, rest by floating.

The test administrator must objectively evaluate the individual performance of the test, and in so doing, should keep in mind the purpose of each test element.

- **Jump feetfirst into water over the head in depth, level off, and begin swimming.** The swimmer must

be able to make an abrupt entry into deep water and begin swimming without any aids. Walking in from shallow water, easing in from the edge or down a ladder, pushing off from the side or bottom and gaining forward momentum by diving does not satisfy this requirement.

- **Swim 75 yards in a strong manner using one or more of the following stokes: sidestroke, breaststroke, trudgen, or crawl.** The swimmer must be able to cover distance with a strong, confident stroke. The 75 yards or meters (depending upon the facility being used) must not be the outer limit of the swimmer's ability; completion of the distance should demonstrate sufficient stamina to avoid undue risk. Dog paddling and strokes repeatedly interrupted and restarted are not sufficient; underwater swimming is not permitted. The itemized strokes are inclusive. Any sidestroke or breaststroke or any strong overarm stroke (including the back crawl) is acceptable.
- **Swim 25 yards using an easy, resting backstroke.** The swimmer must indicate ability to execute a restful freebreathing backstroke that can be used to avoid exhaustion during the swimming activity. This element of the test necessarily follows the most strenuous swimming activity to show that the swimmer is able to use the backstroke as a relief from exertion. A change of stroke must be accomplished in deep water without any push off or other aid. Any variation of the elementary backstroke is acceptable. An overarm back crawl may suffice, if it clearly provides opportunity for the swimmer to rest and regain his wind.
- **The 100 yards must be swum continuously and include at least one sharp turn.** The total distance is to be covered without rest stops. The sharp turn



simply demonstrates the swimmer's ability to reverse direction in deep water without assistance or push off from side or bottom.

- **After completing the swim, rest by floating.** This critically important component of the test evaluates the swimmer's ability to float in the water indefinitely even though exhausted or otherwise unable to continue swimming. Treading water or swimming in place will further tire the swimmer and are therefore unacceptable. The duration of the float test is not significant, except that it must be long enough for the test administrator to determine that the swimmer is in fact resting and could likely continue to do so for a prolonged period of time.

A swimmer is permitted full use of the swimming facility, but must still be accompanied with a buddy. It is recommended that swimmers be tested annually to reinstate their classification. Persons who have not been swimming for years, or even months, may find that their stamina is not quite what it was, or they may have forgotten how to perform some of the skills.

**2. Explain the beginner and swimmer tests.** In the previous section the tests have been described; the intention here is to have the candidate explain how these tests are administered. It would be advisable to have the candidate conduct several beginner and swimmer tests in the presence of the counselor.

**3. Explain the importance of learning to swim.**

References: *Swimming* and *Lifesaving* merit badge pamphlets.

#### D. Swimming Areas

**1. List the qualities of a safe swim area.**

- Gentle slope. The bottom should have a gentle slope from shallow water area to deeper water. There should be no holes or sudden drop-offs. All underwater obstructions, such as tree stumps, logs, or rocks, should be removed from the swimming and diving areas. Holes that cannot be filled should be clearly marked.
- Ability areas. Separate ability areas should be assigned for nonswimmer, beginner, and swimmer. Water depth for nonswimmers should be not over 3½ feet, 6 feet for beginners, and 12 feet for swimmers. Buoyed lines or docks should be placed between each of these areas to help prevent straying into areas beyond respective skill levels. The areas should be large enough to avoid crowding. In a lake or natural waters, 50 square feet per person is recommended. In a pool 40 square feet is satisfactory.
- Beach area. Beaches should be raked to remove glass, rocks, sharp objects, or trash. All holes should be filled.
- Water temperature. Water should be 70°F or above. Reduce exposure time in the water if temperature is lower than 70°F.

- Water purity. Water should meet minimum water quality standards (bacterial and chemical) established by the state for water contact activities. In the absence of state standards, swimming water quality standards established by the United States Public Health Services should be applied. Water quality should be monitored and confirmed by sample analysis preceding the swimming activity and be retested periodically thereafter.
- Water clarity. Activity in turbid water (where a 12-inch white disc is not visible from above the surface at a depth of 3 feet) shall be limited to surface swimming. Underwater swimming, headfirst entry, and board diving should not be permitted in turbid water. Clear water exists when a 12-inch white disc is visible from above the surface of the water at a depth of 8 feet.
- Equipment. Reach poles and heaving lines should be readily available. A buddy check-in and check-out system is provided.
- Avoid hazards. Thunderstorms, high waves, fast-moving water, cold air, riptides, and some species of marine life are conditions that are cause for temporarily closing the beach area.
- Diving. Injuries frequently relate to diving into shallow water or otherwise obstructed water. Even when drowning is avoided, crippling neck and back injuries are likely. Studies have shown that most serious diving injuries occur to males, ages 12 to 31, diving from low heights such as the edge of a pool deck, a dock, or pier into water less than four feet deep. Therefore, the Boy Scouts of America recommends a minimum of seven feet of water beneath and beyond the point of entry for diving from the edge of a pool pier, or floating platform. Additional depth is required from boards or raised platforms. Most authorities recommend 10–12 feet of water depth from a 1-meter diving board.

Even sufficient depth and elimination of rocks, stumps, and other obstructions are not adequate if diving is not regulated to avoid body collision. One of the most common types of injuries on troop swims results from jumping or diving from points above the water onto persons in the water below. Proper onsite supervision should prevent accidents of this nature from occurring.

**2. Explain where nonswimmers, beginners, and swimmers swim.**

Reference: *Swimming* merit badge pamphlet.

**3. Select and set up a safe swim at an established swim area.** This is an actual doing experience. The purpose is to get experience and face problems that you wouldn't encounter in a discussion. Some people erroneously assume that because a public pool is used, the safe swim is not needed. The candidate should get practical experience in handling a safe swim under conditions when other people are around.

**4. Select and set up a safe swim in an improvised area.** This should be done in an unimproved area on a lake,

beside a river, or on the shore. This is an improvised situation on a campout or a canoe trip. Determine whether the necessary equipment has been brought along. Do improvised materials work?

5. **Indicate knowledge of local laws that apply to swimming.** Obtain information from your local or county health department. Also check with your state department of health. Some states have youth camping regulations that may apply to wilderness camping sites as well as established camps.

## E. Buddy System

1. **Explain buddy system to a group.** Point out that this is to be a training session on the part of the candidate. It is one thing to explain the buddy plan to a counselor who can anticipate answers and read between the lines, but an entirely different situation to talk to a group that does not know and may ask questions.

The purpose of the buddy check is to remind each swimmer to remain near his buddy and to always be aware of his buddy's situation so that he can lend immediate assistance when needed. Pair every person with another of his own ability group. Buddies check in and out of the swimming area together. As soon as all are checked in and before a swim activity actually begins, a buddy check is called to be sure that everyone went to the area they checked into and that there's no confusion as to who is whose buddy. After swimming has commenced, buddy checks are held at approximately 10-minute intervals and immediately before all swimmers get out. The signal for a buddy check is usually a single blast of a whistle, bell, or horn followed by the call "buddies" by the lookout guard. He counts slowly up to 10, and by then all swimmers are to have joined hands with their buddy, and stay still and silent until all guards have checked their areas and have reported. Each report is acknowledged and confirmed by the individual responsible for the "in" board. Two blasts mean resume swimming. When all cooperate quickly, your buddy check can be taken in very few seconds, and not much time will be lost from the actual swimming.

Remember that the mechanical procedures are not the buddy system, but are used only to assure that every Scout is fulfilling his responsibility to his buddy. The buddy system is two people enjoying aquatics activity together while each provides a critical margin of safety for the other. Bells, whistles, horns, and tags accomplish nothing—buddies do!

2. **Make a safe swim kit.** This is another doing project, not a discussion. Unless this is done, we somehow never get around to actually making this item. Emphasize the importance of the kit being small, lightweight, and easily used, so that it does not become something that is left behind because it is too bothersome. The following items are the type that might be used when a unit puts a safe swim plan into operation at a temporary waterfront or at a swim site that the unit will use

while on a hike or camping trip. Although these swim gadgets are improvisations, they will allow a group to use proven techniques of safety.

A simple but durable cloth sack containing marker cord (on reels); buddy tags; balloons for corner markers and buoys; a whistle; and one 100-foot (30-meter) length of  $\frac{3}{16}$ -inch nylon cord makes the basis of a good unit swim kit.

Lines used to define nonswimmers' and beginners' areas can be made from light chalkline cord or even binder twine (if only a single use is planned). Light braided or twisted cord of more durable nature can be

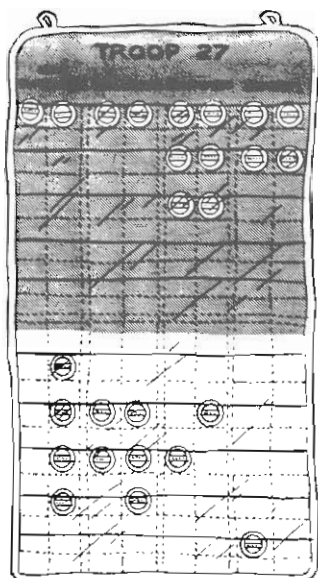


kept on simple reels and reused at various unit swim sites.

Floats can be made of plastic bottles, wooden sticks secured to lines, or inflated balloons. Matched cross sticks supporting a vertical flag staff can serve as a marker buoy. A stick carefully weighted at one end with a rock so that it floats vertically becomes a spar buoy. Glass jars or jugs should not be used as buoys since broken glass is especially dangerous in the water. Large lead fish sinkers can be used as anchors to hold light cord moorings, or rocks can be bridled to a mooring line.

Improvised buddy boards. To use the buddy system effectively whenever or wherever units go swimming, an understanding of improvised buddy boards is important. Swimming areas are marked on the ground or chalked on the surface. Tongue depressors with names on them can become buddy tags. Pointed sticks, slashed on one side so that names can be written on the flat part, serve as buddy tags when placed on the ground alongside the buddy stick. Pairs of shoes with identifying wallets or name slips placed inside serve the same purpose. Anything that permits the identification of the individual and can be placed alongside

a similar item representing his buddy will serve that purpose. Slips of paper with names of buddies can be pinned on a shirt on a bush to form a simple buddy board.



Portable plastic buddy board. The portable check board shown here can be made and used by units at all swimming activities. The top section used for the actual check-in procedure can be constructed of red oil-cloth or colored plastic. The bottom, or tag storage section, is made of clear plastic. Clear plastic pockets are sewn on both sections to allow easy reading of the tags. Adaptable to all swimming surroundings, this board can be fastened to a wall of the YMCA pool, a fence of the city pool or a tree at the unit swimming hole. To carry, fold lengthwise down the center and carefully roll from the bottom to keep tags in place.

3. **Manage buddy board for one swim.** Candidate needs to manage the board throughout an entire cycle, commencing with check-in, continuing with periodic buddy checks, and finishing with check-out. It is not difficult if everyone follows directions, but that does not always happen. The candidate needs practical experience handling real problems in the use of the buddy board.

#### F. Lookout

1. **Explain the need for and duties of lookouts.**

Reference: *Lifesaving* merit badge pamphlet.

