Whitewater Rafting

Introduction

Many Scouting units participate in rafting trips conducted by outfitters or councils. *Whitewater Rafting* recognizes the challenge and adventure of such activities. The award is available to Scouting youth and adults who are members of Scouts BSA, Venturing, or Sea Scouts. Requirements for the award focus on safety and basic paddling skills on whitewater up to Class III. All instruction and skill completions are directly supervised by a professionally trained or licensed rafting guide. A qualified raft captain must be in each raft during the required trip. Participants help power and control the raft with paddles – simply riding in a raft rowed by a guide is not sufficient.

Acknowledgement

ACA PADDLESPORTS

The American Canoe Association assisted with program development.

Scouting America

Preparation:

Rafting Company Selection

Scouting America Safety Afloat Policy requires leaders and participants to have experience appropriate for safe boating activities. Most units lack the training necessary for treks on whitewater. The Whitewater Rafting award recognizes that units with limited experience can safely participate in whitewater rafting under the direct supervision of professionally trained paddle captains in each raft. Those guides, backed by their employer, provide the supervision, equipment, planning, and emergency response required by Safety Afloat. Therefore, the first step to earn the Whitewater Rafting award is selection of an appropriate service provider. Units may utilize programs at council and National High Adventure bases, such as the Summit, that have already done that groundwork. Otherwise, unit leaders are responsible for screening raft outfitters based on their guide training programs, quality of equipment, and safety policies. Guidance may be found in the Scouting America *Aquatics Supervision* manual. Leaders should inquire about guide training in swift water rescue and first aid as well as paddling, what rescue and first aid equipment is carried down river, and how guides contact emergency services.

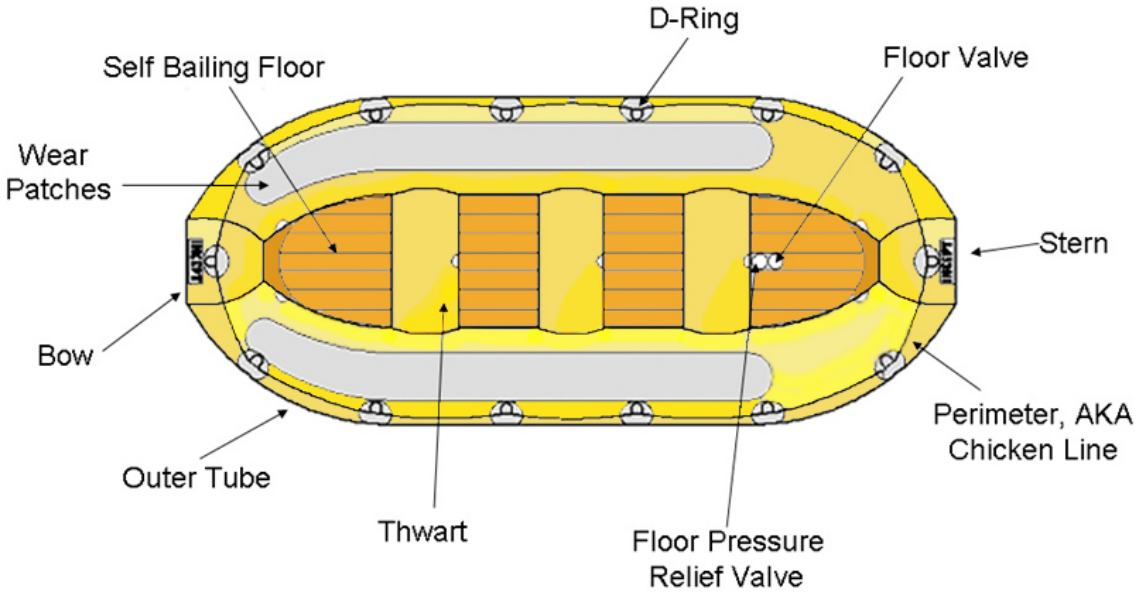
Swimmer Test: Jump feetfirst into water over the head in depth. Level off and swim 75 yards in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; then swim 25 yards using an easy, resting backstroke. The 100 yards must be completed in one swim without stops and must include at least one sharp turn. After the swim, rest by floating.

Swimming Ability

Even though the outfitter is primarily responsible for the safe conduct of a whitewater excursion, unit leaders are still required to have Safety Afloat training. Guides may not be familiar with some aspects of Safety Afloat such as medical reviews, the buddy system, or swimming ability. In particular, unit leaders should pre-screen applicants for the Whitewater Rafting award to meet the prerequisite requirement for swimmer classification. Information on Safety Afloat may be found in the online version of the *Guide to Safe Scouting* at www.scouting.org/health-and-safety/gss/.

