



AN OWNER'S GUIDE TO PRIVATE BUOYS

NAVIGATION
PROTECTION PROGRAM





Transport Canada Tower C, Place de Ville
330 Sparks Street Ottawa, ON K1A 0N5
E-mail: NPPHQ-PPNAC@tc.gc.ca

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TABLE OF CONTENTS

AN OWNER'S GUIDE TO PRIVATE BUOYS

| | |
|--|-----------|
| INTRODUCTION | 2 |
| <i>PRIVATE BUOYS REGULATIONS</i> | 3 |
| <i>CANADIAN NAVIGABLE WATERS ACT</i> | 4 |
| <i>VESSEL OPERATION RESTRICTION REGULATIONS</i> | 5 |
| TO COMPLY WITH THE MAIN PRINCIPLES OF THE VORR | 6 |
| CANADIAN COAST GUARD – THE CANADIAN AIDS TO NAVIGATION SYSTEM | 7 |
| BUOYS SELECTION | 8 |
| RESPONSIBILITIES OF PRIVATE BUOY OWNERS | 11 |
| PRIVATE BUOYS (EXAMPLES) | 12 |
| CONTACT INFORMATION | 22 |

INTRODUCTION

In Canada's marine navigation system, buoys are important to the safety and well-being of the boating community. Persons, organizations, corporations, or other groups may place "private buoys" on the water to communicate with other mariners.

Buoys are floating markers used for communicating traffic channels, speed limits, mooring locations or for warning boaters of hazards such as shoals, rocks or rapids. Depending on their purpose, they can:

- come in many shapes, sizes and colours;
- display different markings; and
- be equipped with lights, sound appliances and retroreflective material for added visibility.

Canada's [Private Buoy Regulations](#)² (PBR) applies to all private buoys placed as aids to navigation – except those used to mark fishing gear. These regulations set out private buoys' placement requirements, including the standards of the Canadian Coast Guard (CCG).

When you place a private buoy you are responsible for following the PBR under the [Canada Shipping Act, 2001](#)³ (CSA, 2001). Where boating is restricted, private buoy owners and operators must also follow the [Vessel Operation Restriction Regulations](#)⁴ (VORR).

On March 29, 2004, the responsibility for enforcement and compliance provisions of the PBR was transferred from Canadian Coast Guard (CCG) to Transport Canada (TC) Navigable Waters Protection Program, now known as the Navigation Protection Program (NPP). The NPP is also responsible for administering the [Canadian Navigable Waters Act](#)⁵ (CNWA). More information on the CNWA can be found in the "[Canadian Navigable Water Act](#)" section of this document.

This guide will help private buoy owners to understand and apply Canada's laws and standards, and inform them of their responsibilities when placing a private buoy.

For general information about the PBR, please [contact your local Navigation Protection Program office](#)⁶.





PRIVATE BUOYS REGULATIONS

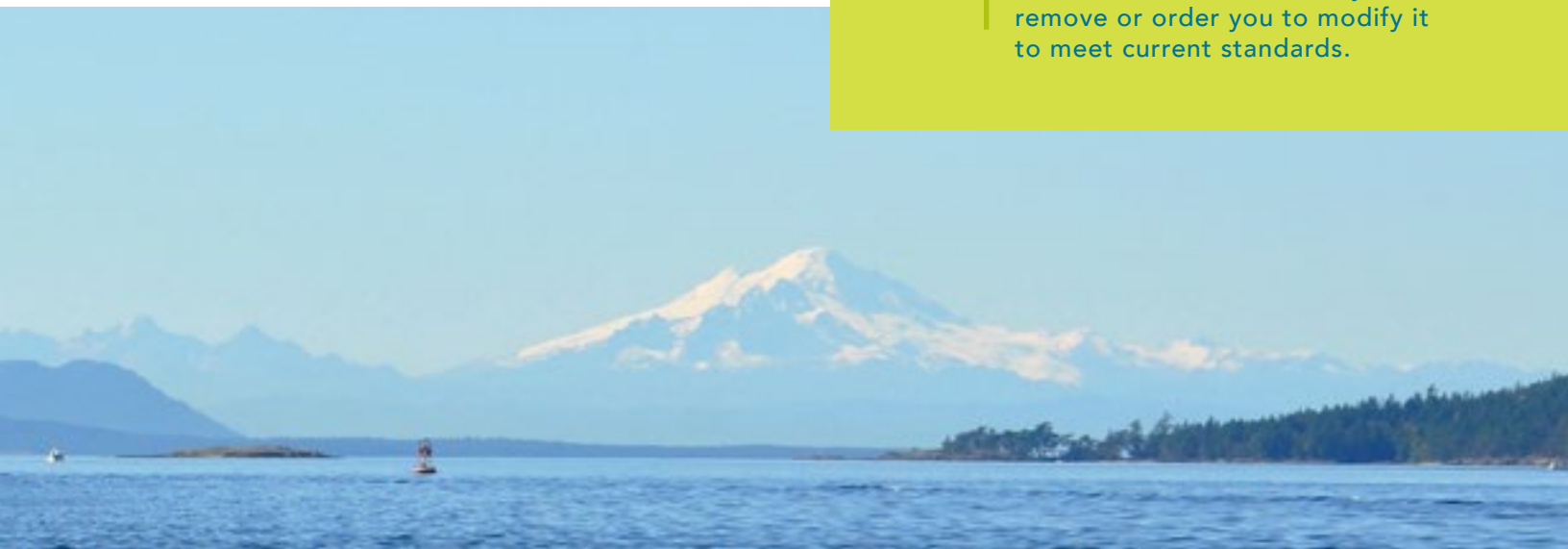
The PBR describe the size and markings required for each buoy, as well as the responsibilities of the person(s) placing them. While the requirements for the colour, shape, placement and use of private buoys are the same as those for buoys maintained by the CCG, private buoy identification markings must conform to the PBR - **not** the number and letter identification system used by the CCG.

WHY IT IS IMPORTANT TO COMPLY WITH THE REGULATIONS?

You can be fined for not meeting the requirements set out in the regulations and standards. In the event of an accident, private buoy owners may also be found liable for any damages resulting from negligence respecting their private buoy.

Note: *Canada Shipping Act, 2001*; [Contraventions Regulations](#)⁸

- 1 Do not place a private buoy that will/may interfere with the navigation of any vessel, or that will/may mislead any boater.
- 2 Do not place a private buoy in any water unless all size, shape and identification requirements are met and all required information is accurate and up to date.
- 3 Make sure that all private buoys meet the [Canadian Aids to Navigation System](#)⁷ standards.
- 4 Understand that the Minister of Transport (the Minister) may require changes to a private buoy, such as size or adding retroreflective material, when there is a need for improved visibility or better identification.
- 5 Use, build and install anchors that will keep the buoy in position.
- 6 Use lighted buoys that meet the Canadian Aids to Navigation System standards, during the hours of darkness or periods of poor visibility.
- 7 Understand that when a private buoy does not meet legal standards, the Minister may remove or order you to modify it to meet current standards.



CANADIAN NAVIGABLE WATERS ACT

Under the CNWA, it is prohibited to construct, place, alter, rebuild, remove or decommission a work in, on, over, under, through or across any navigable water except in accordance of the CNWA.

When issuing an approval for a work, NPP may include as a condition of approval, the requirementⁱ for work owners to install private buoys or other aids to navigation to mark wharves, marinas, aquaculture areas, dams, bridges, etc. Owners of these works have the responsibility to install and maintain these

i Private buoys, as mandated by the Private Buoy Regulations, must have PRIV on both sides, as well as the contact information of the owner of the buoy. Additional buoy requirements vary by province and may include business name, license number, and/or Crown lease number issued to the licensee (when buoys require a lease/license to occupy submerged provincial crown lands).

private buoys or other aids to navigation according to legal standards, or as directed by the Minister through their approval document or through orders given under the CNWA.