2. **Serve as a lookout.** When the candidate has completed this experience, let him describe to the counselor what he did, and how he felt this supported the lifeguards on duty.

#### G. Lifeguards

1. **Explain the need for lifeguards and the ratio of lifeguards to swimmers.** The primary responsibility of the lifeguard is to provide for the safety of the participants using an aquatic facility. Knowing how to prevent accidents from occurring is more important than knowing how to rescue someone in the act of drowning.

Reference: *Lifesaving* merit badge pamphlet.

2. **Explain duties of a lifeguard and describe training needed to be one.** Depending upon whom you ask, the duties of a lifeguard may vary considerably. Some responses might include:

- A supervisor who watches people in and around the water to assist anyone in trouble.
- A disciplinarian who enforces rules and regulations.
- A maintenance person who helps to maintain a clean and safe aquatics facility.
- A teacher who gives swim lessons.
- A person trained in lifesaving and first aid.

In reality, a lifeguard may perform all of these roles at one time or another to some degree. Lifeguards must understand that they are *responsible* for providing the safest possible conditions in their area of authority. The ability to recognize a hazardous situation and to prevent an accident or further injury is vital to lifeguards. They must be able to supervise bathers, minimize dangers, educate participants in safety, enforce rules and regulations, render assistance, prepare records and reports, and perform whatever additional administrative duties are required. The position of lifeguard has become one of authority and responsibility.

Reference: chapter 1, *Lifeguard Training*, American National Red Cross, Washington DC, 1983; chapter 6, *On the Guard*, YMCA of the U.S.A., Champaign, Ill., 1986.

3. **Serve as a lifeguard for three swim periods.** These periods need not necessarily be consecutive nor at the same location. The counselor should monitor at least one of these experiences. The other two may be verified by the adult leader in charge of the swim.

#### H. Discipline

**Explain elements of good discipline, the rules needed to conduct a safe swim, and the adult role in discipline.**

Almost every accidental drowning can be attributed to the violation of one or more basic rules of water safety. Most incidents in Scouting occur in circumstances that could easily have been avoided if safe swim principles had been followed. "Qualified supervision" and "discipline" are the first and last elements of the Safe Swim Defense, for all other points depend upon them. All aquatic activities must be supervised and every Scout must know, understand, appreciate, and respect the rules of water safety. Discuss with the candidate examples he can cite of good and bad discipline as experienced during a swimming activity.

Reference: *Lifesaving* merit badge pamphlet.

#### I. Conduct a Swim

**Administer two unit swims of at least ½ hour each, using all eight defenses.** This is the final practical test. If the candidate is less than 21 years of age, either the counselor or another person meeting this requirement will need to be present. Be sure all elements of the eight defenses are practiced.





### 3. Safe Area

Have lifeguards and swimmers systematically examine the bottom of the swimming area to determine varying depths, deep holes, rocks, and stumps. Mark off the area for three groups: not more than 3½ feet deep for nonswimmers; from shallow water to just over the head for beginners; deep water not over 12 feet for swimmers. For boundary markers use poles stuck in the bottom, or plastic bottles, balloons, or sticks attached to rock anchors with twine. Enclose nonswimmer and beginner areas with buoy lines (twine and floats) between markers. Mark the outer bounds of the swimmer area with floats. Diving from the edge of pools, piers, or floating platforms requires a minimum water depth of 7 feet.

### 4. Lifeguards on Duty

Designate as lifeguards two persons who are capable swimmers. Station them ashore, equipped with lifeline (a 100-foot length of 3/16-inch nylon cord). In an emergency, one carries out the line and the other feeds it out from shore, then pulls in his partner and the boy being assisted. In addition, if a boat is available, man it with two persons, preferably capable swimmers, one rowing and the other equipped with a 10-foot pole or extra oar. Provide one guard for every 10 boys.

### 5. Lookout

Station a lookout on the shore where he can see and hear everything in all areas. He may be the adult in charge of the swim and may give the buddy signals.

### 6. Ability Groups

Divide the boys into three ability groups: Nonswimmers, beginners, and swimmers. Keep each group in its own area. Nonswimmers have not passed any swimming test. Beginners passed this test: jump feetfirst into water over their head in depth, level off, swim 25 feet on the surface, stop, turn sharply, resume swimming as before and return to starting place. Swimmers passed this test: jump feetfirst into water over their head in depth, level off and begin swimming. Swim 75 yards in a *strong* manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl: then swim 25 yards using an easy resting back stroke. The 100 yards must be swum continuously and include at least one sharp turn. After completing the swim, rest by floating. *These classifications tests should be renewed annually, preferably at the beginning of each season.*

### 7. Buddy System

Pair every boy with another in his own ability group. Buddies check in and out of the swimming area together. Check all boys in the water about every 10 minutes. The adult in charge signals for a buddy check with a single blast of a whistle or ring of a bell and a call of "Buddies!" He counts slowly to 10 while buddies join and raise hands and remain still and silent. Guards check all areas, count the pairs, and compare the total with the number known to be in the water. Signal two blasts or bells to resume swimming. Signal three blasts or bells for checkout.

### 8. Discipline

Be sure all Scouts and Explorers understand and agree that swimming is allowed only with proper supervision and use of the complete Safe Swim Defense. Advise their parents of this policy. When the boys know the reason for rules and procedures, they are more likely to follow them. Be strict and fair, showing no favoritism.





## QUALIFIED SUPERVISION

A responsible adult must supervise all activity afloat and must be experienced and qualified in water safety (BSA Lifeguard or lifeguard or lifesaver certified by a recognized agency) and in the particular skills related to the watercraft being used, or use assistants so qualified. Ability to meet current requirements for Canoeing, Rowing, Small-Boat Sailing, or Motorboating merit badge qualifies a person in respect to safe handling of that watercraft. One adult supervisor is required for each ten people with a minimum of two adults for any one group. All adult supervisors must complete Safety Afloat and Safe Swim Defense training, and at least one must be certified in CPR.

*For Cub Scouts:* The adult supervisor must be experienced and qualified in water safety (BSA Aquatics Instructor; BSA Lifeguard counselor; BSA Lifeguard; or American Red Cross Lifeguard). The ratio of adult supervisors to Cub Scouts is one to five.

## PHYSICAL FITNESS

All persons must present evidence of fitness by a complete health history from a physician, parent, or legal guardian. Adjust all supervision, discipline, and protection to anticipate any potential risks associated with individual health conditions. In the event of any significant health conditions, a medical evaluation by a physician should be required by the adult leader.

## SWIMMING ABILITY

A person who has not been classified as a "swimmer" may ride as a passenger in a rowboat or motorboat with an adult swimmer, or in a canoe, raft, or sailboat with an adult certified as a lifeguard or a lifesaver by a recognized agency. In all other circumstances, the person must be a swimmer to participate in an activity afloat. Swimmers must pass this test:

Jump feetfirst into water over the head in depth, level off and begin swimming. Swim 75 yards in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; then swim 25 yards using an easy resting backstroke. The 100 yards must be swum continuously and include at least one sharp turn. After completing the swim, rest by floating. This qualification test should be renewed annually.

## PERSONAL FLOTATION EQUIPMENT

Properly fitted U.S. Coast Guard approved personal flotation devices (PFDs) must be worn by all persons engaged in activity on the open water (rowing, canoeing, sailing, boardsailing, motorboating, water skiing, rafting, tubing, kayaking, and surfboarding). Type II and III PFDs are recommended.

## BUDDY SYSTEM

All activity afloat necessitates using the buddy system. Not only does every individual have a buddy, but every craft should have a buddy boat when on the water.

## SKILL PROFICIENCY

All participants in activity afloat must be trained and experienced in watercraft handling skills, safety, and emergency procedures. (a) For unit activity on white water, all participants must complete special training by a BSA Aquatics Instructor or qualified white water specialist. (b) Powerboat operators must be able to meet requirements for Motorboating merit badge or equivalent. (c) A minimum of 3 hours training and supervised practice is required for all other unpowered watercraft.

*For Cub Scouts:* Canoeing and rafting for Cub Scouts (including Webelos Scouts) is to be limited to council/district events on flat water ponds or controlled lake areas free of powerboats and sailboats. Prior to recreational canoeing, Cub Scouts are to be instructed in basic handling skills and safety practices.

## PLANNING

*Float Plan.* Obtain current maps and information about the waterway to be traveled. Know exactly where the unit will "put in" and "pull out" and what course will be followed. Travel time should be estimated generously. Review plan with others who have traveled the course recently.

*Local Rules.* Determine which state and local regulations are applicable, and follow them. Get written permission to use or cross private property.

*Notification.* File the float plan with parents of participants and a member of the unit committee. File float plan with council office when traveling on running water. Check in with all those notified when returning.

*Weather.* Check the weather forecast just before setting out and keep an alert weather eye. Bring all craft ashore when rough weather threatens.

*Contingencies.* Planning must identify possible emergencies and other circumstances that may force a change of plans. Appropriate alternative plans must be developed for each.

*For Cub Scouts:* Cub Scout canoeing and rafting does not include "trips" or "expeditions" and is not to be conducted on running water (i.e., rivers or streams), therefore, some procedures are inapplicable. Suitable weather requires clear skies, no appreciable wind, and warm air and water.

## EQUIPMENT

All equipment must be suited to the craft, to water conditions, and to the individual; must be in good repair; and must satisfy all state and federal requirements. Spare equipment or repair materials must be carried. Appropriate rescue equipment must be available for immediate use.

## DISCIPLINE

All participants should know, understand, and respect the rules and procedures for a safe activity afloat. Rules for safety do not interfere with fun when fairly applied.

**Note:** For cruising vessels (excluding rowboats, canoes, kayaks, and rafts, but including sailboats and powerboats greater than 20 feet long) used in adult supervised unit activities by a chartered Explorer post/ship specializing in watercraft operations, or used in adult-supervised program activity in connection with any high-adventure program or other activity under the direct sponsorship and control of the National Council, the standards and procedures in the *Sea Exploring Manual*, No. 3239, may be substituted for the "Safety Afloat" standards.



## Section III—Safety Afloat

Three factors are important in the safety of any boating activity: 1. The people involved, 2. the equipment used, and 3. the nature of the environment surrounding the activity. Safety Afloat attempts to put these three factors together, reducing potential risks to a minimum through awareness, knowledge, and skill. Keep this in mind as the requirements for this section are discussed and demonstrated.

Before any BSA group engages in an excursion, expedition, or trip on the water using small craft (canoe, raft, sailboat, motorboat, rowboat, tube or other craft less than 20 feet in length) the adult leaders for such an activity should complete *Safety Afloat Training*, No. 34159, and commit themselves to full compliance with all nine points of Safety Afloat.

Reference: *Safety Afloat* video, AV-09V002.

### A. Qualified Supervision

**1. Explain the meaning of qualified supervision and describe the necessary qualities required.** Maturity is an essential quality required of someone supervising a youth activity on the water. The BSA states that this supervisor must be at least 21 years of age.

- Maturity is the ability to make good choices among a variety of alternatives.
- Maturity is a compassion for others—understanding their shortcomings, be they physical ability or endurance, eagerness or fool-hardiness, pride or selfishness.
- Maturity is knowing when to push to meet a reachable challenge, and when to stop and revise the activity because of challenges beyond the capability of individuals in the group.

