

MAJOR LIGHTED AIDS

LIGHT
Major lighted aids to navigation may display a main light and may be equipped with a fog signal and/or RACON.

The colour and character of the light are advertised on the nautical chart and in the "List of Lights, Buoys and Fog Signals" publication. The colour of the structure may not have lateral significance. The focal height of the light above water level, in metres (m) or feet (ft), and nominal range, in nautical miles (M), may be indicated on nautical charts. When the colour of the light is not specified for any marine aid to navigation light, it is white.

Fog signal characteristics are advertised on charts and in the "List of Lights, Buoys and Fog Signals".

A RACON (radar beacon) transmits a Morse code pulse that can be seen on a radar display distinguishing it from surrounding radar targets. Information concerning RACONS can be found in "Radio Aids to Marine Navigation".

FIXED AIDS

PORT HAND
GREEN OR BLACK
UPSTREAM

STARBOARD HAND
RED
UPSTREAM

SECONDARY LANDFALL
OR
GREEN OR BLACK
UPSTREAM

A minor lighted aid may display characteristics of lateral significance. Consult the "List of Lights" for physical description of these aids.

RANGES

DESCRIPTION
A range consists of two or more fixed navigation marks situated some distance apart and at different elevations. May or may not be lighted. The shapes and colours of the daymarks and the colours and characters of lights are advertised in the "List of Lights".

USER'S GUIDE
A range provides a leading line for navigators. When marks are in line the observer is on the recommended track. Consult the nautical charts for the portion of channel serviced by the range.

FIXED AIDS

NO ANCHORAGE
FIXED AIDS

DESCRIPTION
Black anchor symbol centre on a white background, with a red fluorescent diagonal (top left to bottom right) superimposed over the black anchor and white background.

USER'S GUIDE
Do not anchor within the zone indicated on the chart. Area may contain submerged pipelines, power cables, etc.

SECTOR LIGHTS

FIXED AIDS

DESCRIPTION
A sector light's beam is divided into sectors of different colours.

USER'S GUIDE
The different coloured sectors provide a warning or a leading line to mariners. Sector colours and boundaries are indicated in the "List of Lights", and on marine charts.

STANDARD DAYBEACONS CHARACTERISTICS

FIXED AIDS

PORT HAND
BLACK OR GREEN

DESCRIPTION
Green fluorescent or black square centre on a white background with a green retroreflective border. It may display an odd number made of white retroreflective material.

USER'S GUIDE
When proceeding upstream, must be kept on the vessel's port (left) side.

PORT BIFURCATION
GREEN

DESCRIPTION
Green retroreflective square on a white diamond with a red fluorescent border.

USER'S GUIDE
Marks a point where the channel divides and may be passed on either side. If the preferred channel is desired (right), the daybeacon should be kept on the vessel's port (left) side.

STARBOARD BIFURCATION
RED

DESCRIPTION
Red retroreflective triangle on a white diamond with a red fluorescent border.

USER'S GUIDE
Marks a point where the channel divides and may be passed on either side. If the preferred channel is desired (left), the daybeacon should be kept on the vessel's starboard (right) side.

STARBOARD HAND
RED

DESCRIPTION
Red fluorescent triangle centre on a white background with a red retroreflective border. It may display an even number made of white retroreflective material.

USER'S GUIDE
When proceeding upstream, must be kept on the vessel's starboard (right) side.

THE CANADIAN AIDS TO NAVIGATION SYSTEM | 2022

UPSTREAM →

When a vessel is proceeding in the upstream direction, STARBOARD HAND AIDS MUST BE KEPT TO STARBOARD (RIGHT) AND PORT HAND AIDS MUST BE KEPT TO PORT (LEFT).

NOT TO BE USED FOR NAVIGATION

THIS ILLUSTRATION FORMS PART OF THE PUBLICATION "THE CANADIAN AIDS TO NAVIGATION SYSTEM" WHICH MAY BE OBTAINED, AS WELL AS AN EXPLANATION VIDEO ON THE CCG WEBSITE.