Rafts:

There are various types of inflatable whitewater rafts. Cataraft have pontoons separated by a metal or inflatable frame, but oval forms are more common. Propulsion is provided by oars, paddles, or occasionally motors. Oars and paddles are similar, but different. Paddles are held vertically with two hands: one just above the blade and the other hand at the upper end of the paddle. An oar is supported horizontally by a pivot point fixed to the boat and held by the rower at the end opposite the blade. Oared rafts typically have a rigid frame to which the pivots, called oarlocks, are attached. A single rower, who usually faces forward, is sufficient to control a raft carrying inactive passengers. In some rafts, a rower is assisted by paddlers. In paddle rafts, a captain in the stern with a paddle directs a team of 2 to 10+ paddlers. Applicants for the Whitewater Rafting award must assist in moving the boat under instruction from a captain with either oars or a paddle. Parts of a raft are shown below. Note the perimeter line which rafters may grasp if they fall out and use to get back in. Perimeter lines need to be properly installed to prevent entrapment hazards.



Individual Equipment:

Lifejacket - Lifejackets provided by the outfitter must be Coast Guard approved, rated for whitewater and properly sized to each participant. The label will indicate intended use and specify sizes in various ways, including ranges for the user's chest size and weight. All fastenings must be functional and should be pulled snug. The paddle captain, unit leaders, and buddies should all check the fit. Shoulder straps should not rise to ear level when lifted.

Whistle - A whistle attached to the lifejacket is a good option.

Helmet - The outfitter should provide helmets designed for whitewater use, that is, waterproof and able to withstand multiple impacts. To test the fit, put on the helmet with the chin strap initially unbuckled. It should feel comfortable and stay in place when you shake your head. Then fasten the strap. If unsure of the fit, ask your guide to check.

Paddle - Paddles for the rafting team are typically 60 inches long whereas the paddle captain's "stick" is longer. A paddle that reaches from the floor to the paddler's chin is about right. The guide may suggest a different length depending on the height of the raft and the paddler's size.

Attire - Before the trip, check with the outfitter for recommendations on clothing and footwear appropriate for air and water temperatures. Multiple layers offer flexibility. The outfitter may suggest or require wetsuits or dry suits for some conditions.

Personal Items - Also follow outfitter recommendations for other items to bring (or leave at home). Essential medications, water bottles, sunscreen, and eyeglasses with a strap are common needs. Check on dry storage options for phones, wallets, and keys.

Getting to the Water:

There are several ways to carry a raft. Your guide will select one appropriate for the group and the terrain. A few launch sites will have special ramps to slide the raft down a steep slope, but dragging a raft is not a good option.

Side or Briefcase Carry – The team is spaced on both sides of the raft facing the same direction. They grasp handles or the perimeter line with the hand closest to the raft and lift on command by bending at the knees while keeping backs straight. They then carry the raft at a slow pace as directed.

Shoulder Carry - This lift starts similar to the briefcase carry, but the lifters face inward and grasp with both hands. At the count of three, everyone lifts the raft to the inside shoulder while turning to face in the same direction.

Overhead Carry - This lift begins the same as the shoulder carry and is used when the trail is too narrow for everyone to walk to the sides of the raft. After the raft is lifted, the carriers move towards the center of the raft, supporting it on their heads while steadying it with their hands. They may form a single line if needed. The raft is lowered after first returning to the shoulder carry.

Sitting in the raft:

Members of the paddle team sit on the side tube and hold themselves in place by wedging their feet under a thwart, the outer tube, or in foot cups. They must be able to fall free in a mishap and should not wrap their legs in sidelines or otherwise entangle themselves.

Basic Strokes & Commands:

Hold – A "hold" or "stop" command by the paddle captain alerts team members to stop paddling, not to stop the raft. It may be used to rest while drifting with the current. Paddlers should lower their grip hand to hold the paddle across their lap, ready for the next command.

Forward - "All forward", or just "forward", alerts paddlers to move the raft in the direction it is pointing. Each paddler leans forwards from the hips to CATCH the water near the side of the raft. POWER is transferred to the raft by pulling it toward the paddle. When the hips reach the paddle, RECOVER the paddle for another stroke. Everyone should stroke in unison, with those in the bow setting the pace.