Knowledge is a second essential quality. The supervisor should have an understanding of the conditions the

group will encounter and prepare the group through training in how to cope with the worst of these conditions. The supervisor should be totally familiar with the watercraft the group will be using and its limitations—either in the design of the craft itself or because of abilities of the individuals who will be using the craft.

The candidate should understand the distinction between an adult who means well and one who is trained and trustworthy. Discuss when trained assistants are appropriate and the extent of their authority. Discuss the standard of one adult supervisor for ten participants as a sensible balance between too lax and too stringent.

**2. State necessary certification and experience needed to supervise the float trip.** Relate certification and experience to purpose. For instance, it may seem unreasonable to require someone currently certified in lifesaving skills by the Boy Scouts of America, American Red Cross, or YMCA to take a group on a float trip. The rationale is that anyone who has this training and has been certified has a more-than-casual knowledge of water conditions and their effect upon the body. They know about cold water and hypothermia. They know about the power of moving water. They know why we establish a buddy system. The knowledge acquired through this training will affect the discipline of the group and activities upon the water.

Experience is a wonderful teacher. The experience needed here includes skill in using the watercraft and participation in previous successful water-related trips.

It is highly desirable to find a supervisor of a unit float trip who meets all criteria of this requirement, namely:

- a. Over 21 years of age.
- b. Currently certified as a BSA Lifeguard, ARC Lifeguard, or YMCA Lifeguard.
- c. Experienced and skilled in handling the small craft being used for the trip.
- d. Currently certified in CPR by the American Red Cross or American Heart Association.

Finding all of this wrapped up in one individual may not be easy, so the BSA permits others in the group to be currently certified in items b and d above, but the supervisor must meet the criteria in items a and c.

It should also be noted that anyone currently certified as a BSA Lifeguard should meet requirements b, c, and d above, assuming that their CPR certification is current.

**B. Physical Fitness. Explain the need to be physically fit for boating activity.** Because boating can be strenuous, general fitness needs to be determined and special precautions taken if necessary. Discussion should not be limited to the so-called "handicapped." Daily mileage should be adjusted to the group since fatigue can contribute to accidents. Races should not be entered without proper conditioning.

**C. Swimming Ability. Explain the importance of swimming ability as a prerequisite for watercraft activities.** There is no substitute for good swimming ability. Two out of every three water fatalities involve non-swimmers! Since most fatal boating accidents are drownings, the ability to swim is an obvious precaution. Review current statistics. Candidates should know BSA policy concerning use of watercraft by non-swimmers and beginners.

#### D. Personal Flotation Devices (PFDs)

1. **Describe U.S. Coast Guard Classification of PFDs and BSA Guidelines on wearing them.** Properly fitted USCG-approved personal flotation devices must be worn by *all* persons in activity on the open water. This includes rowing, canoeing, sailing, sailboarding, motorboating, water skiing, rafting, tubing, kayaking, and surfboarding. Type II or III are recommended in most situations.

Only U.S. Coast Guard-approved equipment (Types I, II, or III) is acceptable for use in Scouting aquatics. (No ski belts are permitted.) All Scouts should be instructed in how to put on a PFD and how to check it for proper fit. Scout leaders responsible for activity and craft must always check to ensure that PFDs are of the right type and properly worn. Both Scouts and unit leaders should be taught the types of PFDs and which is appropriate for each specific circumstance.

Explore reasons for any reservations the candidate might express concerning this policy. Note the importance of example. Review statistics of drownings when PFDs were available but not worn. Note the awkwardness of donning PFDs in water when the boater is dumped from the craft, injured, or hypothermic. To be an effective aid to the unit, the candidate must know BSA policy and be convinced of its soundness.

References: *Canoeing* and *Rowing* merit badge pamphlets.

2. **Show how to wear PFDs properly.** Candidate should describe procedure while donning PFD, and know how to recognize an improperly worn PFD, including those too large or too small.
3. **Show how and indicate why you test PFDs.** After checking buckles, fabric, and weight, the most reliable test is conducted in the water. Most common problems are with the stitching and plastic buckles. Kapok vests need to be checked for floatability. If plastic bags have been punctured, it is quite likely that the vest will not support a person in the water for very long, and these vests should be destroyed to put out of service.

#### E. Buddy System

1. **Explain the buddy system to a group of boaters.**
2. **Describe responsibilities of buddy.** The purpose of the buddy system is to remind each boater to remain near his buddy and to always be aware of his buddy's situation so that he can lend immediate assistance when needed. This statement is not unlike the statement in the Safe Swim Defense, but there are some notable differences. First, buddies are normally companions in the same craft (exception: tubing, surfboarding, kayaking and board-sailing) and, second, not necessarily of the same swimming ability (specifically aboard a rowboat or motorboat). Third, buddy checks normally do not occur, except at cast-off time and at the end of each segment of a trip. It is recommended that the supervisor maintain a record of buddies for easy reference. See *Safety Afloat Training*, No. 34159. Discuss a plan for assigning buddies that are tubing, kayaking, surfboarding, board-sailing, or waterskiing.
3. **Explain what is meant by a "buddy boat."** The buddy boat serves the same purpose as an individual buddy. This requires the group to travel together, except in rapids where the occupants of one boat watch the occupants of another. The occupants in the lead boat must often check behind to avoid getting too far ahead of the group, and to determine if there are any problems.

This may be an opportune time to discuss "solo" type activity such as tubing, surfboarding, board-sailing, and kayaking. Review board-sailing standards in Aquatics Section of *Camp Program and Property Management*, No. 20-920, or the Health and Safety Guide, No. 34409.

#### F. Skill Proficiency

1. **Explain the skills needed before a group performs an activity afloat.** Discuss the safety skills (i.e. maximum load, PFDs, effect of environmental conditions upon participants, physical condition of participants, and others).

What emergency procedures should all participants be trained to take in the event of lightning storms, high

winds, upset craft, person overboard, or an injured person in your group? What do you do if you and your boating partner become suddenly aware that you are no longer a part of the group—they went one way and you another? Are there other situations to discuss?

Now let's discuss the training and experience needed to handle small craft:

- a. A minimum of 3 hours training and supervised practice, or meeting the requirements for "Basic Handling Test" is recommended for all unpowered craft.

**The Basic Handling Test for a rowboat is:**

- (1) Demonstrate ability to launch a boat properly, row a straight line for 100 yards, turn, come back, land, and moor boat properly.
- (2) Participate in a swamped boat safety demonstration, including the use and care of PFDs.

**The Basic Handling Test for a canoe is:**

- (1) As a stern paddler (tandem with a partner) demonstrate ability to launch the canoe properly, paddle a straight course for 100 yards, turn, come back, land, and rack canoe.
- (2) With a partner, jump out of the canoe, hold on to it, and climb back into the canoe without swamping.
- (3) With a partner, get into a swamped canoe and paddle it to shore.

- b. Powerboat operators must meet state requirements and be able to meet the requirements for the *Motorboat* merit badge. Refer to these merit badge requirements.

- c. All persons who plan to participate in a unit activity on white water must complete specialized training involving the environmental conditions encountered on or in running water conducted by an BSA Aquatics Instructor or qualified equivalent

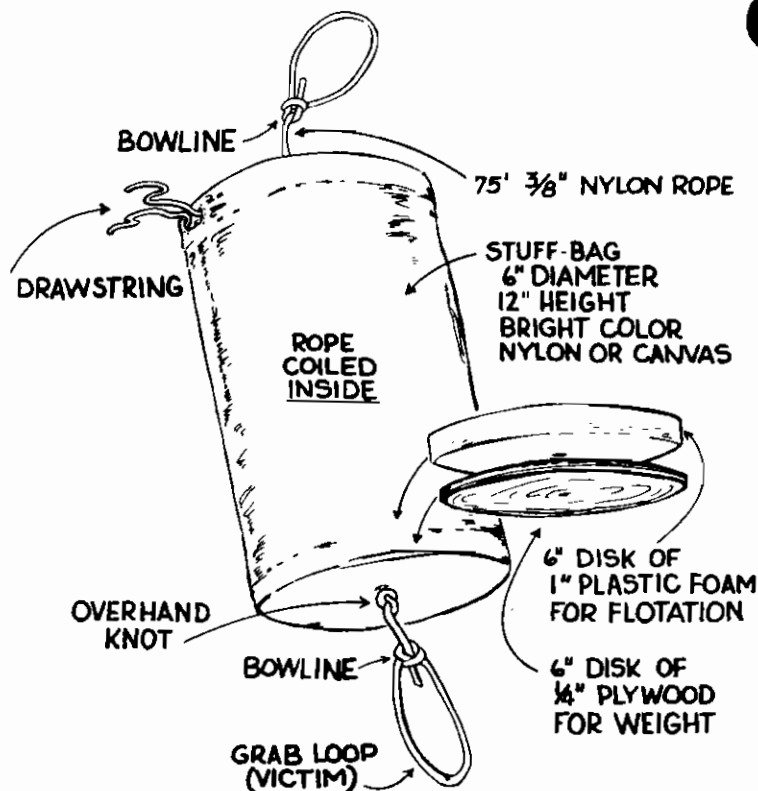
Discuss why a basic skill level is required and why this level can change under new or different circumstances. Since skill levels normally vary within a group, activities must be adjusted to the level of the least skilled.

2. **Indicate sources of skill training.** The candidate should be familiar with the BSA council plan for Safety Afloat training and specific courses offered by the BSA and other groups and organizations such as the American Red Cross, the YMCA, the U.S. Coast Guard Auxiliary, the U.S. Power Squadron, local canoe associations, local colleges, and marinas that periodically provide boat handling training.

3. **Demonstrate the following rescues from a canoe:** (a) Swamped craft, (b) swamped equipment, and (c) people overboard. Emphasize the importance of rescuing people first and gear second.

References: *Canoeing* and *Lifesaving* merit badge pamphlets.

## THROW-BAG RESCUE ROPE



Throw-Bag Rescue Rope. A stuff-bag is a versatile rescue device that can easily be stowed aboard any small craft. It can be thrown like a football for considerable distance from a kneeling position in a canoe or a sitting position in a rowboat to a nearby victim in the water. On a river the distance can be extended by allowing the bag to float downstream.

Make a 6×12-inch bag of medium or lightweight canvas or nylon of a bright color such as white, yellow, or international orange. Cut a 6-inch diameter disk of 1-inch foam plastic for flotation and a similar 6-inch diameter disk of ¼-inch plywood for weight. Make a ⅜-inch hole in the center of the disks and the bottom of the bag. You may wish to adhere the two disks together with strips of duct tape. This will help to prevent the plastic from breaking apart with use. The disk keeps the bag afloat and helps to give the bag a shape that is easier to throw. Put a drawstring in the top of the bag to keep the rope from falling out. Nylon line ⅜-inch in diameter and 75 feet long works well. Pass one end through the disk and bottom hole. Tie an overhand or figure eight knot on both sides of the disk (one inside the bag, the other outside). Leave sufficient line at the bottom of the bag to tie a bowline for the rescued person to grab and place over the wrist. The other end of the line should have a similar bowline loop for the rescuer to place over his/her wrist before throwing the bag.

Stuff the rope into the bag from the open end, then close the bag loosely with the drawstring. Practice tossing the bag from a distance toward a "victim." You will find that the line will not tangle, and you can place the bag "on target" with just a little practice.

