### MERIT BADGE SERIES



# MOTORBOATING



STEM-Based

# BOY SCOUTS OF AMERICA MERIT BADGE SERIES

# **MOTORBOATING**



"Enhancing our youths' competitive edge through merit badges"



### Requirements

#### 1. Do the following:

- a. Discuss with your counselor the following hazards you might encounter while motorboating: flammable fuel; carbon monoxide; propellers; collisions; falls overboard; capsize; running aground. Explain what you should do to anticipate, prevent, mitigate and respond to these hazards.
- Explain first aid for injuries or illnesses that could occur while motorboating, including hypothermia, heat reactions, dehydration, motion sickness, bugbites, and blisters.
- c. Identify the conditions that must exist before performing CPR on a person, and explain how such conditions are recognized. Demonstrate proper technique for performing CPR using a training device approved by your counselor.

#### 2. Do the following:

- a. Before doing requirement 5, successfully complete the BSA swimmer test.
- b. Name the different types of personal flotation devices (PFDs), and explain when each type should be used. Show how to choose and properly fit a PFD.

#### 3. Do the following:

- a. Explain inboard, outboard, and inboard/outboard motors, and the uses and advantages of each.
- Explain the safety procedures and precautions involving handling fuel and engine servicing, and equipment storage and placement.
- c. Explain how to winterize a boat motor and tell why this procedure is necessary.
- d. Explain the safety procedures and precautions involving swimmers and skiers in the water, passenger positions underway, and boat wakes.

- 4. Show you know safety guidelines for motorboating by doing the following:
  - a. Review how each item of the BSA Safety Afloat policy applies, including checking the weather prior to and during time on the water, confirming all required equipment is present and functional, and following a float plan.
  - b. Explain the rules or laws that apply to recreational boating in your area or state. Have a permit to operate a motorboat, if required by the laws of your state. Discuss how you would find information regarding the boating laws in different states.
  - Discuss how hazards of weather and heavy water conditions can affect safety and performance in motorboating.
  - d. Discuss with your counselor the nautical rules of the road and describe the national and your state's aids to navigation.
  - e. Explain and show the correct use of equipment required by both state and federal regulations to be carried aboard a motorboat.
  - f. Explain federal and state rules for a ventilation system, and tell why these rules are required.
  - g. Explain the use of lights (sight signals) and sound signals on motorboats.
  - b. Discuss the common types of anchors used in motorboating and under what conditions each would be preferred.
     Explain proper anchoring techniques.
- With your counselor or other adults on board, demonstrate proper boat-handling procedures and skills by doing the following:
  - a. Board and assist others in boarding. Confirm that all passengers on board are wearing properly fitted life jackets.
  - b. Fuel the boat and complete a safety check.
  - c. If equiped, attach a kill switch and safely start the motor. Get underway from dockside or from a beach launch.
  - d. Run a course for at least a mile, showing procedures for overtaking and passing slower craft, yielding right-of-way, passing oncoming traffic, making turns, reversing direction, and using navigation aids.
  - e. Stop and secure the boat in position on the open water using anchors. Raise and stow the anchor and get underway.
  - f. Land or dock the boat, disembark, and assist others in doing the same.
  - g. Moor, dock, or beach the boat and secure all gear.

# Motorboating Resources

#### **Scouting Literature**

Canoeing, First Aid, Fire Safety, Fishing, Fly-Fishing, Kayaking, Lifesaving, Pioneering, Rowing, Scuba Diving, Small-Boat Sailing, Swimming, Waterskiing, Weather, and Whitewater merit badge pamphlets; Scouts BSA Handbook for Boys, Scouts BSA Handbook for Girls, and Fieldbook

With your parent's permission, visit the Boy Scouts of America's official retail website, www.scoutshop.org, for a complete listing of all merit badge pamphlets and other helpful Scouting materials and supplies.

#### **Books**

- Aarons, Richard N. Small-Boat Seamanship Manual. International Marine/Ragged Mountain Press. 2006.
- American Red Cross. *American Red Cross First Aid: Responding to Emergencies*. Staywell, 2007.
- Armstrong, Bob. *Getting Started in Powerboating*, 3rd ed. International Marine/Ragged Mountain Press, 2005.

- Browne, Steven D. *Nautical Rules of* the Road: The International and Inland Rules, 4th ed. Cornell Maritime Press, 2006.
- Eaton, Jonathan. *Chapman Piloting & Seamanship*, 68th ed. Hearst, 2017.
- Larkin, Frank J. *Basic Coastal Navigation: An Introduction to Piloting*, 2nd ed. Sheridan
  House, 1998.
- Low, Charles T. Boat Docking: Close Quarters Maneuvering for Small Craft. Harvey Island Enterprises, 1997.
- Siminoff, Roger H. *Boating 101: Essential Lessons for Boaters*. International Marine/Ragged Mountain Press, 1999.
- Stagner, Eugene. *Understanding the Outboard Motor*, 3rd ed. Prentice Hall, 2002.
- Thompson, Luke. *Essential Boating for Teens*. Children's Press, 2000.
- U.S. Sailing Association. *Start Powerboating Right!* 3rd ed. United

  States Sailing Association, 2013.

#### **DVDs**

The following DVDs are available from Bennett Marine Video (website: https://bennettmarine.com):

Back to the Basics of Boating

Back to the Basics: Improve Your Boating Skills and Knowledge

Back to the Basics: What to Do When Things Go Wrong

Boating Basics for First-Time Boaters

The Encyclopedia of Boating Tips

On-the-Water Boating Tips

100 Boating Mistakes and How to Avoid Them

Top 60 Tips: Boat Handling

#### Organizations and Websites North American Safe Boating Campaign

Website:

www.safeboatingcampaign.com

#### U.S. Coast Guard Auxiliary

Website: www.cgaux.org

# U.S. Coast Guard Boating Safety Resource Center

Website: www.uscgboating.org

#### **U.S. Sailing Association**

1 Roger Williams University Way Bristol, RI 02809

Website: www.ussailing.org

#### **Acknowledgments**

This edition of the *Motorboating* merit badge pamphlet was written by K. Gregory Tucker, Readyville, Tennessee. The Boy Scouts of America thanks this devoted Scouter, who is a Silver Buffalo Award recipient and past BSA Health and Safety Committee chair. As a volunteer, Mr. Tucker has written or contributed to a number of merit badge pamphlets on aquatics and health-related topics.

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