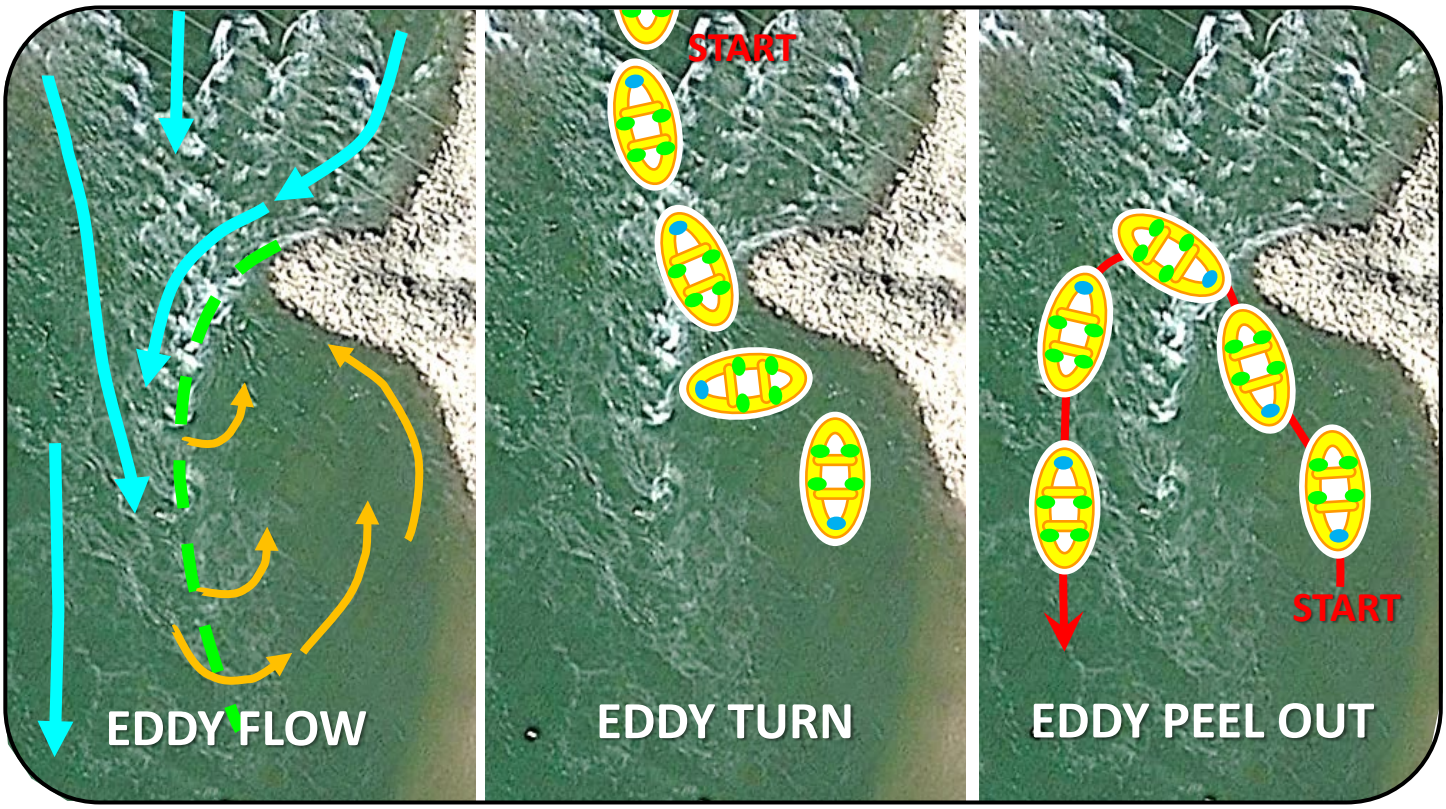
Back - To move in the opposite direction, all paddlers should do a backstroke in unison, planting the blade in the water just behind the hip. The lower hand holds the paddle to pry off the hip as the grip hand pulls back.

Turns – "Left turn" or "left back" alerts paddlers on the left side to paddle back while those on the right paddle forward. A right turn results when paddlers on the right paddle back while those on the left paddle forward. The paddle captain will assist with sweep, draw, or pry strokes, which are not used by the paddle team.

Safety Note: Try to keep both hands on the paddle with the blade outside the raft at all times. Being struck by an out-of-control paddle is no fun.