MOORING BUOYS

TC considers mooring buoys as “works” under the CNWA on all navigable waters, since they usually secure vessels in fixed locations (such as docks, piers or wharves), and do not aid or direct mariners. Certain mooring buoys can be considered “minor works” as moorings systems are described in the [Minor Works Order](#)⁹.

This means that the placement of a mooring buoy is subject to review and approval under the CNWA, unless otherwise excluded by TC policies and standards.



VESSEL OPERATION RESTRICTION REGULATIONS

Regulations under CSA, 2001 also govern the marking of any private buoy used to **restrict** navigation (for example, speed limits, engine size, keep-out areas, etc.). Under the VORR, requests for restrictions:

- Originate from a local authority; and
- Have gone through public consultation.

A complete application package must be sent to TC's Office of Boating Safety (OBS) for final review and publication in the regulations.

Note: In Quebec, there is a designated provincial authority that reviews each VORR application before it is submitted to TC.

Additional information on this process can be found in the [Local Authorities' Guide: Vessel Operation Restriction Regulations](#)¹⁰.



TO COMPLY WITH THE MAIN PRINCIPLES OF THE VORR:

1. Do not place a sign that restricts the operation of any vessel in Canadian waters without the authorization of the Minister. Signs must comply with VORR requirements. VORR's prohibit the placement of signs or symbols on control buoys and keep-out buoys unless they are otherwise authorized under the *Canada Shipping Act, 2001* or another Act of Parliament, such as the CNWA.
2. Do not change, hide, damage or destroy any authorized sign or use a sign for mooring purposes.
3. Respect restrictions conveyed in an authorized sign when boating.
4. Do not hold a sporting, recreational, or public event in waters specified in [Schedule 8 of the VORR](#)¹¹, unless authorized by a permit issued by the Minister.
5. Do not hold a sporting, recreational, or public event or activity in any waters in a manner or at a place that would unnecessarily obstruct navigation.
6. Under the VORR, an enforcement officer may direct or prohibit the movement of vessels to ensure compliance with the requirements for safe vessel operation.

Note: Any person who does not comply with these regulations may be charged with an offense. A schedule of fines can be found in the [Contraventions Regulations](#)¹²



CANADIAN COAST GUARD – THE CANADIAN AIDS TO NAVIGATION SYSTEM

Following the basic rules of the [Canadian Aids to Navigation System](#) will lead to a better navigation system for all boaters and waterway users. These guidelines provide in-depth information on standard uses, colours, shapes and the identification of private buoys and other aids to navigation within Canada. Additional information on aids to navigation in Canada can be found on the [CCG Aids to Navigation webpage](#)¹³.

If you place private buoys or observe that private buoys have been placed in charted waters, and potentially pose a risk to navigation, contact the nearest CCG Marine Communications and Traffic Services (MCTS) Centre and provide their characteristics and positions, so that it may be published as a navigational warning, among other possible safety-related actions.



BUOYS SELECTION

TYPE

When selecting buoys for navigation or mooring, do your best to keep the system simple by using as few buoys and buoy types as possible. Some boaters have little knowledge of the purposes and meanings of buoys and marine aids to navigation.

By limiting the number of different types, shapes and sizes of buoys, and by selecting the more common types (such as lateral), the system is:

- easier to understand;
- more effective; and
- easier to maintain.

In small craft/low traffic areas, there is usually no need to use any private buoy other than the port (green), starboard (red) and cautionary (yellow) buoys for navigational purposes. Other popular types that may be used include hazard, swimming or information buoys, and those buoys prescribed under the VORR (for example, control, keep-out).

In uncharted waters or in lakes where identification of “upstream direction” may be a problem, it may be best to use cardinal buoys. Consult TC officials to determine the best option for your particular situation.

BUOY CLASSIFICATIONS

Lateral buoys indicate the side on which they may be safely passed. There are six types of lateral buoys: port hand, starboard hand, port bifurcation, starboard bifurcation, fairway, and isolated danger.

Cardinal buoys indicate the location of the safest or deepest water by reference to the cardinal points of the compass. There are four cardinal buoys: North, South, East and West.

Special buoys convey a variety of information to the mariner, which while important, is not primarily intended to help in navigation.

Any of these buoys can be privately owned as long as they don't impact the navigation.

Examples of commonly used private buoys are shown in Figures 1 through 9, in the [Private Buoys \(Examples\)](#) section of this document.

SIZE

The PBR require that all private buoys meet **minimum** above-water dimensions of 15.25 cm (6 inches) in width and 30.5 cm (12 inches) in height above water level. This buoy size is suitable only for very sheltered, low-traffic areas. Keeping in mind adverse weather conditions and varying sea states, a buoy should be large enough to be seen from the distance it takes a mariner to see, interpret and act upon its signal.

TC has the authority to require buoys to be larger than these minimum dimensions, be equipped with retroreflective material or be altered in any other way (for example, adding lights or sound appliances) in the interest of marine safety and according to site conditions.

All private buoys must display, on two opposite sides, the capital letters "PRIV". These letters are to be as large as practical for the size of the buoy and contrasting in colour (white when the background colour is red, green or black, and black when the background colour is white or yellow).

In addition, the buoy owner's current name, address and telephone number must be on the buoy in an easy to read, permanent manner. Any additional numbers or letters the owner wishes to place on the buoy must not interfere or conflict with the letter and number system used by the CCG in the area – to prevent confusion between government-operated buoys and private buoys.

Information buoys: Specific information (e.g., DANGER - RAPIDS) may be placed inside the orange symbol.

The identification required by the PBR and the identification required by the VORR are to be on every control and keep out buoy (this includes the TC wordmark at the bottom of the sign).

MATERIAL

Before placing a private buoy, determine what construction material would be best to use. Ideally, a buoy should be rugged enough to withstand weather and water conditions, be very visible, and yet be soft enough to absorb vessel impacts and reduce collision damage. Several types of commercially manufactured buoys meet these different needs. While most manufactured buoys provide the safest, most reliable and standardized option available, **be aware that not all buoys meet the PBR standards.**

There are "home-made" buoys that will meet PBR requirements and weather well. For example, rigid plastic foam and rigid molded plastic buoy types are strongly recommended because they are readily available, lightweight and easy to install and handle. Steel buoys are very rugged, but they can cause extensive damage and be difficult to handle.

Note: Do not use steel drums, barrels, propane cylinders, bleach bottles and jugs as buoys. Most of these do not conform to the PBR or CCG standards.

LIGHTS

At night, the colour and flash characteristics of a buoy light tell boaters why it is there. Under the PBR, all private buoys equipped with lights must continuously display that light during the hours of darkness and during periods of poor visibility. All lights that are part of a buoy must conform to standards and guidelines in the Canadian Aids to Navigation System.

RETROREFLECTIVE MATERIAL

If your private buoy is too small for a light or you are not required to place a lighted buoy, an unlighted buoy equipped with retroreflective material is a good and affordable idea. On a lighted private buoy, retroreflective material provides extra safety because it makes your buoy easier to see and interpret at night or if the light fails.

Applications: Most retroreflective material on buoys or signs displays numbers, letters, backgrounds or horizontal bands. Where a horizontal band is used, it should be no less than 10 cm (4 inches) wide and should be placed around the buoys circumference.