## G. Planning

- 1. Write a float plan for a 72-hour activity afloat.** Estimates of travel time and water conditions should be accurate. Number in group and skill level should be appropriate for the candidate's own group. Do not dictate the details of the trip to the degree that the candidate only needs to fill in the names of the participants. Information should include local council requirements. If necessary, acquaint candidate with information sources, such as river guidebooks.
- 2. Provide a list of laws and rules that apply to the plan developed for the requirement above.** Information sources may be provided, but allow candidate to determine specifics. Digests of state boating laws are often available and should be familiar to the candidate. Do not overlook tour permits and fishing licenses.
- 3. Indicate persons who need to be advised of this activity.** Primarily notify individuals who would be anticipating your return and be aware that your group was overdue at checkpoints or returning. A first consideration are parents and spouses; second, members of the unit committee in chartered organization. Of course, a tour permit is required by the local council, but this is primarily a check to see that all the proper conditions have been met prior to the trip. In all likelihood the local council is not going to know when or even if you return unless notified by an anxious parent or spouse that something has gone wrong.

Certainly if the float plan takes you into state or federal parks or forests, appropriate officials should be advised. And it is a well-advised unit that notifies, or better, requests permission of private property owners if you plan to camp or cross their premises.

- 4. Indicate what weather and environmental conditions the leaders should be alert to.** As your group plans for a float trip, plan for the worse possible conditions that could happen and train your participants to be prepared to meet these conditions. Do not be lulled into apathy by the anticipation of a great adventure. Weather and environmental conditions can and do change rapidly. Be prepared to handle these abrupt changes.

Steady weather patterns involving high or low temperatures will require special precautions. Probabilities of abrupt weather changes, such as local thunderstorms or passing fronts, are available from forecasts. The leader should be alert to these possibilities and be able to recognize approaching systems in time to bring the craft ashore.

Discuss danger of high wind and waves, lightning, poor visibility in rain, and sudden drops in temperature. Note

that large stretches of open water should be avoided in unsettled water and weather. It is better to follow a lake shoreline than to cut across with an offshore wind since waves are potentially worse in large or wide open areas. Discuss how different water levels affect a river and why rapid changes, either rises or drops, should be avoided because of debris and difficulty variations. On some rivers changes are due to dam releases. Surf and tides need to be considered on coastal trips.

Discuss the accessibility and use of NOAA weather radio. Resources: *Fieldbook*, No. 33200; *Motorboating* merit badge pamphlet, No. 33294; and *Weather* merit badge pamphlet, No. 33274.

- 5. Indicate what sources of emergency help would be available in case of need.** Specific sources should be identified along the route. These include hospitals, ambulance service, ranger stations, and local law enforcement agencies. Candidates should identify the quickest means of summoning aid (telephone, CB radios, etc.) and nearest access to water for emergency vehicle.

## H. Equipment

- 1. Provide a list of equipment for trip planned in requirement G-1.** This list will vary, depending on body of water, craft, and season. Include items needed for transportation.

Reference: *Canoeing* merit badge pamphlet.

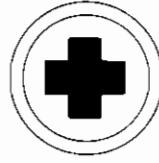
- 2. Demonstrate how to properly pack and load equipment into your craft.** Equipment should include appropriate patrol gear, personal effects, and boating essentials. Important items such as food and bedding should be waterproofed. Check loaded craft for stability, freeboard, and rated capacity.

References: *Canoeing* merit badge pamphlet; *Fieldbook*.

- 3. Demonstrate proper care of equipment and craft.** Critique candidate during launching and landing of craft and on placement of equipment for proper overnight storage.

References: *Canoeing* and *Rowing* merit badge pamphlets.

- I. Discipline. Explain what good discipline means and why it is important to an activity afloat.** Candidate should realize that discipline is as much the responsibility of the participants as the leader and that poor discipline can endanger the entire group as well as the individual. Examples of poor discipline from the candidate's own background, such as laxity, favoritism, and adverse rigidity, may help the candidate define good discipline.



## Section IV—First Aid

There are several good reasons for knowing first aid techniques: (1) The person who is prepared to give emergency care to someone in need may save a life; (2) First aid training provides candidates with insight into how injuries and illnesses occur, and gives them some preventive techniques and procedures to use and share with others for their safety and well being; (3) It gives candidates an awareness of their limitations in training, adaptable skills, and equipment in a "field" situation; and (4) It provides them with a knowledge of medical resources to call upon if more advanced medical care is required.

All this knowledge is desirable for a lifeguard—at the ocean beach, on a white water river, at a backyard pool, or on a wilderness lake. The time inevitably will come when one or more of these situations will become a reality. It is therefore strongly recommended that anyone serving in a lifeguard capacity learn as much about first aid and emergency care as possible. The American Red Cross provides first aid training in almost every community. This is good basic training. Beyond this, many community colleges have "first response" and emergency medical technician courses for those interested in more advanced first aid procedures. For *BSA Lifeguard*, candidates are not expected to have this high degree of expertise, but they are expected to have more than a few basic skills. First they need a working knowledge of skills found in the First Aid merit badge pamphlet. Beyond this we have added areas particularly related to injuries and illnesses frequently found in aquatics.

### A. Cardiopulmonary Resuscitation

- 1. Show evidence of current certification in basic life support by American Red Cross or American Heart Association.** As a counselor, it would be beneficial if you were currently certified as a CPR instructor with the American Red Cross or American Heart Association. If this is impossible, you must assist the candidate in obtaining this training. Local rescue squads, fire departments, utility companies, schools, and churches frequently provide CPR training. Be sure the candidate shows you a current certificate dated within the past 12 months.

A good reference resource from the American Heart Association is *The Heartsaver Manual* (70-1002 CP) and a 1/2-inch videotape entitled *Project Lifesaver*. Both the publication and the cassette are relatively inexpensive and are excellent references and teaching guides.

- 2. Explain importance of knowing CPR skills.** The lack of oxygen is the cause of death by drowning. Anyone who has taken a CPR course knows that the heart is responsible for pumping blood, and thereby oxygen, to the brain. Therefore, anyone removed from the water who does not have a pulse requires CPR. Normally, CPR must be started as soon as possible after "sudden death" or when the heart stops beating. If CPR isn't started within 4 minutes, chances for survival are very slight.

This time frame, however, doesn't necessarily hold true for a drowning victim. Commander Martin Nemiroff with the U.S. Coast Guard has been instrumental in studying conditions referred to as the "Mammalian Diving Reflex." Hundreds of situations are recorded where people have been submerged in cold water (less than 68°) for up to 40 minutes, rescued from the watery depths and submitted to aggressive CPR, and survived with little or no brain damage. It wasn't too many years ago that anyone underwater more than 5 minutes was left for body recovery hours or days later.

Dr. Nemiroff does point out that the following factors can make a marked difference:

- The younger the victim, the greater the chance of survival.
- The colder the water, the better the chance of survival.
- The cleaner the water, the better the chance of survival.
- The better the quality of CPR, the better the chance of survival.

As lifeguards, and as first responders in many cases, we need to be aware that if a victim has been underwater less than an hour in a cold water situation, there are increased chances for survival. It is worth recovering the person as quickly as possible and beginning CPR.

There are experiments underway to find a reasonably effective way to perform CPR in deep water. As of this writing no technique has been accepted by the American Red Cross or American Heart Association, but someday we may see it. In the meantime, we must get the victim to shore or on a boat as quickly as possible.



Rescue breathing has been successfully given in deep water. The candidate should practice the use of rescue tubes and a PFD for support while rescue breathing is administered.

- B. Hypothermia. Explain what hypothermia is, the symptoms to look for, and how to treat.** Much has been reported, written, and discussed in recent years about hypothermia. The First Aid, Swimming, and Lifesaving merit badge pamphlets all cover this subject from a slightly different perspective. Have the candidate read all three of these statements plus page 182 from the third edition of the *Fieldbook* prior to discussing this subject.

Hypothermia is the body's last defense against cold, its final effort to defend the vital organs. The pulse rate slows and blood is diverted to the critical organs and away from the extremities. The effect is to keep the heart and lungs working at the expense of the hands, feet, and head. The problem is that in many situations the hypothermia victim needs the use of his extremities—possibly to hang onto a capsized craft. The blood shortage affects the brain, and survivors of hypothermia recall a feeling of well-being sweeping over them as they begin to lose their mental grip. Early symptoms include violent shivering and convulsions.

In case of accidental submersion in cold water, remember that water (particularly moving water) causes heat loss much times faster than air. Get in or on a capsized boat, or anything else available, to get as much of the body out of the water as possible. A PFD may provide a degree of warmth as well as flotation. Remaining still and assuming the fetal position, or "heat escape lessening postures" (HELP), will increase the survival time. Since about 50 percent of heat loss is from the head, it is important to keep the head out of the water. Other areas of heat loss are the neck, sides, and groin. If there are several people in the water, huddling close, side by side in a circle will help conserve body heat.

Hypothermia victims must be handled gently and should not be allowed to walk. Move the victim to shelter and warmth as rapidly as possible. Gently remove all wet clothing. Place the victim on a hard flat surface to allow for administration of CPR, if needed. Apply heat to the central core of the body (head, neck, sides, and groin). Place the victim in direct bare-skin contact with another person to allow for transfer of body heat, if no other heat source is available.

Reference: *Cold, Wet, and Alive* video, American Canoe Association, P.O. Box 1190, Newington, VA 22122.

## C. Fractures and Sprains

- 1. Describe types of fractures apt to occur in aquatic activities.** Almost any type could happen; a waterfront is not exempt from them. Discuss the types of activities that might cause fractures, and what precautions might be taken.

- 2. Demonstrate proper care and splinting of these fractures.** This is another doing project, not just a discussion.

References: *First Aid* merit badge pamphlet; *Boy Scout Handbook*.

- 3. Demonstrate, with assistant, proper use of backboard in rescuing someone with a possible back or neck injury from the water.** When a person is discovered floating facedown in the water after diving, possibly unconscious, a back or neck injury should be suspected. The person should be removed from the water only after having been secured to a backboard. Before the backboard can be used, the victim must be faceup and, of course, the victim's nose and mouth must be clear of water to maintain breathing or administer resuscitation.

The recommended procedures for spinal injury management are described in *Lifeguard Training Supplement* (American Red Cross, 1988) and in the video *Spinal Injury Management* (American Red Cross).

This is not a discussion-only requirement. Look for the ability of the candidate to properly direct his assistants in this type of rescue. A mistake in this first aid procedure could prove fatal or make the victim a paraplegic.

## D. Burns

- 1. Describe what types of burns are apt to occur in aquatic activities:** Too much sun, burns from boating fuel fire, burns from campfires, cooking on floating trip, electrical burns, and hot engines.
- 2. Describe and demonstrate care of these burns.**

References: *Boy Scout Handbook*; *Fieldbook*.

- 3. Discuss the prevention of sunburn.** To avoid painful sunburn, gradual exposure is recommended—15 minutes a day to start. If prolonged exposure is anticipated, cover up. Medically proven sun-screening ingredients such as homomenthyl salicylate make certain suntan lotions acceptable for waterfront use to reduce the risk of sunburn while permitting tanning. These lotions must of course be reapplied if the individual gets wet or sweats heavily. Blocking agents will prevent sunburn as well as tanning (zinc oxide paste is inexpensive and effective).

