

# STATE OF NEW HAMPSHIRE

**DEPARTMENT OF SAFETY  
DIVISION OF STATE POLICE  
BUREAU OF MARINE PATROL**



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## **COMMERCIAL VESSEL OPERATOR'S MANUAL**

### **NEW HAMPSHIRE MARINE PATROL**

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This study guide was designed by the New Hampshire Marine Patrol to aid the commercial vessel applicant in understanding commercial vessel boating laws and rules, in order to prepare for the commercial operator's examination.

This study guide is provided as a supplement to the Boat New Hampshire Course Guidebook and the Boater's Guide of New Hampshire which are currently used in conjunction with the New Hampshire Safe Boater Education Program. The Safe Boater Education Program requires that every person operating a vessel with any type of power motor in excess of 25 horsepower must have a certificate of boating safety education.

In addition to the information contained in this study guide, commercial boat operator license applicants **must be** knowledgeable of the information that is contained in the BOAT NEW HAMPSHIRE COURSE GUIDEBOOK and the BOATER'S GUIDE OF NEW HAMPSHIRE.

## **GENERAL REQUIREMENTS**

All commercial boats must be commercially registered and inspected by the State of New Hampshire. The bow numbers issued to every vessel shall be displayed on the forward half of the hull and meet specific numbering requirements regarding size, color and placement. A person must pass a licensing examination before a certificate to operate a commercial vessel can be issued. The licensing examination consists of a written test and, if the vessel involved is 34 feet or greater, a practical examination of the applicant's piloting skills will also be administered.

It is the responsibility of the commercial operator to ensure that all safety requirements are met prior to operation. The operator is required to obey the boating laws and rules regarding navigation, operation, and safety equipment while underway. It is important that the commercial license applicant study and review the BOAT NEW HAMPSHIRE: A COURSE ON RESPONSIBLE BOATING guidebook and the BOATER'S GUIDE OF NEW HAMPSHIRE. These materials are available online and can be found at [www.marinepatrol.nh.gov](http://www.marinepatrol.nh.gov) or [www.boatingeducation.nh.gov](http://www.boatingeducation.nh.gov).

Commercial operators need to know that any person who violates any rule adopted by the Department of Safety with reference to inspection, equipment or operation of a commercial vessel shall be guilty of a misdemeanor or felony.

The operator or owner of a commercial vessel shall report all boating accidents involving \$2000 or more in total damage; personal injury or death, immediately to the Division of State Police, Marine Patrol bureau or to a Marine Patrol Officer. The operator of a commercial vessel must have their commercial boat license in their possession at all times when operating a commercial vessel.

As the person in charge of a vessel, commercial operators should be knowledgeable of general definitions and terminology pertaining to boats and their operation.

## **TERMINOLOGY**

**Aft:** At or near the stern.

**Beam:** The width of a boat at its widest part.

**Bilge:** The lowest point of a boat's hull.

**Boat:** A vessel propelled by oars, paddles, sails or power.

**Bow:** The forward part of a boat.

**Commercial boat:** Any boat used as a common carrier of passengers or property; operating on a regular schedule; any vessel propelled by electric or mechanical power carrying passengers for hire, or any boat or outboard motor used by the proprietor of any school or camp in which minors attend. Any boat used in conjunction with any form of enterprise where money or other compensation is received, whether actual or implied, for employment of the vessel, or any description of watercraft utilized by an employee of any enterprise in the performance of the employee's duties.

**Capacity plate:** A metal plaque located near the operator's position and/or near the transom of the vessel indicating the maximum weight capacity and/or the maximum number of people that vessel can safely carry. On outboard powerboats the capacity plate will also state the maximum horsepower rating for that vessel.

**Cowl:** A hooded opening used for ventilation.

**Flame arrestor:** A safety device that prevents the ignition of gasoline vapors in case the engine backfires.

**Freeboard:** The vertical distance from the waterline to the top of the gunwale.

**Gunwale:** The upper edge of the side of a boat.

**Headway Speed:** The slowest speed at which it is still possible to maintain steering or six miles per hour.

**Hull:** The body of a vessel.

**Masthead:** The top of a mast.

**Masthead light:** A white light at or near the masthead used underway by a vessel under power at night, showing 112.5 degrees, to either side, totaling 225 degrees, visible for two miles.