COLOUR

For all buoys other than “special buoys”, retroreflective material must be the same colour as that of a light for that buoy.

For example:

- green – port side buoy
- red – starboard side buoy

For “special buoys” (cautionary, control, hazard, information, keep out, mooring, or swimming):

- a yellow light, if lighted;
- yellow retroreflective material, if the material is used; and
- where the buoy displays an orange symbol orange retroreflective material in addition to yellow, for the purposes of enhancing the visibility of the symbol.

Reflective properties of retroreflective material may be reduced by:

- bird droppings, even after thorough cleaning; and
- exposure to the sun.

Since you may not notice less reflection during daytime, check your buoy’s level of performance with a light after dark. Any material that appears to be damaged should be replaced.

RESPONSIBILITIES OF PRIVATE BUOY OWNERS

As an owner of a private buoy, you are responsible to make sure that:

1. It meets all legal requirements, standards and guidelines of the PBR, the Canadian Aids to Navigation System and TC directives included in this guide.
2. It is built and maintained so that it remains in position.
3. Anchors are used, built and installed in a way that will keep the buoy in position.
4. You have a monitoring and repair schedule for checking that the buoy continues to meet all legal requirements, stays in position and remains in good working order.
5. You use recommended retroreflective material (as a minimum).
6. Any lights comply with the Canadian Aids to Navigation System.
7. Any light or reflective markings shall not interfere or conflict with any CCG buoys in the area – to prevent confusion between government-operated buoys and private buoys.

Note: In the event of an accident involving a private buoy, the owner(s) may be held liable for any resulting damages. This is why you should think about getting liability insurance coverage.

- Owners of any operations such as a yacht club or campground, must make sure to:
 - explain the purpose of their private buoys to local users;
 - have a plan in place to routinely monitor the position and condition of their private buoy(s) as per the PBR; and
 - if applicable, owners should ensure that they seek approval from other governments.

PRIVATE BUOYS (EXAMPLES)

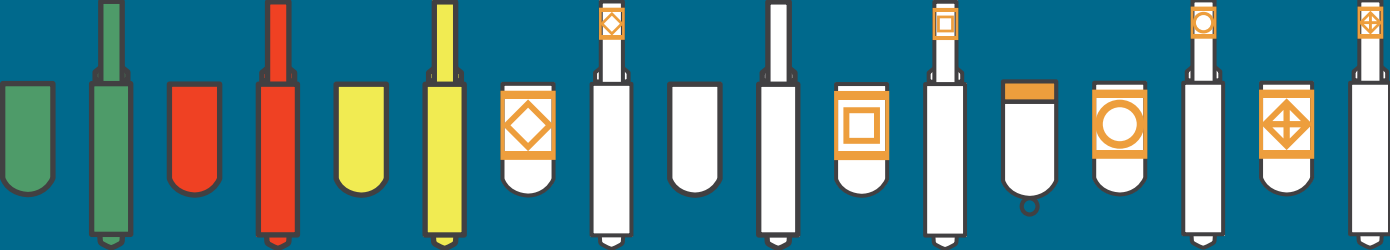
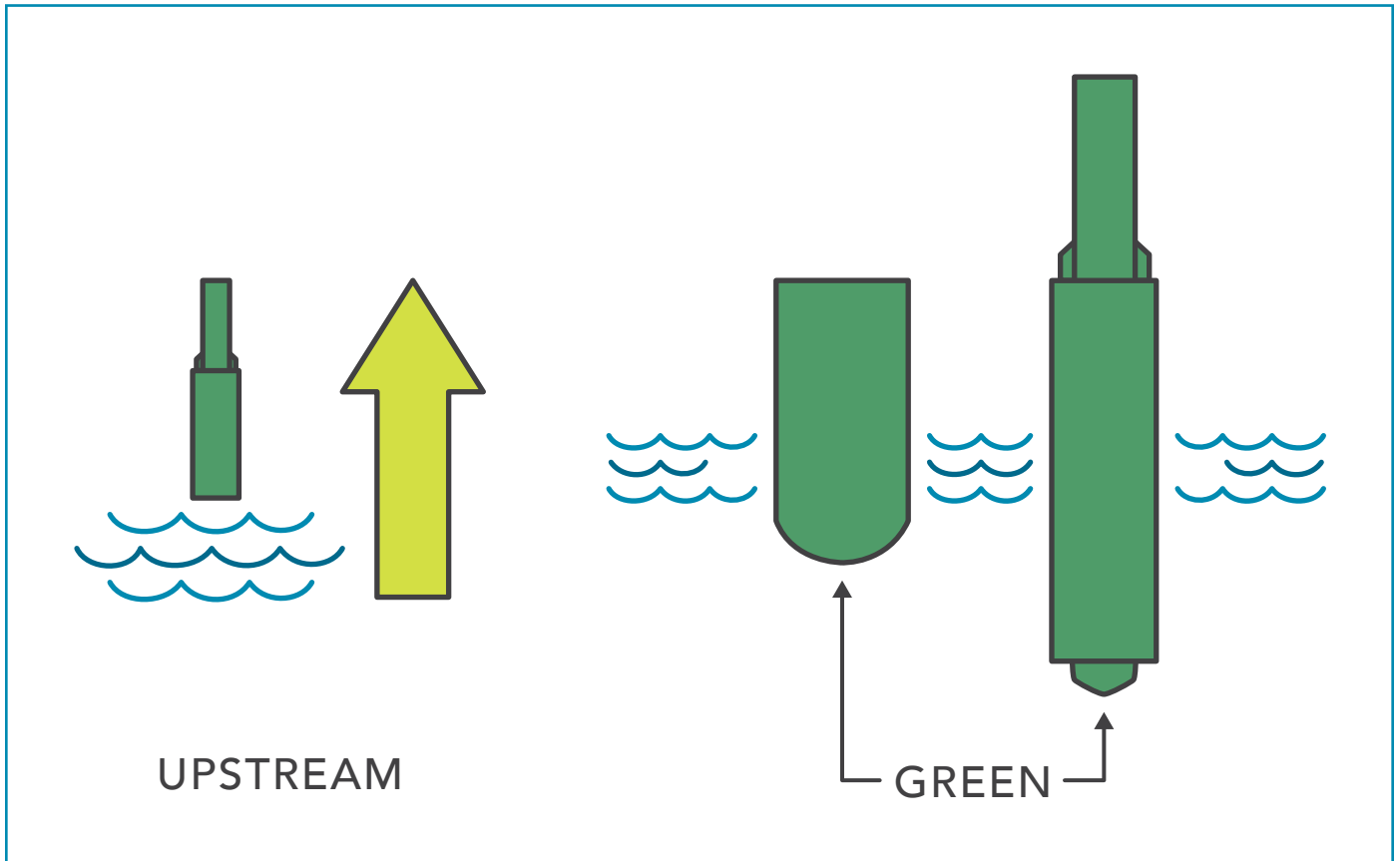