Most people have been conditioned to believe that soaking up the sun and acquiring a "healthy tan" is good for them. In general, this just isn't so! The sun health benefits are primarily psychological. An immediate result of overexposure to the sun's ultraviolet rays is severe sunburn. Many have suffered the painful blisters, fever, and other discomforts that come from too much sun too fast. Another result of too much sun is prematurely aged skin. While we seek a tan to make

us look young and vibrant, the sun is hard at work making us look old—giving us wrinkles and a tough, leathery look. With enough time, the sun weakens the skin's elasticity, and can also cause dark patches and scaly, gray growth known as keratoses, which are often precancerous.

Sunburn and prematurely aged skin are not the worst results of constant overexposure to the sun. Skin cancer is. An estimated 500,000 Americans were victims in 1986 alone. The most common forms of skin cancer are "basal cell" and "squamous cell." Both are caused by overexposure to ultraviolet rays of the sun. These rays are the most intense between 10 a.m. and 2 p.m. While ultraviolet rays seduce sunbathers by warming and browning their bodies, they also scramble vital genetic materials, causing cancer to develop. Fair-haired, fair-skinned, and blue-eyed individuals are at higher risk; however, everyone is a potential victim.

Anyone who is exposed to the sun should take these precautionary measures:

- a. Apply sunscreen with the sun protection factor (SPF) of at least 15 when being exposed to the sun for any period of time. It is best to apply to all exposed areas at least 30 minutes before exposure. Most sunscreens need time to penetrate and adhere to skin cells before the active ingredients are effective. Sunscreens should be reapplied at intervals, especially after swimming or sweating.
- b. Wear proper apparel. Cotton offers a high amount of protection. Cool, loose fitting beach robes, long-sleeve shirts, and wide-brimmed hats are recommended.

If sunburn should occur, treatment should be the same as for a burn from other causes. Since young people may not be mindful of sunburn until it is too late to be avoided, lifeguards should be observant and recommend covering up with T-shirts and headgear, when appropriate. Burns of the nose and ears are common and can be avoided by use of zinc oxide ointment. Sun glare can also be harmful to the eyes and persons in the sun or on the water for prolonged periods should consider using properly fitted sunglasses. (If eyeglasses are worn on or near the water, a safety strap or string should be used to prevent loss.)

#### E. Bleeding and Bandaging

##### 1. Demonstrate how to control serious bleeding.

References: *Boy Scout Handbook*; *First Aid* merit badge pamphlet.

##### 2. Describe how to treat a nose bleed.

Reference: *Boy Scout Handbook*.

##### 3. Describe when a tourniquet is used.

Reference: *First Aid* merit badge pamphlet.

#### F. Shock

##### 1. Describe shock and its symptoms.

References: *First Aid* merit badge pamphlet; *Fieldbook*.

##### 2. Demonstrate first aid for shock.

References: *Boy Scout Handbook*; *Fieldbook*.

- G. **Hyperventilation. What is hyperventilation, what is the inherent danger, and how can you prevent it from happening?** Deliberate hyperventilation, defined as excessive respiration leading to abnormal loss of carbon dioxide, thus suppressing the breathing reflex, has been cited as a factor in numerous drowning accidents. Contestants in underwater swimming events may be especially prone to this danger because, under the stress and excitement of competition, they may ignore their "urge to breathe." The possibility of such an accident is increased by the common practice of "overbreathing" (hyperventilating) before swimming underwater.

Overbreathing depletes the body of carbon dioxide, which triggers the urge to breathe. Thus, the urge to breathe is delayed to the point where the oxygen supply is inadequate and the person loses consciousness. In such cases a swimmer may have little or no warning that he is about to pass out. He may even continue swimming for a few more seconds. As a result, observers or fellow swimmers may not realize he is in trouble until he loses all consciousness, automatically breathes, and, in the case of the underwater swimmer, drowns. (Competitive underwater swimming events are not permitted, and underwater swimming for any reason is permitted only in clear water.)

#### H. First Aid Kit

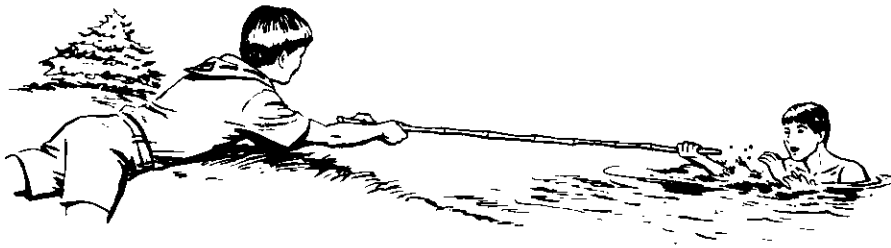
##### 1. Develop a list of contents for a first aid kit in an aquatic area.

##### 2. Display a kit assembled by you based on the above list.

This is something the candidate must actually do. Emphasis should be on making the kit lightweight, waterproof, easy-to-use, and accessible. Cost of materials for this kit might possibly be borne by the group the candidate represents.

All care givers are strongly encouraged to include latex gloves, antiseptic, and eye goggles in their first aid inventory, to be used as protective devices against possible exposure to communicable diseases when giving first aid to bleeding victims. Mouthpieces or mouth barrier devices should be used for CPR.

Reference: *First Aid* merit badge pamphlet.



## Section V—Emergency Action

**A. Emergency Procedures.** *Develop a written plan of action to be taken in the event of: drowning, electrical storm, high wind, and suspected neck injury.* The best defense against an emergency is preparedness. The development of step-by-step actions or procedures to be followed in the event such a condition or situation occurs will better prepare the candidate to function effectively when an emergency actually happens.

The following is an example of a written plan developed for an uncontrolled fire discovered in a central camp:

1. Any camper detecting an uncontrolled fire at any point in camp or vicinity is to report the incident immediately to camp headquarters so that alarm may be sounded and local fire authorities notified.
2. Sound central alarm.
3. Notify local fire authorities—telephone 911.
4. Upon hearing central alarm, troops are to mobilize at predetermined locations to await further instructions.
5. Troops are to send one runner to camp headquarters to receive instructions from camp fire warden.
6. Members of central camp staff will man the camp fire-fighting equipment assigned to them under direction of the camp fire warden.

Similar outlines are to be developed by the candidate for a suspected drowning, an approaching electrical storm, predicted high winds, and a suspected neck injury from diving into a pool or pond.

### B. Lost Bather Drill

1. **Explain the purpose and proper procedure to conduct drill.**
2. **Using others, organize and conduct a lost bather drill.**

This is an action demonstration. Three to six other swimmers should participate in this practice drill.

Reference: *Lifesaving merit badge pamphlet.*

If a bather becomes lost, use every qualified person available and immediately search the entire waterfront—especially that part of the area where the missing person was checked in or last seen. A lifeguard should be in charge of the search area. Search the non-swimmer area, having people link arms and wade in line across the area.

Search the beginner and swimmer areas using either wading or surface diving as depth indicates. Anyone available and of sufficient height is qualified to assist in the wading searches. In a deepwater search, qualified personnel line up on the surface and then simultaneously surface dive, taking an agreed-upon number of forward underwater breaststrokes along the bottom before surfacing. Each searcher then moves backward in a line about 6 feet before repeating the underwater search procedure to ensure no gaps. After having crossed each area in one direction, repeat both the wading and diving searches by criss-crossing at right angles to the first search movement. The searchers should proceed quickly but systematically under strict supervision. If swimming areas have been thoroughly searched without result, the search should be extended to surrounding areas. Areas under docks should be searched by teams covering both the bottom and the water surface under the deck or planking. If personnel are available, all swimming areas, adjacent waters, and docks should be searched simultaneously.

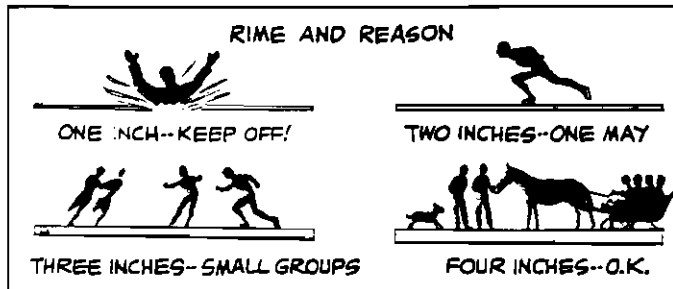
The diving search procedure is a strenuous and dangerous activity. Only personnel trained in the procedures should be used. Persons qualified in BSA Lifeguard and those holding the Lifesaving merit badge may be trained for use in the event of an emergency, and emergency procedures should be practiced periodically. At all times during a lost bathers drill the activity must be guarded and supervised and the buddy system used.

# ICE SKATING SAFETY



ICE SKATING ACCIDENTS CAN BE PREVENTED. WHEN YOU SKATE OR PLAY ON ICE, SOLID ICE IS ESSENTIAL FOR SAFETY.

BEWARE OF ICE NEAR MOUTHS OF INFLOWING STREAMS, OR STREAMS FLOWING OUT OF LAKES, OR NEAR SPRINGS.



FOUR INCHES OF NEW ICE IS SAFE FOR A CROWD. PROTECT YOURSELF AND THOSE WHO MAY FOLLOW YOU BY TESTING THE THICKNESS OF THE ICE FIRST.

NEVER SKATE ALONE! USE A BUDDY SYSTEM THE SAME AS YOU DO IN SWIMMING, OR SKATE WITH A GROUP BUT NOT TOO NEAR EACH OTHER. THEN, IF THE ICE SHOULD GIVE WAY, THERE WILL BE OTHERS ON SOLID ICE TO ASSIST.

THE FIRST THING TO DO IF YOU BREAK THROUGH THE ICE IS TO GRASP THE EDGE OF THE ICE LIGHTLY AND SUPPORT YOURSELF. LOOK AROUND AND CONSIDER YOUR PROBLEMS; THEN CALMLY TRY TO SOLVE THEM.

## HUMAN CHAIN RESCUE

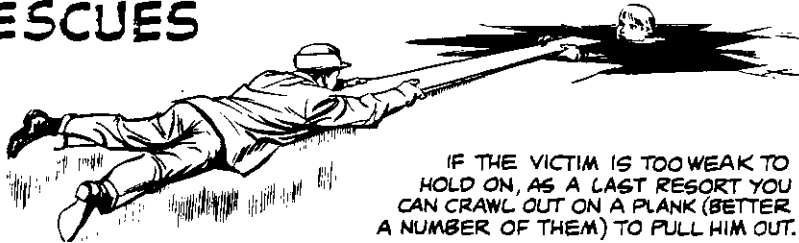
THIS IS THE RECOMMENDED METHOD OF RESCUE FOR A GROUP WHEN NO EQUIPMENT IS AVAILABLE.



NUMBER ONE MAN GRASPS WRISTS OF VICTIM. NUMBER TWO MAN HOLDS ON TO SKATES OF FIRST MAN WITH ONE HAND, HELPING HIS PROGRESS WITH THE OTHER HAND. NUMBER THREE MAN GRABS NUMBER TWO MAN'S SKATES, DIGS IN WITH HIS SKATES AND WORKS HIMSELF BACKWARD WHEN NUMBER ONE YELLS, "PULL!" ALL MOVE BACKWARD AND PULL VICTIM OUT ON HIS STOMACH.