**Maximum Capacity:** The maximum number of people or pounds (whichever is reached first) designated by the United States Coast Guard on the vessel's capacity plate.

**Motorboat:** A boat propelled by machinery.

**PFD (Personal Floatation Device):** official terminology for life jacket.

**Port:** The left side of a boat looking forward.

**Right-of-way:** Certain boats taking priority over other boats in meeting situations.

**Starboard:** The right hand side of a boat looking forward.

**Steerage way:** Sufficient motion through the water to enable a vessel to respond to its rudder.

**Stern:** The rear end of a boat.

**Transom:** The vertical flat part of the stern of a boat.

**Underway:** When a vessel is not moored, anchored or aground.

**Wake:** Waves which a vessel leaves behind as it moves through the water.

The BOAT NEW HAMPSHIRE Course Guidebook provides you with nautical definitions in each chapter in addition to providing specific information regarding: understanding how your vessel operates; things to do before you get underway; operating your vessel safely; the legal requirements of boating; how to handle boating emergencies; and enjoying water sports with your boat.

It is important to note that as of January 1, 2008, any person 16 years of age or older who operates a boat powered by an engine in excess of 25 horsepower MUST HAVE a Safe Boater Education Certificate. Please contact New Hampshire Marine Patrol regarding the Boating Education Program.

The following information is specific to commercial vessels and it is expected that commercial operators will know this information, in addition to the information relative to recreational boating contained in the BOAT NEW HAMPSHIRE Course Guidebook and the BOATER'S GUIDE OF NEW HAMPSHIRE. This information is not meant to be referred to as a complete publication of the written rules. Specific questions should be referred to the New Hampshire Watercraft Safety Rules Saf-C 400, and/or the New Hampshire Revised Statutes Annotated, Chapter 270. A copy of the Watercraft Safety Rules is available online at [www.marinepatrol.nh.gov](http://www.marinepatrol.nh.gov).

## **SAFETY EQUIPMENT**

Safety equipment, in addition to other requirements, must be in good and serviceable condition, readily accessible, and should be checked prior to getting underway.

## **PERSONAL FLOTATION DEVICES**

Every commercial vessel shall carry a US Coast Guard Approved Type I personal flotation device that is in serviceable condition for each person on board. The device must be of an appropriate size for the intended wearer, and the device must be readily accessible. When passengers aboard a commercial boat are **wearing** an approved type I, II, III, or V PFD while underway, the vessel shall be exempt from the carrying requirement for that person(s) found above.

Children 12 years of age or younger must wear a PFD at all times unless the vessel meets special requirements for exemption from this rule. Additionally, unless the vessel never carries children, the vessel shall be equipped with a number of such approved devices suitable for children, equal to at least 10 percent of the total number of persons carried. A US Coast Guard Approved Type IV device must also be provided on vessels that are 16 feet or greater in length.

## **SOUND PRODUCING DEVICES (SPD)**

Powerboats must have a horn or whistle that meets SPD requirements. Vessels 26 feet or greater in length must also have a bell. When boats are running in the fog, mist, etc, and cannot see each other, the operators shall sound their whistle or horn at intervals not exceeding two minutes.

## **FIRE EXTINGUISHERS**

A fire extinguisher is required on all power boats. Fire extinguishers must be approved by the United States Coast Guard and/or Underwriters Laboratory.

- Powerboats less than 26 feet in length must have at least a B1 extinguisher.
- Powerboats 26 to less than 40 feet in length must have at least a size B-2 extinguisher or two B-1 extinguishers.
- Powerboats 40 feet or greater in length must have a B-2 extinguisher and a B-1 extinguisher or three B-1 fire extinguishers.