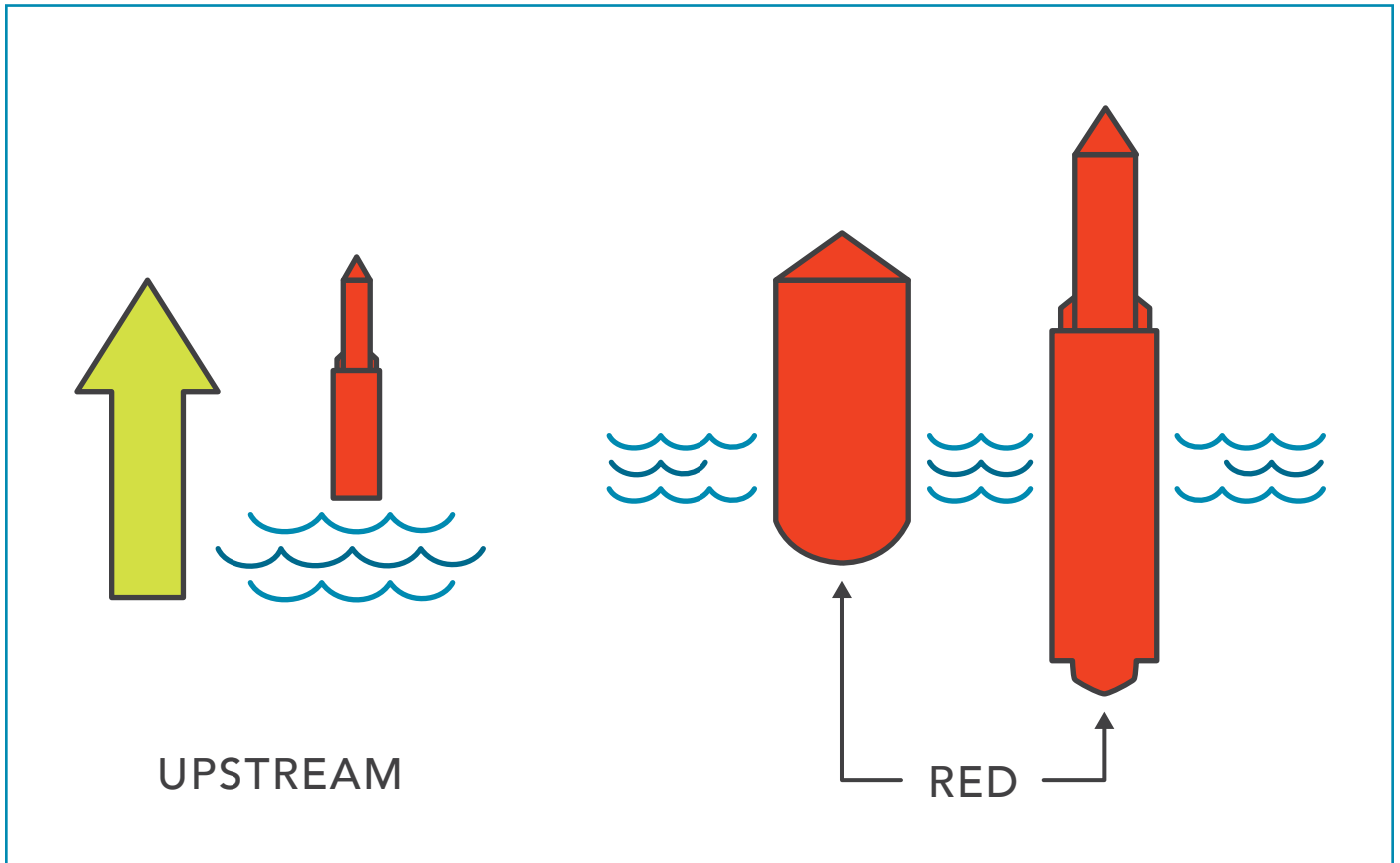
FIGURE 1 PORT BUOY



Port buoys are used to mark the left side of a channel or the location of a danger, which must be kept on the vessel's left side when going in the upstream direction. A port buoy is coloured green, displays identification letter(s) and odd number(s) and must have:

- a flat top, if unlighted;
- a green light, if lighted; and
- green retroreflective material, if material is used.

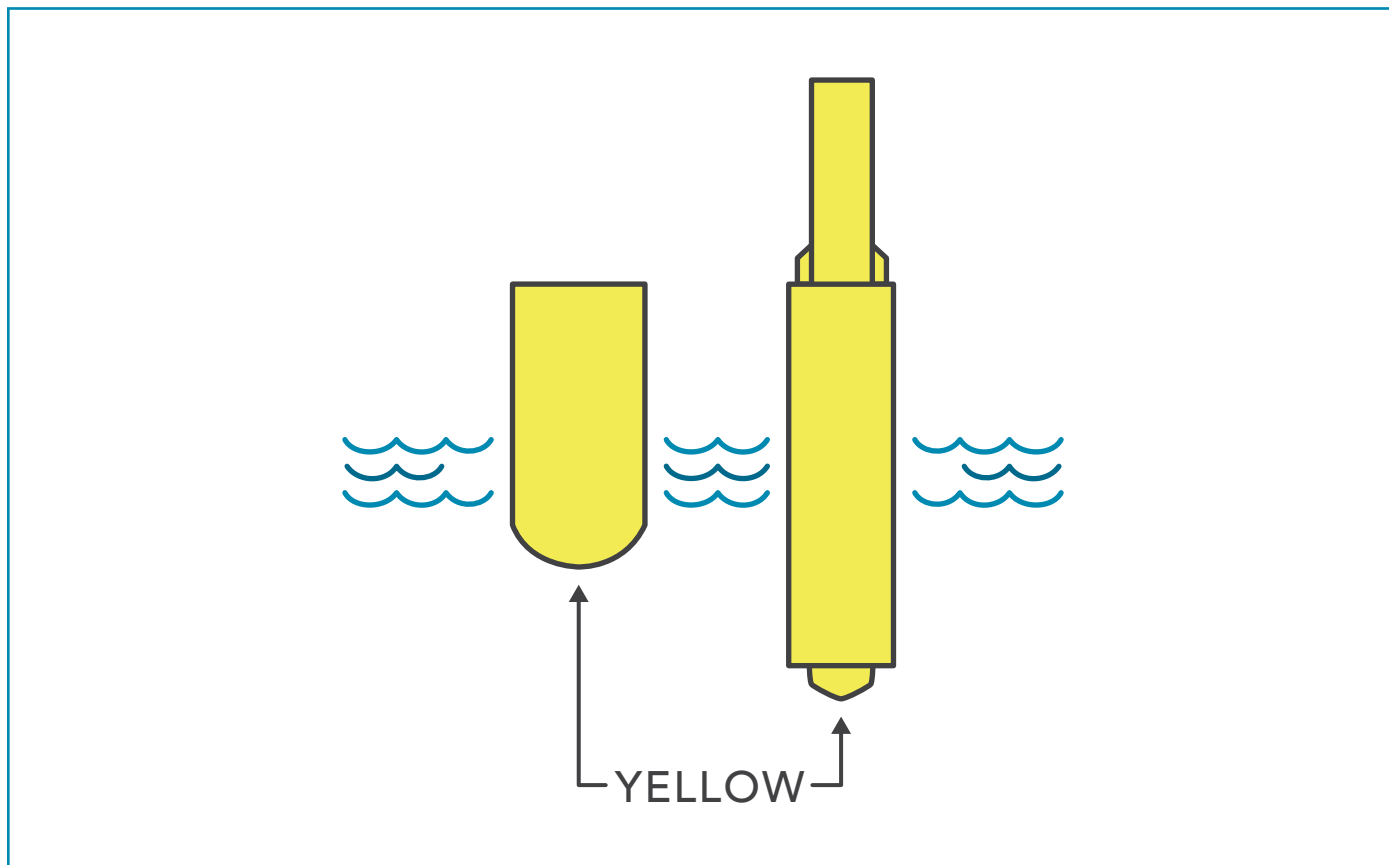
FIGURE 2 STARBOARD BUOY



Starboard buoys mark the right side of a channel or the location of a danger that must be kept on the vessel's right side when going in the upstream direction. A starboard buoy is coloured red, displays identification letter(s) and even number(s) and must have

- a pointed (conical) top, if unlighted;
- a red light, if lighted; and
- red retroreflective material, if material is used.