## SINGLE RESCUES

PUSH A PLANK, A LADDER, OR A POLE WITHIN REACH OF THE VICTIM. LIE FLAT AND SPREAD YOUR LEGS WIDE APART.



IF THE VICTIM IS TOO WEAK TO HOLD ON, AS A LAST RESORT YOU CAN CRAWL OUT ON A PLANK (BETTER A NUMBER OF THEM) TO PULL HIM OUT.

WHEN USING A ROPE FOR A RESCUE, YOU SHOULD BE EQUIPPED WITH SKATES OR "CREEPERS." SECURE ONE END OF THE ROPE TO A ROCK OR TREE. OTHERWISE, YOU MAY BE PULLED INTO THE ICE HOLE YOURSELF!



## SELF RESCUE

IT'S IMPORTANT TO KNOW HOW TO SAVE YOURSELF IF YOU SHOULD BREAK THROUGH THE ICE.



EXTEND BOTH ARMS OUT OVER THE ICE TO SUPPORT YOUR WEIGHT WHILE CALLING FOR HELP.

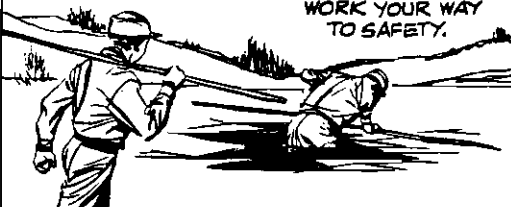


KICK YOUR FEET TO KEEP YOUR BODY AS FLAT AS POSSIBLE. CRAWL FORWARD ON THE ICE ON YOUR BELLY UNTIL YOUR HIPS ARE AT THE EDGE-- THEN QUICKLY ROLL SIDWAYS AND TRY TO ROLL AWAY FROM THE HOLE.

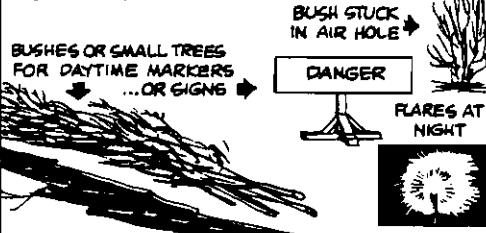


USE YOUR KNIFE OR ICE AWLS DRIVEN INTO THE ICE TO PULL YOURSELF OUT.

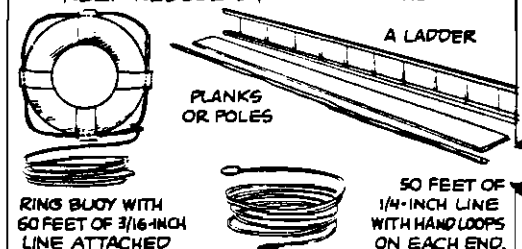
WHEN CROSSING STRANGE ICE ON FOOT, CARRY A STRONG POLE WITH YOU. THEN IF YOU BREAK THROUGH, YOU'VE GOT A CHANCE TO WORK YOUR WAY TO SAFETY.



UNSAFE ICE SHOULD BE MARKED ON A POPULAR SKATING POND.



KEEP RESCUE EQUIPMENT HANDY



## C. Ice Management and Rescue

### 1. Explain how to conduct a safe group activity on the ice, including: (a) a list of safety procedures; (b) how to determine if ice is safe; (c) safety equipment to be on site.

This may appear to be a strange series of requirements in a lifeguard certification program, but refer to our earlier definition of a lifeguard. We stated that the primary responsibility is to provide for the safety of the participants using an aquatic facility. In this case the water is frozen, and offers some different situations and hazards.

Probably the first thing we need to ascertain for a group skating party is the condition of the ice. Today many communities have artificial ice rinks available in shopping malls or public facilities. We really have no concern about the ice hazards in this situation. We should be concerned, however, in areas of the country blessed with subfreezing temperatures where ice forms naturally on ponds, lakes, and rivers. Many communities will flood an area in a municipal park or schoolyard to provide skating opportunities. Though a group may still risk exposure to excessive periods of cold temperatures and wind increasing the possibility of hypothermia, at least the hazard of falling through the ice is eliminated.

Shallow ponds, such as those frequently found on farms where the known depths do not exceed 4 or 5 feet and where the water is not affected by underwater currents from springs or drainage, particularly sewage, would provide the safest location once the ice has reached the thickness of 3 to 4 inches.

Beyond this we get into large open areas on lakes and frozen rivers that may be safe, but also may have weak spots where skaters and snowmobiles can get into trouble. It is generally accepted that ice should be more than 4 inches in thickness to support anything heavier than a small group of skaters. This should be used as a minimum for any group activity on ice.

Even so, it would be well to have some rescue equipment available in case some section of the ice proved to be weaker than anticipated. Probably the best rescue equipment is a 10- to 14-foot wooden ladder with a coil of light nylon line attached to the bottom rung.

Other equipment might include a ring buoy with 60 feet of  $\frac{3}{16}$ -inch line attached, reach poles, planks, and brightly colored cones that could be used to mark the perimeter of known safe ice for your activity. Flares or lanterns might be used to identify the area at night.

The buddy system can be well adapted to your skating party to assure that no one goes off exploring the ice alone.

### 2. Explain or demonstrate how to carry out the following ice rescues: (a) You have fallen through the ice; (b) a large adult has fallen through the ice.

There are at least two general rules that apply in all cases in which a person breaks through ice: 1. the person should not attempt to climb out immediately, and 2. the victim should kick his feet to the surface to the rear to avoid jackknifing the body beneath the ice rim. Rather than follow the first impulse to climb out after breaking through the ice, the person should extend the hands and arms forward on the unbroken surface, kick to nearly level position, and attempt to work forward onto the ice. If the ice breaks again, the victim should maintain his position and slide forward again. Upon reaching firm ice, the victim should not immediately stand, but should roll away from the break area, thus distributing the body weight over as broad an area as possible on the weak ice.

Too often, when someone falls through ice, a would-be rescuer also breaks the ice in attempting to assist. Any equipment that helps distribute the weight of rescuers across a broader area of ice will alleviate this problem. One of the most useful devices for ice rescue is a light ladder, from 14 to 18 feet long, with a light, strong line attached to the lowest rung. The ladder should be shoved out on the ice to the limit of its length with the line serving as an extension. If able to do so, the victim can climb onto the ladder and move along its length in a prone position.

If the victim is unable to climb onto the ladder, the rescuer may crawl out on the ladder to assist. If the ice breaks under the ladder, the ladder will angle upward from the broken ice area and can be drawn to safety by other persons.

For rescues in which the rescuer must remain at a distance from the victim because of ice conditions, a ring buoy with line attached or a coiled line with a weighted end may be thrown to the victim. A ring buoy can be scaled along the ice for a considerable distance.

A hockey stick with line attached can also be scaled along the ice. Sometimes a tree branch or a board may be the only available device. A spare tire, preferably with line attached, may be used for an extension rescue and will support several people. In addition, a victim of an ice accident may be rescued by the use of a small flat-bottom boat shoved along the ice. The victim is pulled aboard over the stern.

Where no regular or improvised rescue devices are available, it may be necessary to form a human chain to effect a rescue. To form this chain, several rescuers approach as closely as they can with safety and then lie prone upon the ice, forming a "chain." Each person holds tightly to the skates or ankles of the person ahead. If possible, the lightest person should be closest to the victim. When the lead person grasps the victim, the person nearest shore pulls the others back. If the ice breaks under the weight of the lead person in the chain, the individual can be held and drawn to safety by the others.

**3. Describe proper care after a victim has been rescued from icy waters.**

Needless to say, someone rescued from icy waters is bound to be cold, even if originally heavily clothed for protection from cold and wind on the surface. Submersion in extremely cold water will quickly reduce body heat and make the victim a prime candidate for hypothermia. Look for early symptoms and take extreme care in handling the person upon removal from the water. As quickly as possible, the victim should be transferred to a location that is dry and warm, and to a medical facility for examination. Pay no more attention to the victim's comments than is necessary—remember that hypothermia affects the victim's ability to recognize the nature or seriousness of their own condition.

References: *First Aid* and *Lifesaving* merit badge pamphlets.

**D. Reporting Accidents**

**1. Indicate what authorities are to be notified of serious or fatal accidents.** Local law enforcement and the emergency medical system should be notified immediately. In the event of a fatality, contact the local coroner.

Reference: *Camp Health and Safety*.

**2. Explain what information should be gathered at the scene of an accident.** The important information to gather at the scene of an accident is: (1) the names of the individuals involved, plus age, address, next of kin and how they can be reached; (2) the names and addresses of witnesses; (3) time of day and date; (4) what happened; and (5) how it happened. Record only facts of what people did or saw. This is not the place for speculation.

**3. Explain what special action should be taken at a Scout-related accident.** In case of serious accident or illness, parents, guardians, or next of kin should be notified by the council Scout executive or his representative about the accident or illness and what steps have been taken to aid the injured or ailing individual. This will usually be done by a telephone call or personal

visit. The Scout executive or his representative will reassure the family that everything possible is being done. Arrangements should be made to contact the family physician, if such is the desire of the parent or guardian. Be sure that the parent or guardian is satisfied with the medical arrangement. If necessary, provide transportation for the family to the location of the injured or ailing person.

In the event of a fatal accident, the Scout executive and local authorities must be immediately notified. The Scout executive will personally make contact with the family, news media, attorneys, and insurers. Local authorities will institute an inquiry to determine the cause of death and whether responsible precautions were taken to prevent the accident.

**Conclusion**

Refer to the last page of the *Lifesaving* merit badge pamphlet, entitled "Conclusion." We could well repeat most of that statement here, except now we are dealing with someone who will be giving leadership to preventive awareness as well as rescue efforts.

Approximately 6,500 people drown each year, according to the National Safety Council. Forty percent of these drownings are between 5 and 24 years of age. From our experience with drownings related to Scouting activities, most of these drownings could have been avoided by simply adhering to the standards offered in the Safe Swim Defense and Safety Afloat and nobody's fun would have been curtailed in the process. These standards are effective as preventive measures only if they are used. Like the seatbelt—aquatics safety measures cannot possibly do anyone any good unless they are used. We hope that the people you certify as BSA Lifeguards will use these standards constantly, and urge their peers to do likewise.

Thank you for giving your time and knowledge to those interested in becoming BSA Lifeguards. With more people developing an awareness of aquatic hazards and how to safely deal with them, the more people can enjoy the many exciting activities on and in the water throughout a long and healthy life.