All B-I and B-II extinguishers should be securely mounted in brackets in locations where they are readily accessible.

All commercial vessels powered by gasoline or other flammable fuel in which the motors or fuel tanks are enclosed shall also, in addition to the equipment otherwise specified in these rules, have a fixed fire extinguisher system in the enclosed engine compartment. All other vessels shall be equipped with the appropriate size, type and number of fire extinguishers for the class of vessel as described in the New Hampshire Boater's Guide.

## **NAVIGATION LIGHTS**

Commercial boats must meet all powerboat lighting requirements. Navigation lights are to be displayed between sunset and sunrise. All boats are to show at the forward part of the boat a red light to port and a green light to starboard. Each colored light must show from dead ahead to two points abaft (towards the stern) of the beam or 112.5 degrees of an arc. In addition to the forward colored running lights, an all around 360 degree white light must be aft and higher than the colored running lights. Boats 26 feet and greater in length may mount the running lights on the sides of the super structure and must display a white masthead light showing in the direction of the red and green lights combined. Colored lights must be visible for one mile on a clear night and white lights must be visible for two miles on a clear night.

## **FLAME ARRESTORS**

The carburetor(s) of every engine installed on motorboats which use gasoline as a fuel, except outboard motors, shall be fitted with a device which has demonstrated its ability to arrest backfire, and which has been accepted and approved by the U.S. Coast Guard or Underwriter's Laboratory.

## **VENTILATION**

All boats with an enclosed engine compartment which use gasoline or other flammable fuel, shall be provided with at least two cowls or their equivalent for the purpose of properly and efficiently ventilating the bilge, engine and fuel tank compartments. All commercial vessels powered by gasoline or other flammable fuel in which the motors or fuel tanks are enclosed shall have a forced draft blower for ventilating the bilge, engine and fuel tank compartments in order to remove flammable or explosive gases.

## **PADDLES**

All commercial vessels less than 26 feet in length must be equipped with two paddles in case of engine failure.

## **FUEL SHUT OFF**

All commercial vessels equipped with fuel tanks having a capacity of 6 gallons or more shall be equipped with a functional shut-off valve having a securely attached handle that is readily accessible for use.

## **DRUGS AND ALCOHOL**

No person may operate a vessel while under the influence of an intoxicating liquor or drugs or any combination thereof. Additionally, no person may operate a vessel while knowingly having in his possession, or in any part of the vessel, a controlled drug. Any person convicted of Boating While Intoxicated will lose his/her right to operate a vessel for one year and will also lose his/her license to operate a motor vehicle for a minimum of 90 days.

## **MUFFLERS AND DECIBEL LIMITS**

No person shall operate or sell or offer for sale a powered vessel unless it is provided with an underwater exhaust or other muffling device. No person may operate a boat that is capable of being operated in a manner which exceeds a prescribed limit.

## **OPERATION**

The following information is a selection of boating rules and regulations. This information is to aid the commercial boat license applicant in understanding many of the rules and laws which he/she is required to abide by. Again, any questions concerning specific rules should be referred to the Watercraft Safety Rules and/or the New Hampshire Revised Statutes Annotated, Chapter 270.

Operators of passenger boats, while underway, shall not allow unauthorized persons to interfere with the navigation of such boats.

All passengers of a power boat must be completely inside the boat and are not allowed to be seated on the gunwales or transom or to straddle the bow.

While going greater than headway speed all boats must keep at least 150 feet from other boats, rafts, swim areas, docks or shore. Headway speed is defined as the slowest speed at which it is still possible to maintain steering or six miles per hour. This provides a safe distance for boats to react and slow to headway speed for safe passage on New Hampshire waters.

Boats meeting each other head on or bow to bow should turn to the right, a port to port passage, unless a starboard to starboard passage is obviously safe and understood by both operators and the courses of both boats are not meeting head on.

When two or more boats come together in a crossing situation, the boat to the right showing its port side or red light has the right of way.

Sailboats, canoes, and rowboats should always be given the right of way with respect to powerboats.