FIGURE 3 CAUTIONARY BUOY



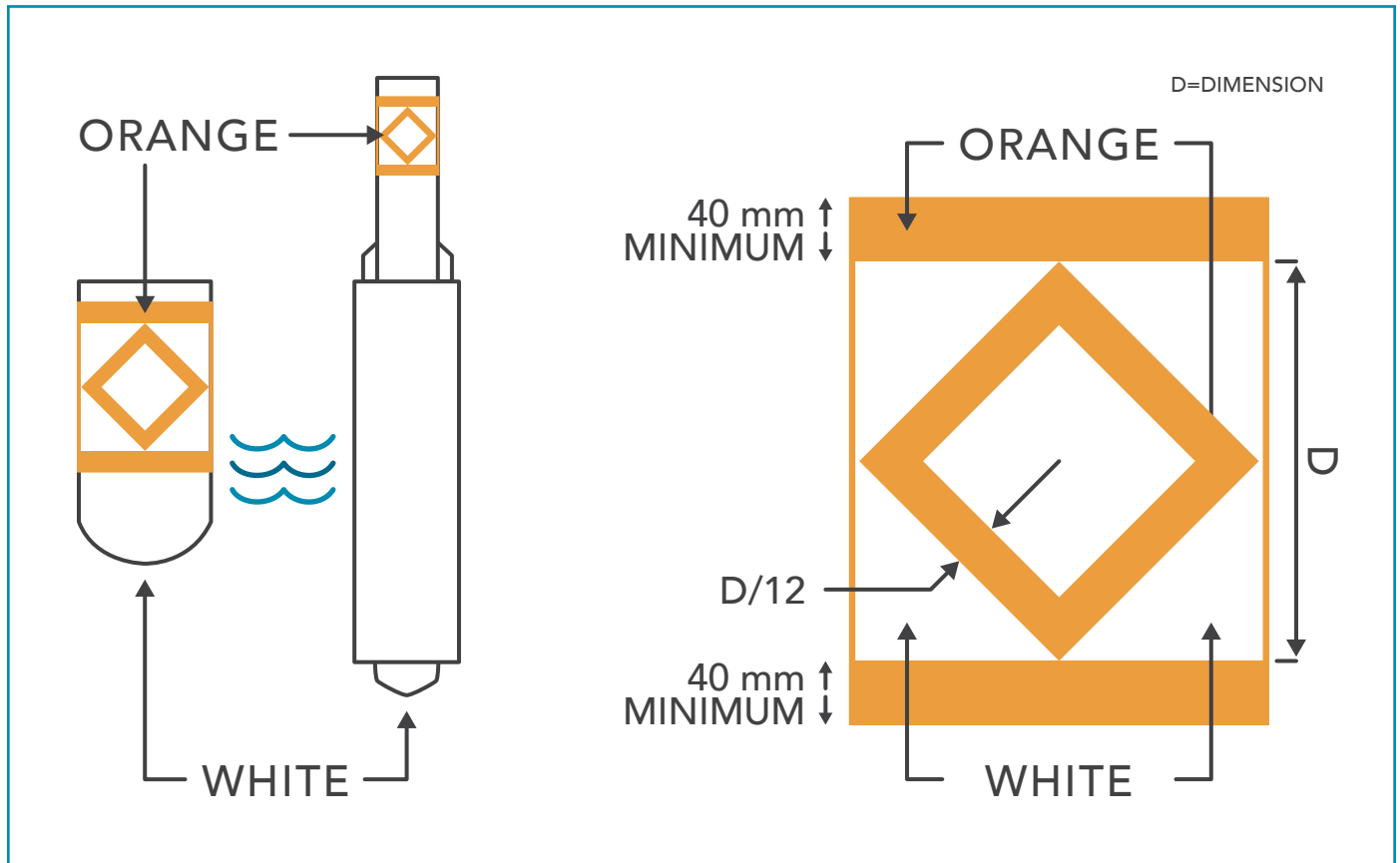
Cautionary buoys mark an area where mariners are to be warned of:

- aquaculture facilities;
- dangers such as firing ranges, racing courses, seaplane bases, underwater structures;
- areas where no safe through passage exits; and
- traffic separations.

A cautionary buoy is coloured yellow, displays identification letter(s) and if it carries a topmark, the topmark is a single yellow "X" shape and must have:

- a yellow light, if lighted; and
- yellow retroreflective material, if material is used.