**BSA Lifeguard Commitment**


*As a BSA Lifeguard, I promise faithfully to observe and promote the procedures established in the:*

<b>Safe Swim Defense</b>	<b>Safety Afloat Standards</b>
1. Qualified Supervision	1. Qualified Supervision
2. Physical Fitness	2. Physical Fitness
3. Swimming Ability	3. Swimming Ability
4. Swimming Areas	4. Personal Flotation Devices
5. Buddy System	5. Buddy System
6. Lookout	6. Skill Proficiency
7. Lifeguards	7. Planning
8. Discipline	8. Equipment
	9. Discipline

Signed \_\_\_\_\_  
No. 4260 BSA Lifeguard

This is to certify that \_\_\_\_\_  
has satisfactorily completed the requirements in aquatics,  
safe swim defense, safety afloat, first aid, and emergency  
action to qualify as a BSA LIFEGUARD for a period of three  
years from \_\_\_\_\_ date \_\_\_\_\_

**BSA LIFEGUARD**

\_\_\_\_\_ Council \_\_\_\_\_  
Certifying Counselor  Scout Executive

**BOY SCOUTS OF AMERICA**



# APPLICATION FOR BSA LIFEGUARD CERTIFICATION

## COUNCIL RECORD

Is counselor certified? \_\_\_\_\_  
 Is applicant registered? \_\_\_\_\_  
 APPROVAL:  
 Certificate written \_\_\_\_\_  
 Filed for year-end report \_\_\_\_\_

This form to be used in local council only

\_\_\_\_\_ Registered in \_\_\_\_\_ No. \_\_\_\_\_ of \_\_\_\_\_  
Name Troop or Post City or Town

who lives at \_\_\_\_\_  
Street or R.F.D. Address City or Town State ZIP Code

has satisfactorily completed all requirements for the BSA Lifeguard certification. Date of completion \_\_\_\_\_

_____	_____	_____
<small>Certifying Counselor's Signature</small>	<small>Type of Certification</small>	<small>Date Expires</small>
_____	_____	_____
<small>Instructing Counselor's Signature</small>	<small>Type of Certification</small>	<small>Date Expires</small>
_____	_____	_____
<small>Instructing Counselor's Signature</small>	<small>Type of Certification</small>	<small>Date Expires</small>

### CERTIFICATION PROCEDURE

1. Only those persons currently certified as *BSA Aquatics Instructor* or as *BSA Lifeguard Counselor* may certify the completion of BSA Lifeguard requirements.
2. Certification as BSA Lifeguard is valid for 3 years from the date of application.
3. All requirements must be met—no substitutions or omissions permitted.
4. The completed application is sent to the local council service center where BSA Lifeguard emblems may be purchased.

### COUNSELORS' RESPONSIBILITY

Scouts, Explorers, or adults who take this examination and become certified BSA Lifeguards must be well qualified and able to use their knowledge in case of need without undue danger to themselves and with a reasonable chance of success. The counselors are responsible for the strict interpretation of requirements and the elimination of applicants who in their judgment are not qualified by strength, judgment, or ability to put their knowledge into practice.

The reputation of the counselors as experts depends to a great extent on the actual performance of those they qualify. Therefore, they should be certain that the candidates' ability is, without doubt, of the highest caliber. It is expected that the BSA Lifeguard emblem and certificate will always stand for a very high standard of skill. The counselors to whom this responsibility is entrusted are expected to maintain that standard. For interpretation of requirements, see *BSA Lifeguard Counselor Guide*, No. 34534.

### REQUIREMENTS

	Date	Counselor's Initials
<b>1. AQUATICS SKILL</b>		
a. Swim 800 meters (1/2 mile).	_____	_____
b. Demonstrate skill and knowledge of <i>current</i> requirements for the following merit badge subjects. (See pages 3 and 4.)	_____	_____
(1) Swimming	_____	_____
(2) Lifesaving	_____	_____
(3) Rowing	_____	_____
(4) Canoeing	_____	_____
(5) First Aid	_____	_____
c. Throw line 10 meters three times in 1 minute accurately.	_____	_____

### REQUIREMENTS

	Date	Counselor's Initials
<b>2. SAFE SWIM DEFENSE</b>		
a. Qualified Supervision. Explain why <i>qualified supervisors</i> must be 21 years of age or older, what qualities they must possess, and what certification is required.	_____	_____
b. Physical Fitness		
(1) Produce evidence of a recent physical exam (within 3 years).	_____	_____
(2) Explain importance of information on fitness and health for swimming.	_____	_____

**REQUIREMENTS**

Date \_\_\_\_\_ Counselor's Initials \_\_\_\_\_

(3) Explain "alert signs" and how to respond to them. \_\_\_\_\_

c. Swimming Ability

(1) Explain swim ability groups and the need for them. \_\_\_\_\_

(2) Explain the beginner and swimmer tests. \_\_\_\_\_

(3) Explain the importance of learning to swim. \_\_\_\_\_

d. Swimming Areas

(1) List the qualities of a safe swim area. \_\_\_\_\_

(2) Explain where nonswimmers, beginners, and swimmers swim. \_\_\_\_\_

(3) Select and set up a safe swim at an established swim area. \_\_\_\_\_

(4) Select and set up a safe swim at an improvised area. \_\_\_\_\_

(5) Indicate knowledge of local laws that apply to swimming. \_\_\_\_\_

e. Buddy System

(1) Explain buddy system to a group. \_\_\_\_\_

(2) Make a Safe Swim kit. \_\_\_\_\_

(3) Manage a buddy board for one swim. \_\_\_\_\_

f. Lookout

(1) Explain need for and duties of lookouts. \_\_\_\_\_

(2) Serve as a lookout. \_\_\_\_\_

g. Lifeguards

(1) Explain need for lifeguards and the ratio of lifeguards to swimmers. \_\_\_\_\_

(2) Explain duties of a lifeguard and describe training needed to become one. \_\_\_\_\_

(3) Serve as a lifeguard for three swim periods. \_\_\_\_\_

h. Discipline

Explain elements of good discipline, the rules for conducting a safe swim, and the adult role in discipline. \_\_\_\_\_

i. Conduct a swim.

Administer two unit swims of at least 1/2 hour each, using all eight defenses. \_\_\_\_\_

**REQUIREMENTS**

Date \_\_\_\_\_ Counselor's Initials \_\_\_\_\_

**3. SAFETY AFLOAT**

a. Qualified Supervision

(1) Explain meaning of *qualified* supervision and describe the required qualities. \_\_\_\_\_

**REQUIREMENTS**

Date \_\_\_\_\_ Counselor's Initials \_\_\_\_\_

(2) Indicate necessary certification and experience needed to supervise a float trip. \_\_\_\_\_

b. Physical Fitness

Explain need to be physically fit for boating activity. \_\_\_\_\_

c. Swimming Ability

Explain importance of swimming ability as a prerequisite for watercraft activity. \_\_\_\_\_

d. Personal Flotation Devices (PFDs)

(1) Describe Coast Guard classification of PFDs and BSA guidelines on wearing them. \_\_\_\_\_

(2) Show how to wear PFDs properly. \_\_\_\_\_

(3) Show how and indicate why you test PFDs. \_\_\_\_\_

e. Buddy System

(1) Explain buddy system to a group of boaters. \_\_\_\_\_

(2) Describe the responsibilities of a buddy. \_\_\_\_\_

(3) Explain what is meant by a "buddy boat." \_\_\_\_\_

f. Skill Proficiency

(1) Explain skills needed before a group conducts an activity afloat. \_\_\_\_\_

(2) Indicate sources of skill training. \_\_\_\_\_

(3) Demonstrate the following rescues from a canoe:

(a) Swamped craft \_\_\_\_\_

(b) Swamped equipment \_\_\_\_\_

(c) People overboard \_\_\_\_\_

g. Planning

(1) Write a "float plan" for a 72-hour activity afloat. \_\_\_\_\_

(2) Provide a list of laws and rules that applied to plan developed for g(1) above. \_\_\_\_\_

(3) Indicate persons who need to be advised of this activity. \_\_\_\_\_

(4) Indicate what weather and environmental conditions a leader should be alert to. \_\_\_\_\_

(5) Indicate what sources of emergency help would be available in case of need. \_\_\_\_\_

h. Equipment

(1) Provide a list of equipment for trip planned in requirement g(1) above. \_\_\_\_\_

(2) Demonstrate how to pack and load equipment into your craft properly. \_\_\_\_\_

(3) Demonstrate proper care for equipment and craft. \_\_\_\_\_

i. Discipline

Explain what good discipline means and why it is important to an activity afloat. \_\_\_\_\_



## REQUIREMENTS

Date \_\_\_\_\_  
Counselor's Initials \_\_\_\_\_

### 4. FIRST AID

#### a. Cardiopulmonary Resuscitation (CPR)

(1) Show evidence of current certification in single-person rescue and pediatrics by American Red Cross or American Heart Association.

\_\_\_\_\_

(2) Explain importance of knowing CPR skills.

\_\_\_\_\_

#### b. Hypothermia

Explain what hypothermia is, the symptoms to look for, and how to treat it.

\_\_\_\_\_

#### c. Hyperthermia

Explain what hyperthermia is, the symptoms, and how to treat it.

\_\_\_\_\_

#### d. Fractures and Sprains

(1) Describe types of fractures apt to occur in aquatics activities.

\_\_\_\_\_

(2) Demonstrate proper care and splinting of these fractures.

\_\_\_\_\_

(3) Demonstrate, with assistant, proper use of backboard in rescuing a possible back or neck injury victim from the water.

\_\_\_\_\_

#### e. Burns

(1) Describe what types of burns are apt to occur in aquatics activities.

\_\_\_\_\_

(2) Describe and demonstrate care of these burns.

\_\_\_\_\_

(3) Discuss the prevention of sunburn.

\_\_\_\_\_

#### f. Bleeding and Bandaging

(1) Demonstrate how to control serious bleeding.

\_\_\_\_\_

(2) Describe how to treat a nose bleed.

\_\_\_\_\_

(3) Describe when to use a tourniquet.

\_\_\_\_\_

#### g. Shock

(1) Describe shock and its symptoms.

\_\_\_\_\_

(2) Demonstrate first aid for shock.

\_\_\_\_\_

#### h. Hyperventilation

Describe what hyperventilation is, what the inherent danger is, and how you can prevent it from happening.

\_\_\_\_\_

## REQUIREMENTS

Date \_\_\_\_\_  
Counselor's Initials \_\_\_\_\_

### i. First Aid Kit

(1) Develop a list of contents for a first aid kit in an aquatics area.

\_\_\_\_\_

(2) Display a kit assembled by you based on the above list.

\_\_\_\_\_

## REQUIREMENTS

Date \_\_\_\_\_  
Counselor's Initials \_\_\_\_\_

### 5. EMERGENCY ACTION

#### a. Emergency Procedures

(1) Develop a written plan of action to be taken in the event of:

(a) Drowning

\_\_\_\_\_

(b) Electric storm

\_\_\_\_\_

(c) High wind

\_\_\_\_\_

(d) Suspected neck injury

\_\_\_\_\_

#### b. Lost Bather Drill

(1) Explain the purpose of and proper procedures for conducting the drill.

\_\_\_\_\_

(2) Using others, organize and conduct a lost bather drill.

\_\_\_\_\_

#### c. Ice Management and Rescue

(1) Explain how to conduct a safe group activity on the ice, including:

(a) A list of safety procedures

\_\_\_\_\_

(b) How to determine if ice is safe

\_\_\_\_\_

(c) Safety equipment to be on site

\_\_\_\_\_

(2) Explain or demonstrate how to carry out the following ice rescues:

(a) You have fallen through the ice

\_\_\_\_\_

(b) A large adult has fallen through the ice

\_\_\_\_\_

(3) Describe the care after victim has been rescued from icy waters.