## **NAVIGATION**

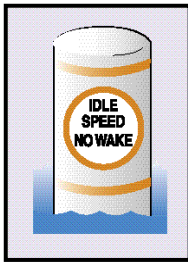
The State of New Hampshire has adopted a modified version of the Uniform State Waterway Marking System. It consists of two categories of aids. One category is regulatory markers which indicate general information and dangerous and restricted areas. Regulatory markers are easily identified by their color; they are white with black lettering and have orange bands. The second category is comprised of the aids to navigation. These buoys and markers direct the boater to a direction towards a cardinal point (North, South, East or West) of a compass. All boat operators should be familiar with the buoying system of New Hampshire and should utilize a chart of the waters being navigated if one is available.

Attached is a chart describing the New Hampshire buoying system and how to use it. Any marker discrepancies noted on public waters should be reported to the New Hampshire Marine Patrol.

It is unlawful to tie a boat to a buoy, marker or other aid to navigation, as doing so may pull the marker off its designated location and direct traffic into a navigational hazard. Any intentional foul play with a New Hampshire navigational aid is a misdemeanor and is punishable by a fine of up to \$2000 or up to one year in jail or both.

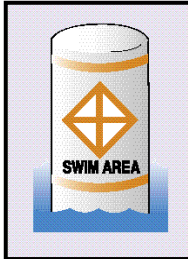
The Commercial Boat Operator License applicant is reminded that this document contains only part of the information that the applicant will be tested on. Comprehensive knowledge of the BOATER'S GUIDE OF NEW HAMPSHIRE and the BOAT NEW HAMPSHIRE Course Guidebook is also necessary. These documents can be found online at [www.marinepatrol.nh.gov](http://www.marinepatrol.nh.gov), or at [www.boatingeducation.nh.gov](http://www.boatingeducation.nh.gov).

## NON-LATERAL MARKERS



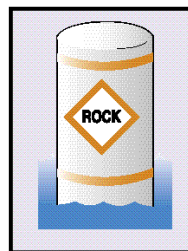
### **Controlled**

CIRCLES INDICATE A CONTROLLED AREA SUCH AS SPEED LIMIT, NO FISHING OR ANCHORING, SKI ONLY OR NO SKIING, OR SLOW-NO WAKE.



### **Exclusion**

CROSSED DIAMONDS INDICATE AREAS OFF-LIMITS TO ALL BOATS, SUCH AS SWIMMING AREAS, DAMS, AND SPILLWAYS.

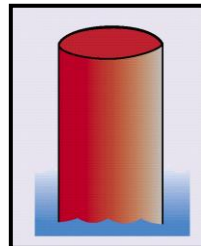


### **Danger**

DIAMONDS WARN OF DANGERS SUCH AS ROCKS, SHOALS, CONSTRUCTION, DAMS, OR STUMPS. ALWAYS PROCEED WITH CAUTION.

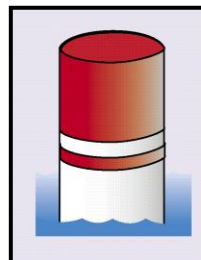
## NEW HAMPSHIRE'S SPAR BUOYS

Vessels operating on New Hampshire waters must observe these rules when encountering spar buoys:



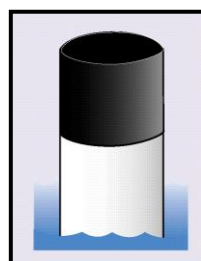
### **All Red**

USED TO MARK ONE SIDE OF A WELL-DEFINED CHANNEL. GO BETWEEN IT AND ITS COMPANION "ALL BLACK" SPAR BUOY.



### **White with Red Top**

IF HEADING WEST OR EAST, GO SOUTH OF THIS BUOY.  
IF HEADING NORTH OR SOUTH, GO WEST OF THIS BUOY.



### **White with Black Top**

IF HEADING WEST OR EAST, GO NORTH OF THIS BUOY.  
IF HEADING NORTH OR SOUTH, GO EAST OF THIS BUOY.