Photos on this page and the upper right of page 9 courtesy of Wilderness Aware, Buena Vista CO, www.inaraft.com

Maneuvers:

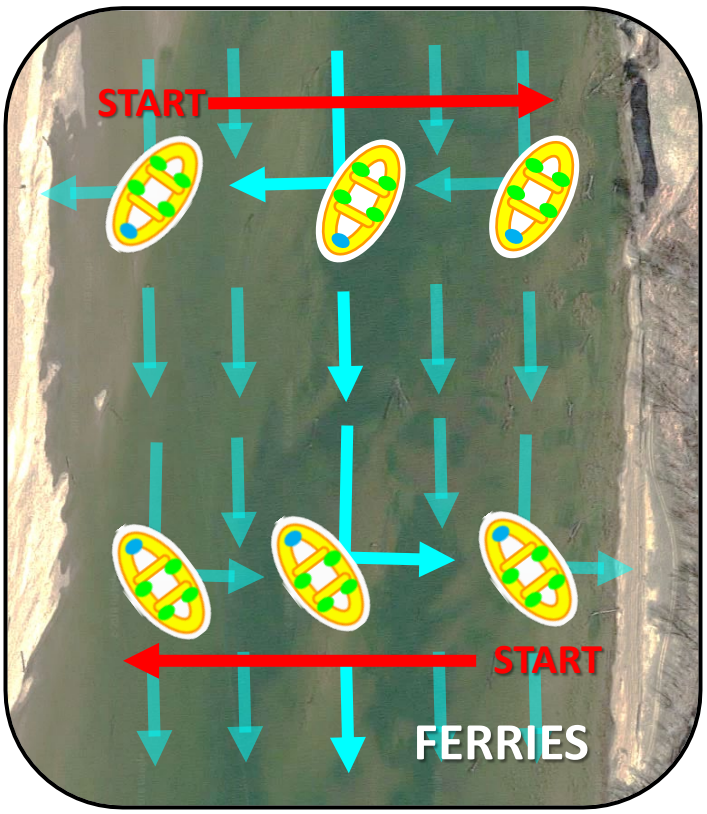


Eddies - Water flowing downstream is diverted by river banks, rocks, and other obstructions. If the area behind an obstacle is wide enough, water pushed to the side will actually flow upstream as it fills in the hole. The area of reverse current is known as an eddy. The boundary between upstream and downstream flow is an eddy line and is often visible. Rafts can pause in eddies to rest and scout ahead. However, getting in an out of an eddy can be challenging due to the abrupt change in current direction.

Eddy Turn – The paddle team will use forward strokes to propel the raft through the eddy line as directed by the paddle captain. The guide will assess the best **p**osition, **a**ngle, **s**peed, and **t**iming (P.A.S.T). The entry angle is typically 45 degrees to the eddy line, but the raft will quickly pivot as it hits the reverse current.

Peel Out – Leaving an eddy is typically done at the top rather than the bottom of the feature. A peel out is similar to an eddy turn in reverse. The paddle captain will again direct the crew according to a P.A.S.T assessment.

Ferries - Current deflected by the raft can be used to move across a river. When the flow hits the side of a raft at an angle, part of the force is directed downstream, but another part of the force pushes the raft sideways as the water moves in the opposite direction. The paddle captain will set the raft at the best angle, typically around 45 degrees, and will direct the crew to paddle either forward or back to keep the raft from moving downstream.



River Features & Hazards:

Reading the River – Part of the delight and challenge of whitewater rafting is the ability to determine and execute a course downriver. That skill requires more experience than provided a paddle crew member on one or two excursions. On a guided trip, the paddle captain is responsible for plotting a safe course around hazards. However, alert participants can begin to pick up basic knowledge.

Strainers – River banks are subject to constant erosion. Therefore, trees at the water's edge are often undercut and fall across the water. Trunks can also break free of the side and become lodged between downstream rocks. Such obstacles, known as strainers, must be avoided to prevent danger to rafters.

Hydraulics – Water flowing over a sharp drop tends to curl back into the feature. A person or raft caught in such a hydraulic can be tumbled in place. Isolated "holes" can be avoided. Hydraulics that extend from bank-to-bank can be particularly hazardous. The paddle captain should know which features can be safety run at various water levels and which must be avoided.

Standing Waves - Standing waves form when a fast current hits a slower flow. They are generally safe to engage. However, large waves, known as haystacks, can knock a person out of the raft or even flip the raft if it turns sideways to the current.