FIGURE 4
HAZARD BUOY

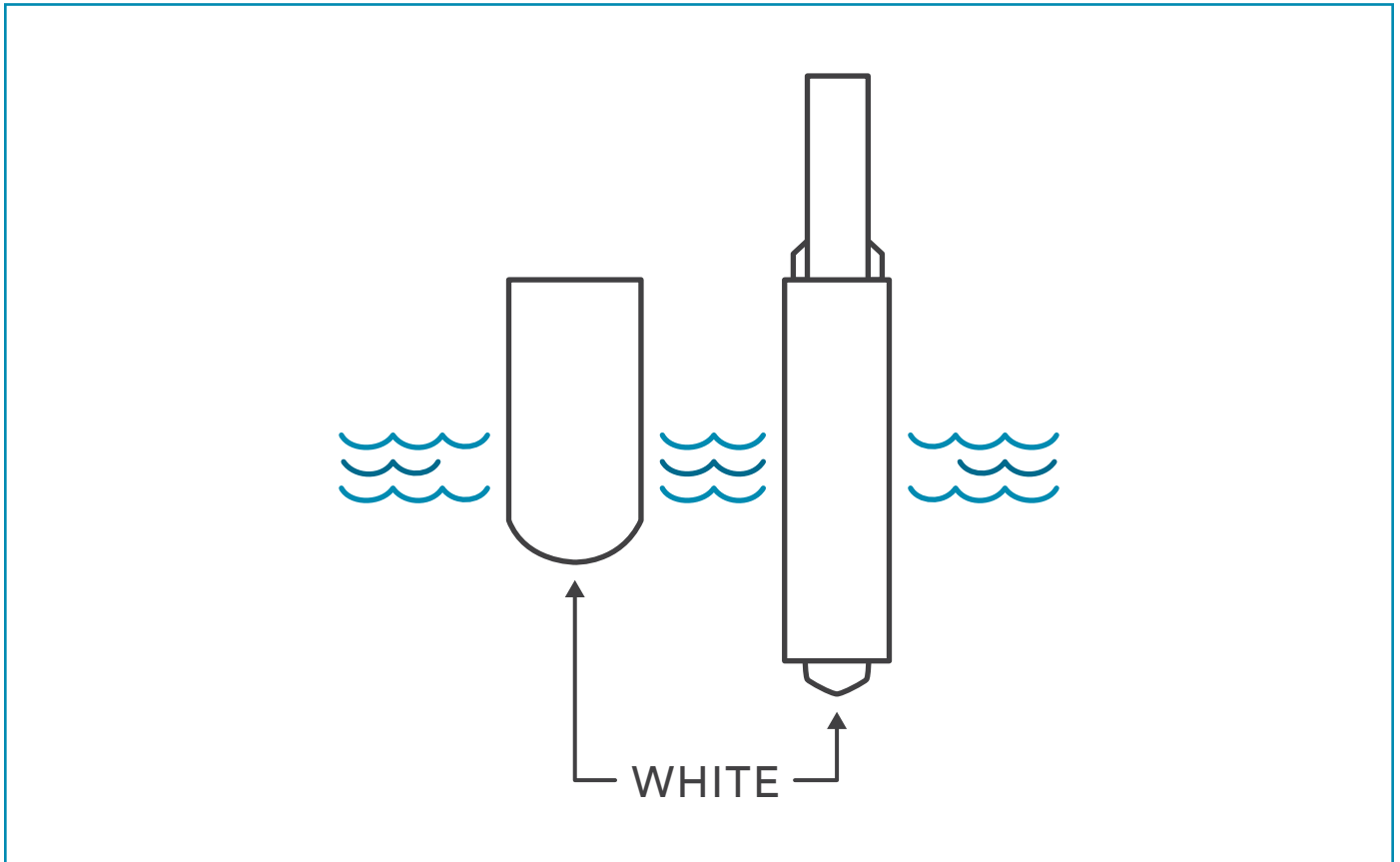


Hazard buoys mark random hazards such as rocks, shoals and turbulent waters. A hazard buoy is coloured white and has an open faced orange diamond on two opposite sides and two orange horizontal bands (40mm minimum), one above and one below the diamond symbols. The thickness of each side of the orange diamond is $D/12$, where D = the dimension of the diamond. Information words or symbols concerning the hazard may be placed within the diamond symbol, or if space doesn't permit, between the orange bands. It may also display identification letter(s) and must have:

- a yellow light, if lighted; and
- yellow retroreflective material, if material is used.

Note: Specific information may figure inside the orange diamond (e.g., rock, shoal, rapids).

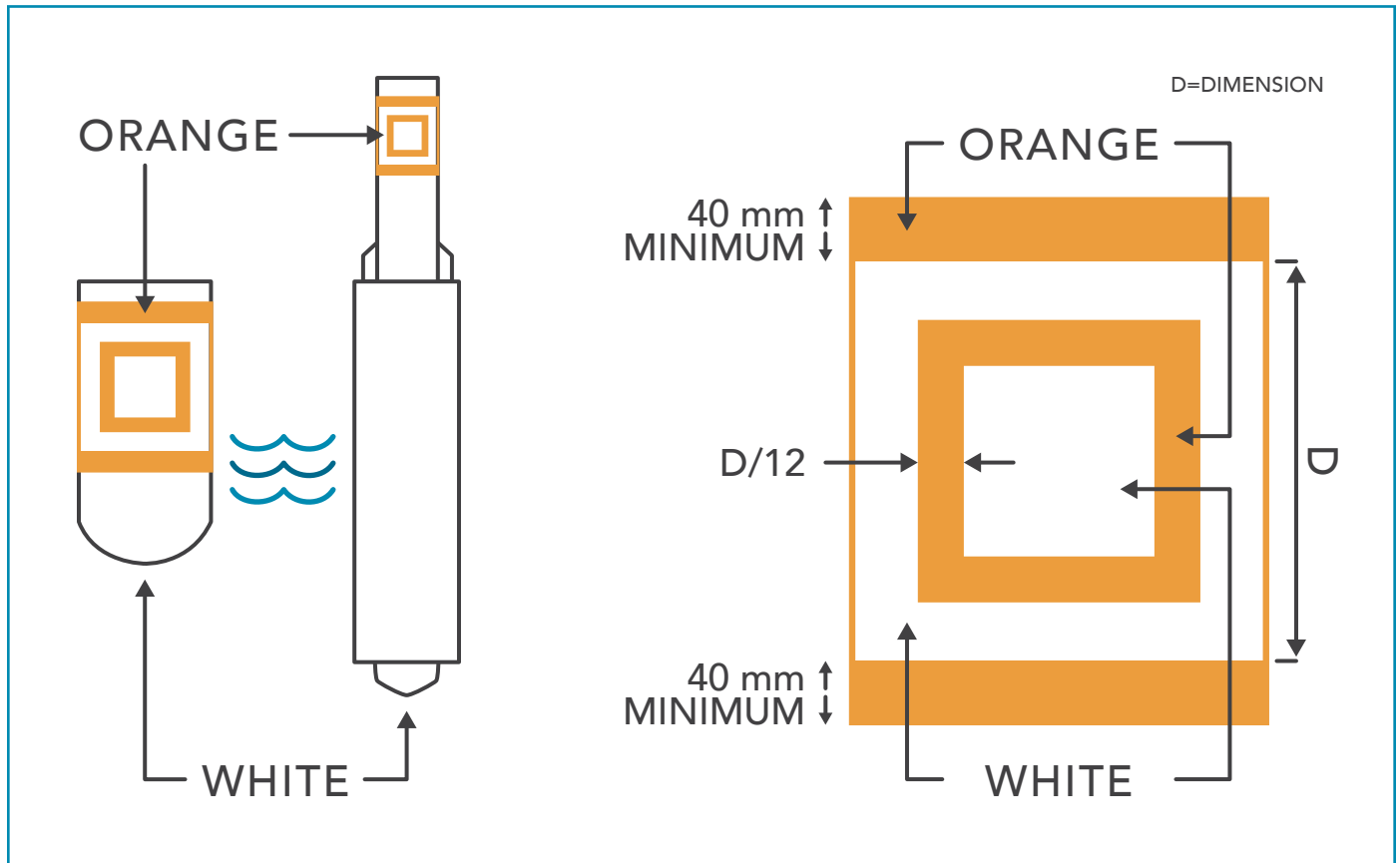
FIGURE 5 SWIMMING BUOY



Swimming buoys¹⁴ mark the perimeter of a swimming area. A swimming buoy is coloured white, and may display identification letter(s) and must have:

- a yellow light, if lighted; and
- yellow retroreflective material, if material is used.