\_\_\_\_\_

#### d. Reporting Accidents

(1) Indicate which authorities are to be notified of serious or fatal accidents.

\_\_\_\_\_

(2) Explain what information should be gathered at the scene of an accident.

\_\_\_\_\_

(3) Explain what special action should be taken in the event of a Scout-related accident.

\_\_\_\_\_

## CURRENT REQUIREMENTS OF MERIT BADGES IDENTIFIED IN REQUIREMENT 1b:

### First Aid



1. Satisfy your counselor that you have current knowledge of all first aid requirements for Tenderfoot, Second Class, and First Class ranks.

2. Do the following:

(a) Explain how you would obtain emergency medical assistance from your home, on a wilderness camping trip, and during an activity on open water.

(b) Prepare a first aid kit for your home. Display and discuss its contents with your counselor.

3. Do the following:

(a) Explain what action you should take for someone who shows signs of a heart attack.

(b) Identify the conditions that must exist before performing CPR on a person.

(c) Demonstrate proper technique in performing CPR on an adult manikin for 3 minutes.

(d) Show the steps that need to be taken for someone suffering from a severe laceration on the leg and on the wrist. Tell the dangers in the use of a tourniquet and the conditions under which its use is justified.

(e) Explain when a bee sting could be life threatening and what action should be taken for

prevention and for first aid.

(f) Explain the symptoms of heat stroke and what action needs to be taken for first aid and for prevention.

4. Do the following:

(a) Describe the signs of a broken bone. Show first aid procedures for handling fractures, including open (compound) fractures of the forearm, wrist, upper leg, and lower leg using improvised materials.

(b) Describe the symptoms and possible com-

plications and demonstrate proper procedures for treating suspected injuries to the back, neck, and head. Explain what measures can be taken to reduce the possibility of further complicating these injuries.

- Describe the symptoms, proper first aid procedures, and possible prevention measures for the following conditions:
  - Hypothermia
  - Convulsions
  - Frostbite
  - Bruises, strains, sprains
  - Burns
  - Abdominal pain
  - Broken, chipped, or loosened tooth
  - Knocked out tooth
  - Muscle cramps
- Do the following:
  - If a sick or injured person must be moved, tell how you would determine the best method.
  - With helpers under your supervision, improvise a stretcher and move a presumably unconscious person.
- Teach another Scout a first aid skill selected by your counselor.

## Canoeing

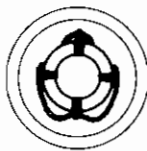


- Before doing other requirements, successfully complete the BSA swimmer test. Jump feet-first into water over your head in depth, swim 75 yards or 75 meters in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; then swim 24 yards or 25 meters using 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.
- Do the following:
  - Name and point out the major parts of a canoe and paddle.
  - Know canoeing terminology.
  - Explain and demonstrate canoe kneeling and sitting positions and the proper use for each position.
  - Review and discuss BSA Safety Afloat, and demonstrate the proper fit and use of personal flotation devices (PFDs).
  - Demonstrate how to load and secure equipment in a canoe.
- With a companion and using a properly equipped canoe:
  - Properly carry, launch, and get into the bow of the canoe from dock or shore (both, if possible).
  - Paddle 100 yards on one side only in the bow position using a single-blade paddle. Turn underway and return to shore or dock showing proper form and use of the bow or power stroke, diagonal draw, and quarter sweep. Repeat while paddling on the other side.
  - While paddling on one side only in the bow position, demonstrate how to hold water and stop. Show proper form and use of the push away, pullover, reverse sweep, and backwater. Repeat while paddling on the other side.
  - Change places with your companion while canoe is afloat.
  - Paddle 100 yards on one side only in the stern position. Turn underway and return to shore or dock while maintaining course and giving proper signals to your companion. Show proper form and use of the stern power stroke (the J stroke). Repeat while paddling on the other side.
  - While paddling on one side only in the stern position, demonstrate how to hold water and stop. Show proper form and use of the push

away, pullover, reverse sweep, and backstroke. Repeat while paddling on the other side.

- As bow paddler, make a proper landing and get out of the canoe while following directions from your companion. Repeat in the stern position giving directions to your companion.
  - Store canoe properly.
- While on deep water with a companion, fully dressed and wearing proper PFD:
    - Jump safely out of the canoe. Get back in without capsizing.
    - Capsize the canoe, get back in, secure all loose gear, and paddle the swamped canoe 25 yards. Go overboard from the swamped canoe and swim, tow, or push the swamped canoe 50 feet.
    - Empty the swamped canoe in shallow water.
  - Demonstrate solo canoe handling:
    - Launch from shore or pier (both, if possible).
    - Using a single-blade paddle and paddling only on one side, demonstrate proper form and use of the forward stroke (J stroke), forward and reverse sweeps, backwater, stop, pullover, push away, inside and outside pivots, and sculling. Repeat while paddling on the other side.
    - While paddling on one side only, paddle a 50-yard course making at least one turn underway and one reverse of direction. Repeat while paddling on the other side.
    - Make a proper landing at dock or shore (both, if possible). Store canoe properly (with assistance, if needed).
  - While alone in a canoe or on deep water and wearing PFD, jump safely out of the canoe. Get back in without capsizing.
  - With a companion in your canoe and while giving instructions to persons who have capsized a canoe in deep water, empty the swamped canoe over your own canoe and assist the persons in reboarding the emptied canoe.
  - Discuss:
    - General care and maintenance of canoeing equipment
    - How to rig a canoe for sailing
    - The differences between river (moving water) canoeing and lake (flatwater) canoeing

## Lifesaving



- Before doing the following requirements:
  - Earn Swimming merit badge.
  - Swim 400 meters (440 yards).
- Explain:
  - The Safe Swim Defense.
  - The order of methods in water rescue.
- Show reaching rescues using such things as arms, legs, branches, sticks, towels, shirts, paddles, and poles.
- Show rescues using items that can be thrown, such as lines, ring buoys, and free-floating supports.
- Show or explain the use of rowboats, canoes, and other small craft in making rescues.
- With a helper and a subject, show a line rescue both as tender and as rescuer. Use a 15-meter (50-foot) length of line. If available, demonstrate the use of a torpedo buoy and rescue tube.
- Show twice that you can remove street clothes\* on shore (except underwear or swim trunks) in 20 seconds or less. Explain the importance of disrobing before a swimming rescue.
- Explain the importance of avoiding contact with a subject; explain "lead" and "wait" tactics; and explain why equipment should be used in a swimming rescue.
- Swim 9 meters (30 feet) and make the correct approach to a tired swimmer. Move him 9 meters (30 feet) to safety using: (a) under-

arm swim-along, (b) two-man assist, (c) tired swimmer carry.

- Keeping the practice victim in sight at all times, make a leaping entry, swim 9 meters (30 feet) with a strong approach stroke, and tow the subject back to pier or poolside using:
  - a shirt or other equipment
  - the rear approach and cross-chest tow
  - the front approach and wrist tow.
 Remove the practice victim from the water and place in position for resuscitation.
- Show in deep water your defense against grasps by blocking, and escaping. Free yourself from both front and rear holds.
- Make four surface dives in 2.4 meters (8 feet) of water. Retrieve an object three times. Bring up a 10-pound weight once.
- Show search techniques:
  - As a part of a lost swimmer drill,
  - As a diver using mask, fins, and a snorkel (not scuba).
- Explain cardiopulmonary resuscitation (CPR) and show evidence of having completed a minimum of 3 hours instruction (not certification) in CPR skills. †

\*"Street clothes" means low shoes, socks, underwear (or trunks), pants, belt, and long-sleeve shirt. A jacket or sweater or sweatshirt also may be worn.

†Resources for CPR instruction include local chapters of the American Red Cross, the American Heart Association, rescue squads, fire departments, hospitals, medical societies, BSA aquatics instructors, YMCA aquatics instructors, or any person having completed the CPR basic life support course.

## Rowing



- Before doing other 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.
- Review and discuss Safety Afloat and demonstrate the proper fit and use of personal flotation devices (PFDs).
- Do the following correctly in either a fixed seat or sliding seat rowboat:
  - Launch and land from and to shore.
  - Row in a straight line for a quarter mile. Stop, make a pivot turn, and return to the starting point.
  - Backwater in a straight line for 50 yards. Make a turn under way still backing water. Return to the starting point.
  - Properly moor or rack your craft. Demonstrate your ability to tie the following mooring knots: clove hitch, round turn and two half hitches, bowline, and hitching tie or mooring hitch.
- In a fixed seat rowboat, do the following:
  - Come alongside a dock and help a passenger into the boat. Row 50 feet, stop, pivot, and come back to the dock. Help the passenger from the boat.
  - Show sculling in good form over the stern for 25 yards. Turn under way, and return to starting point.
- Alone, or with one other person who is a swimmer, tip over a rowboat. Turn it right side up, get in, and row or paddle 25 yards with hands or oars. Tell why you should stay with a swamped boat.\*

- Alone in a rowboat push off from shore or dock. Row 25 yards to a swimmer. While giving instructions to the swimmer, turn the boat so that the swimmer may hold onto the stern. Tow him to shore.
- Show and explain the proper use of anchors for rowboats.
- Describe the following:
  - Types of craft used in commercial, competitive, and recreational rowing.
  - Four common boatbuilding materials. Give some good and bad points of each.
  - Types of oarlocks used in commercial, competitive, and recreational rowing.
- Discuss the following:
  - The advantage of feathering oars while rowing.
  - How to handle a rowboat in a storm.
  - How to properly fit out and maintain a boat in season. How to prepare and store a boat for winter.
  - How to calculate the weight a boat may carry under normal conditions.
  - The differences between fixed seat and sliding seat rowing.
  - The different meaning of the term "sculling" in fixed and sliding seat rowing.
  - The health benefits from rowing for exercise.

\*This requirement can be met in shallow water.

## Swimming



- Explain how swimming should be conducted safely for a group (Safe Swim Defense plan).
- Swim continuously for 150 meters or yards using the following strokes in good form: Sidestroke for 50 meters or yards, elementary backstroke for 50 meters or yards, and any of the following strokes for the last 50 meters or yards: trudgen, crawl, back crawl, or breast.
- Surface dive headfirst into water over your head but not to exceed 8 feet and bring up an object from the bottom. Repeat using the feet-first method of water entry.
- Show a plain front dive from a low board, if available. Show a headfirst dive from a dock. Show a racing start.
- Enter water over your head wearing clothes. (Clothes means shoes, socks, underwear or trunks, long pants, belt and long-sleeve shirt.) Remove shoes and socks. Inflate shirt and show that you can float using the shirt for support. Remove the pants and use them for support while floating. Swim 50 meters or yards using inflated clothing for support.
- Do the following:
  - Float faceup in a resting position, as nearly motionless as possible, for 1 minute.
  - Float facedown in a related position using minimum movement of arms and legs to raise head for breathing and keep body afloat for 10 minutes or longer.
- Do the following:
  - Demonstrate rescuing a person from water by reaching with arm or leg, by reaching with a suitable object, and by throwing lines and floating objects.
  - Explain why swimming rescues should be attempted when a reaching or throw assist or boat rescue can be done. Explain why and how a person making a swimming rescue should avoid contact with the victim.