In the Water:

Upsets – A guided whitewater rafting trip is not the same as an amusement park ride. Significant risks exist which are mitigated by the training and experience of the paddle captain. One of the risks that cannot be completely eliminated is falling from the raft into moving water. If the raft encounters a large wave, an individual may be tossed overboard. If the raft strikes a rock sideways, the raft may **broach** and dump the entire team into the water. In either situation, participants must fend for themselves until assistance is available. That is challenging enough for a good swimmer, but may be particularly difficult for those not used to supporting themselves in deep water, much less water that is rapidly forcing them downstream. That is one reason Whitewater Rafting requires participants to be swimmers, even though everyone is wearing a lifejacket and the outfitter may not have a similar requirement.

Defensive Swimming – Used to get bearings, conserve energy, and stay calm. Lay on back as shallow as possible with feet downstream. Use legs as bumpers to push off obstacles if needed. With hands outstretched, use back strokes and body angle to move toward the side. Don't try to swim against the current. Breathe right after the peak of a wave, then hold breath through the trough. No need to breathe every wave. Find a safe place to stop downstream, either the bank or an eddy, and aim for it.

Aggressive Swimming – Used when being carried into danger or when the water is very cold. Aim for a safe spot downstream and move across the current: do not swim against it. Sprint on tummy using either a front crawl or breaststroke. A scissor or whip kick will likely provide more thrust than a flutter kick. Try to keep legs from dangling. Cross eddy lines at an aggressive angle.

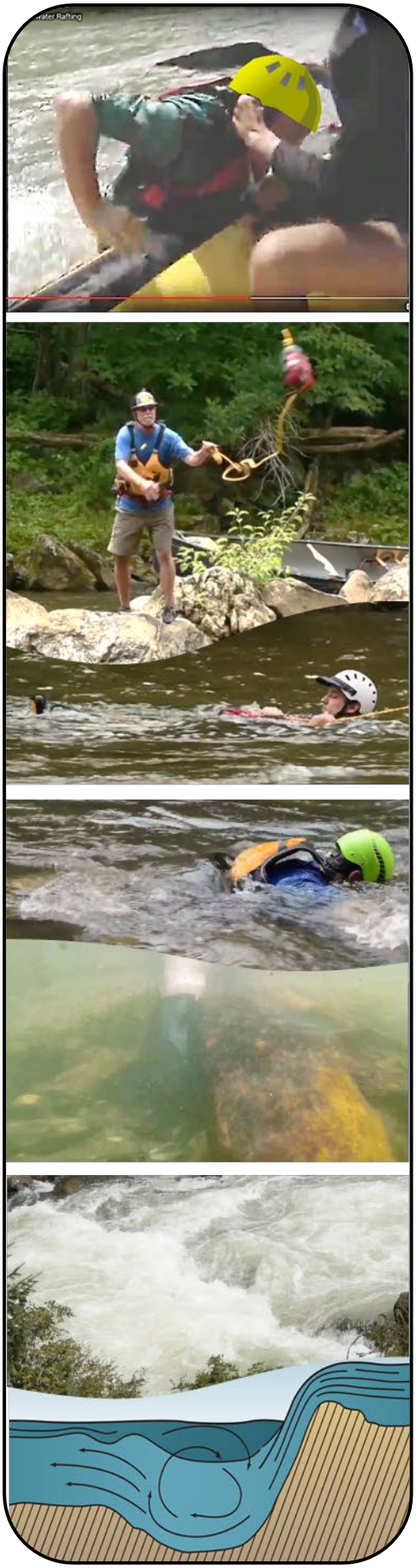
In the Water:

Re-entry - If you maintain contact with the raft during an upset or swim back to it, grasp the handles or perimeter rope and push down while kicking to reenter the raft. A person in the raft can assist by pulling with two hands on the shoulders of your lifejacket or under your armpits. Persons in the raft can also pull you back to the boat by grasping your paddle extended to them or reaching out to you with their own paddle.

Throw Lines – If you hear the word "rope" while swimming, be alert for a line in a bag thrown by a trained person onshore. Ideally the line will land in front of you within reach. If so, grasp the line and lay on your back with the line over your shoulder. You will swing cross current toward the side. The line tender may also pull you against the current, or move slightly downstream so that you land in a safe location. Throw bags are seldom used from a raft moving in whitewater. However, your paddle captain may confer with other rafts to station a safety person onshore below a difficult rapid where a flip is possible. Use of a throw bag requires communication between rescuer and swimmer, an accurate throw, a good anchor for the rescuer, and a good position to land the swimmer. Poor deployment may increase risk.

Foot Entrapment – Do not attempt to stand in swift water that approaches knee-deep or greater. If your foot becomes wedged under rocks, the force of the current may be great enough to hold you face down regardless of how strong you are.