FIGURE 6 INFORMATION BUOY

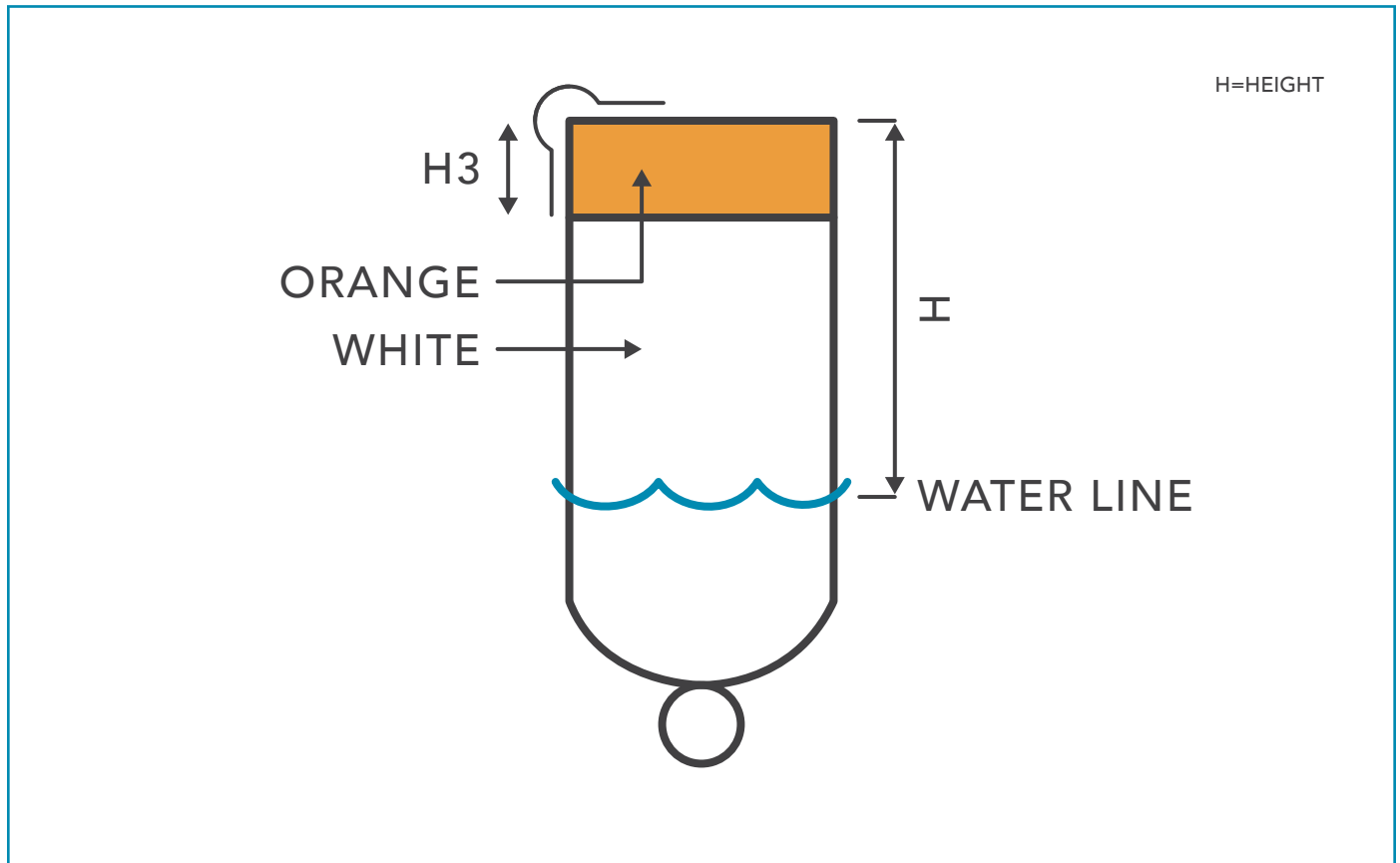


Information buoys display information of interest (e.g., marina entrance, campsite) by words or symbols inside the orange square. The orange square may be retroreflective orange.

An information buoy is coloured white and has an orange, open faced square symbol on two opposite sides and two orange horizontal bands (40mm minimum), one above and one below the square symbols. The thickness of each side of the square is $D/12$, where D = the dimension of the square. The information words or symbols are black and are placed within the white face of the square symbol. It may display identification letter(s) and must have:

- a yellow light, if lighted; and
- yellow retroreflective material, if material is used.

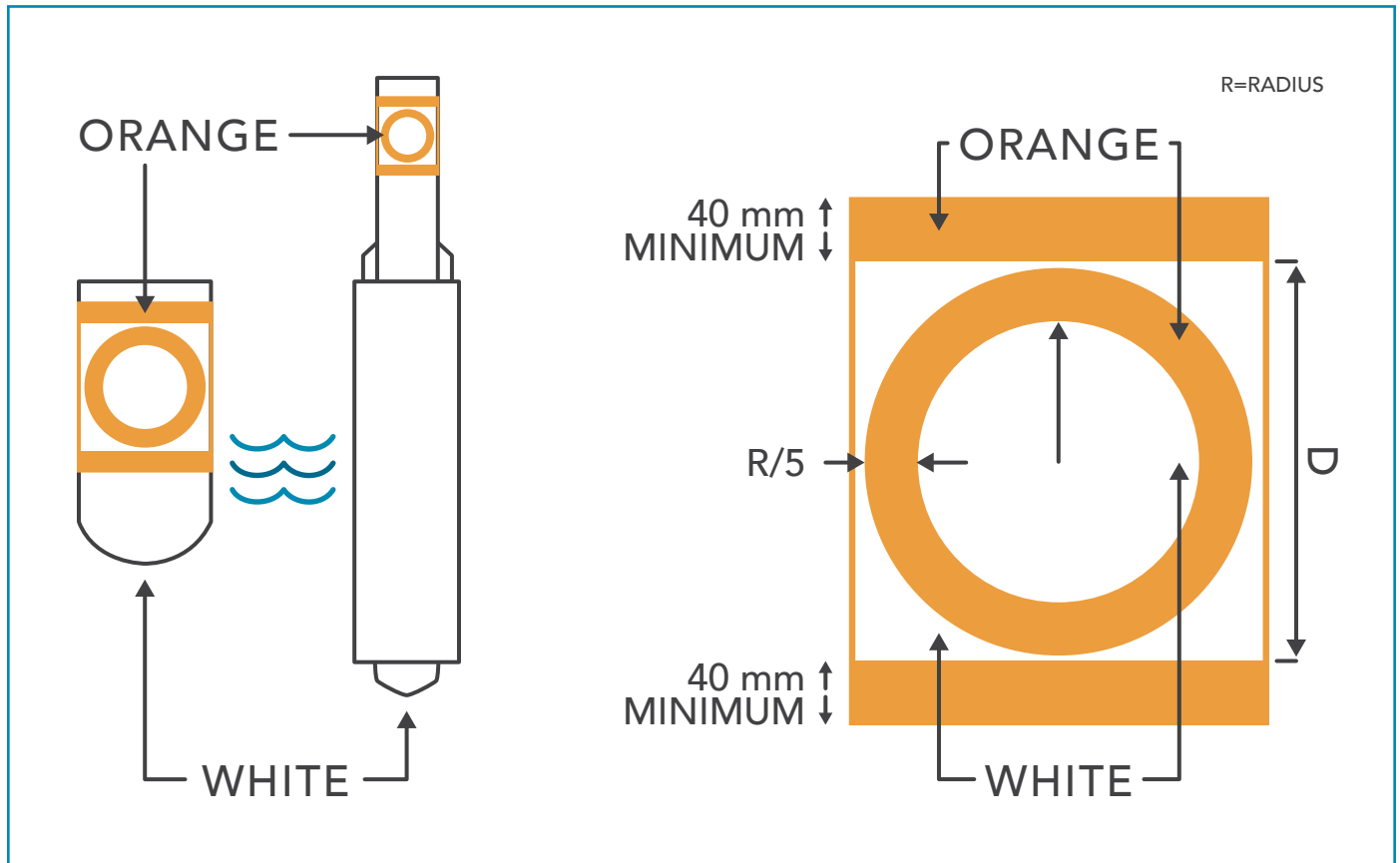
FIGURE 7 MOORING BUOYS



Mooring buoys are used for securing a vessel or similar thing. A mooring buoy is coloured white and orange. The height of the orange colour covering the top is $H/3$, where H = the height of the buoy above the waterline. It may display identification letter(s) and must have:

- a yellow light, if lighted; and
- yellow retroreflective material, if material is used.