Hydraulics - As noted earlier, strong hydraulics in holes or beneath ridges are best avoided. If you are swept into a large hole while swimming, the recirculating current will tend to tumble you over and over just beneath the drop. Try to work your way to the side. If the feature is wide and deep, you may also escape by finding a downstream current at the bottom of the hole.



Scouting America

Whitewater Rafting Application

Name of applicant _____

Address _____

City _____ State _____ Zip _____

Unit type _____ Unit number _____ Council _____

Name of council-approved counselor _____

Address _____

City _____ State _____ Zip _____

Counselor qualification _____

Signature of counselor signifies
applicant has completed all requirements: _____ Date _____

Requirements

1. Before doing the following requirements, successfully complete the Scouting America swimmers test.
2. Do the following:
   a. Name the parts of a whitewater raft.
   b. Describe differences between a paddle raft and an oar-powered raft.
   c. Explain the importance of perimeter lines used on whitewater rafts.
   d. Demonstrate how to choose an appropriate size paddle.
   e. Demonstrate how to select and properly fit a life jacket.
   f. Demonstrate how to select and properly fit a helmet.
   g. Discuss the use of throw ropes in rescuing overboard paddlers.
   h. Discuss common river hazards including rocks, strainers, broaching, standing waves, hydraulics, and foot entrapment.
3. Explain the importance of safety equipment used in whitewater rafting including throw ropes, helmets, and life jackets. Also discuss appropriate clothing and footwear for a whitewater rafting trip.
4. Under proper supervision and appropriate conditions safely do the following:
   a. Lift, carry, launch, and land an inflatable raft, with help, on calm or slow-moving water.
   b. Sit in a raft as a paddler with proper foot position.
   c. Swim a Class I rapid while wearing a life jacket, helmet and attire appropriate for the water temperature. Demonstrate defensive and aggressive swimming positions as possible.
   d. Re-enter a raft from the water, with assistance if needed.
5. While on calm or slow-moving water, demonstrate the following strokes in an inflatable raft with at least one other paddler and on command of a qualified paddle captain:
   a. Forward
   b. Back
6. While on moving water up to Class I, demonstrate the following maneuvers with at least three other paddlers in an inflatable raft and on the command of a qualified paddle raft captain:
   a. Turn left.
   b. Turn right.
   c. Paddle forward in a straight line for 50 feet.
   d. Back paddle reasonably straight for 15 feet.
7. While on moving water up to Class I, demonstrate the following maneuvers with at least three other paddlers in an inflatable raft and on the command of a qualified paddle raft captain:
   a. A front or a back ferry.
   b. A shallow or a wide eddy turn.
   c. A shallow or a wide peel out.
8. Participate in a whitewater rafting trip in up to Class III white water with a qualified paddle raft captain in each raft using a minimum of two rafts and for at least one hour's duration.

(See Notes to Counselor on next page.)

Notes to Counselor

This award is available to youth and adults who are members of Scouts BSA , Venturing, or Sea Scout units. Any adult leader, approved by the council, who is trained in Safety Afloat and can personally verify that all instruction and skill completions were directly supervised by a professionally trained or licensed rafting guide may serve as a counselor for this award. Such guides may be employed by council high adventure programs or commercial outfitters. Guidance for selecting a reputable rafting service is provided in the Scouting America publication Aquatics Supervision No 34346.

Safety Afloat Summary

Complete policy available at:
www.scouting.org/health-and-safety/gss/toc/

1. **Qualified Supervision** - Skilled in the safe operation of the craft, knowledgeable in accident prevention, prepared for emergencies.
2. **Personal Health Review** – Activity adjusted to anticipate potential risks associated with health conditions.
3. **Swimming Ability** – Operation of craft limited to youth and adults who have completed the Scouting America swimmer classification.
4. **Lifejackets** – Properly fitted approved lifejackets worn by every boating participant.
5. **Buddy System** – Every participant is paired with another. Buddies are always aware of each other's situation.
6. **Skill Proficiency** - Everyone must have sufficient knowledge and skill to participate safely.
7. **Planning** – Includes Preparation, Float Plan, Notification, Weather, and Contingencies.
8. **Equipment** - All craft and equipment must meet regulatory standards, be properly sized, and in good repair. Properly designed and fitted helmets must be worn when running rapids rated Class II and above.
9. **Discipline** – All participants should know, understand, and respect rules and procedures for safe boating.

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April 2025