FIGURE 8 CONTROL BUOYS

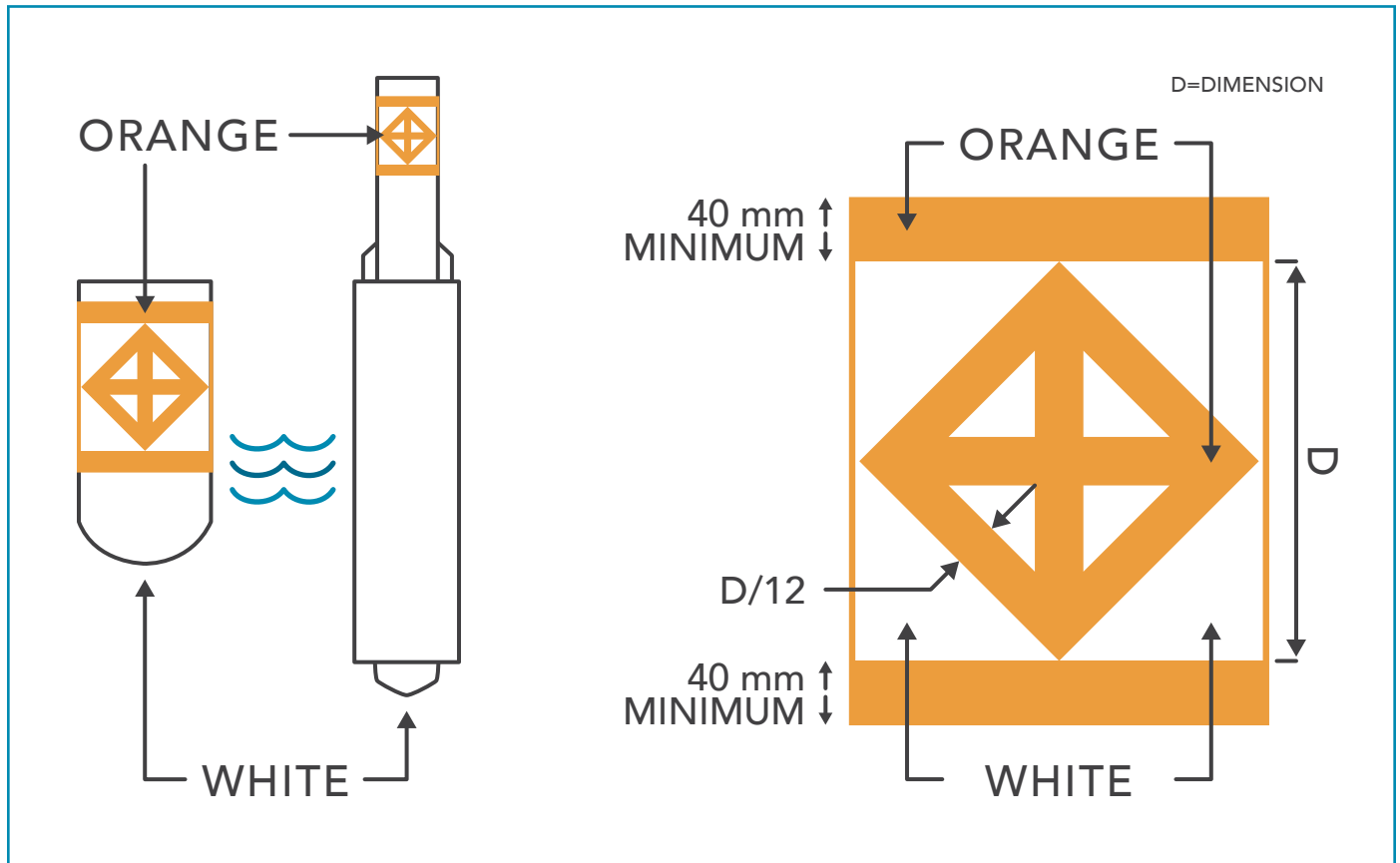


Control buoys mark an area where boating is restricted as authorized under the VORR. The orange circle may be retroreflective orange.

A control buoy is coloured white and has an orange, open faced circle on two opposite sides and two orange horizontal bands (40mm minimum), one above and one below the circles. The thickness of the orange circle is $R/5$, where R = the inner radius of the circle. A black figure or symbol inside the orange circles indicates the nature of the restriction in effect. It may display identification letter(s) and must have:

- a yellow light, if lighted; and
- yellow retroreflective material, if material is used.

FIGURE 9 KEEP OUT BUOYS



Keep out buoys mark an area where all vessels are prohibited under the VORR. The orange diamond may be retroreflective orange. A keep-out buoy is coloured white and has an orange diamond containing an orange cross on two opposite sides and two orange horizontal bands (40mm minimum), one above and one below the diamond symbols. The thickness of each side of the orange diamond is $D/12$, where D = the dimension of the diamond. It may display identification letter(s) and must have:

- a yellow light, if lighted; and
- yellow retroreflective material, if material is used.

Note: For further information on the signage requirements on the VORR the Signage Guide to *Vessel Operation Restriction Regulations (TP15400)* can be requested through your [regional OBS office](#)¹⁵.

CONTACT INFORMATION

For more information on private buoys, contact your regional NPP Office.

NAVIGATION PROTECTION PROGRAM

Transport Canada
Programs Group
Tower C, Place de Ville
330 Sparks Street
Ottawa, ON K1A 0N5
E-mail: NPPHQ-PPNAC@tc.gc.ca

For more information on recreational boating in Canada and the *Vessel Operation Restriction Regulations*, contact your regional OBS office.

OFFICE OF BOATING SAFETY HEADQUARTERS

Transport Canada
Marine Safety
Tower C, Place de Ville
330 Sparks Street
Ottawa, ON K1A 0N5

Email: obs-bsn@tc.gc.ca
Phone: 1-800-267-6687
TTY/TDD: 1-888-675-6863
Fax: 613-991-4818

For more information on aids to navigation in Canada, [contact your regional CCG office](#)¹⁶.

CANADIAN COAST GUARD AIDS TO NAVIGATION

Aids to Navigation
200 Kent Street
Ottawa, ON K1A 0E6
Email: info@dfo-mpo.gc.ca

END NOTES

- 1 Application for Crown Copyright Clearance, <https://tc.canada.ca/en/corporate-services/application-crown-copyright-clearance>
- 2 *Private Buoys Regulations*, <https://laws-lois.justice.gc.ca/eng/regulations/SOR-99-335/index.html>
- 3 *Canada Shipping Act, 2001*, <https://laws-lois.justice.gc.ca/eng/acts/C-10.15/>
- 4 *Vessel Operation Restriction Regulations*, <https://laws-lois.justice.gc.ca/eng/regulations/sor-2008-120/page-1.html>
- 5 *Canadian Navigable Waters Act*, <https://laws-lois.justice.gc.ca/eng/acts/N-22/>
- 6 Contact Navigation Protection Program and Receiver of Wreck, <https://tc.canada.ca/en/marine/contact-navigation-protection-program-receiver-wreck>
- 7 Canadian Aids to Navigation System, <https://www.ccg-gcc.gc.ca/publications/maritime-security-surete-maritime/aids-aides-navigation/page01-eng.html>
- 8 Contraventions Regulations, <https://laws-lois.justice.gc.ca/eng/regulations/sor-96-313/page-4.html>
- 9 *Minor Works Order*, <https://tc.canada.ca/en/marine/department-transport-navigable-waters-protection-act>
- 10 Local Authorities Guide: Vessel Operation Restriction Regulations, https://tc.canada.ca/sites/default/files/migrated/local_authorities_guide_english_accessible_pdf.pdf
- 11 Schedule 8 of the *Vessel Operation Restriction Regulations*, <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2008-120/page-12.html>
- 12 Contravention Regulations, <https://laws-lois.justice.gc.ca/eng/regulations/SOR-96-313/index.html>
- 13 Aids to Navigation, <https://www.ccg-gcc.gc.ca/navigation/aids-aides/index-eng.html>
- 14 Buoys cannot be joined by any means to one another (cable/rope/chain), as it is a violation
- 15 Contact the Office of Boating Safety, <https://tc.canada.ca/en/marine-transportation/marine-safety/contact-office-boating-safety>
- 16 Canadian Coast Guard Aids to Navigation Offices, <https://www.ccg-gcc.gc.ca/publications/maritime-security-surete-maritime/aids-aides-navigation/page12-eng.html>