BUOY DRAWINGS ARE FOR ILLUSTRATIVE PURPOSES AND QUICK REFERENCE ONLY AND WILL NOT APPEAR ON AN OFFICIAL NAVIGATION CHART. FOR SYMBOLS, ABBREVIATIONS AND TERMS USED ON CHARTS, REFER TO [CCG CHART NO. 1](#).

EXAMPLES PROVIDED ARE NOT A REPRESENTATION OF REAL LIFE SITUATIONS.

FAIRWAY LATERAL BUOYS

DESCRIPTION

- Red & white vertical stripes.
- White light Mo(A) 6s or (LF) 10s (if equipped).
- If unlighted, it has a spherical top.
- Red spherical topmark (if equipped).
- Lettered - no numbers.
- White retroreflective material.

USER'S GUIDE
This buoy indicates safe water. Used to mark landfalls, channel entrances or channel centers. It may be passed on either side but should be kept on the vessel's port(left) side when proceeding in either direction.

PORT HAND LATERAL BUOYS

DESCRIPTION

- Green.
- Green light (FI) 4s or (Q) 1s (if equipped).
- If unlighted, it has a flat top.
- Topmark is a single green cylinder (if equipped).
- Lettered and even number(s).
- Green retroreflective material.

USER'S GUIDE
A port hand buoy marks the port (left) side of a channel or the location of a danger which must be kept on the vessel's port (left) side when proceeding in the upstream direction.

STARBOARD HAND LATERAL BUOYS

DESCRIPTION

- Red.
- Red light (FI) 4s or (Q) 1s (if equipped).
- If unlighted, it has a pointed (conical) top.
- Topmark is a single red cone, point upward (if equipped).
- Lettered and even number(s).
- Red retroreflective material.

USER'S GUIDE
A starboard hand buoy marks the starboard (right) side of a channel or the location of a danger which must be kept on the vessel's starboard (right) side when proceeding in the upstream direction.

PORT BIFURCATION LATERAL BUOYS

DESCRIPTION

- Green with one red horizontal band.
- Green light, composite group FI(2+1) 6s or FI(2+1) 10s (if equipped).
- If unlighted, it has a pointed (conical) top.
- Topmark is a single green cylinder (if equipped).
- Lettered - no numbers.
- Green retroreflective material.

USER'S GUIDE
A port bifurcation buoy marks the point where a channel divides when proceeding in the upstream direction. When the preferred (main) channel is desired, the buoy should be kept on the vessel's port (left) side.

STARBOARD BIFURCATION LATERAL BUOYS

DESCRIPTION

- Red with one green horizontal band.
- Red light, composite group FI(2+1) 6s or FI(2+1) 10s (if equipped).
- If unlighted, it has a pointed (conical) top.
- Topmark is a single red cone, point upward (if equipped).
- Lettered - no numbers.
- Red retroreflective material.

USER'S GUIDE
A starboard bifurcation buoy marks the point where a channel divides when proceeding in the upstream direction. When the preferred (main) channel is desired, the buoy should be kept on the vessel's starboard (right) side.

CARDINAL AIDS

DESCRIPTION

- Yellow and black.
- White lights - flash characters indicated below (if equipped).
- Black topmark cones point to the black portion(s) of the buoy.
- Lettered - no numbers. White retroreflective material.
- Two conical topmarks. Direction of points have significance.

Note: may be available in the form of buoys or fixed aids.

ISOLATED DANGER AIDS

DESCRIPTION

- Black with one red horizontal band.
- White light, group FI(2) 5s or group FI(2) 10s (if equipped).
- Two black spherical topmarks.
- Lettered - no numbers.
- White retroreflective material.

USER'S GUIDE
An isolated danger aid is moored on, near or installed above an isolated danger which has navigable water all around it. Consult the chart for information concerning the danger (dimensions, depth, etc.). May be used to mark natural dangers such as small shoals or obstructions such as wrecks.

SPECIAL BUOYS

CAUTIONARY
Cautionary buoys mark dangers such as firing ranges, underwater pipelines, race courses, seaplane bases and areas where no through channel exists.

ANCHORAGE
Anchorage buoys mark the perimeter of designated anchorage areas. Please consult the chart for water depth.

MOORING
Mooring buoys are used for mooring or securing vessels. Mariners should be aware that a vessel may be secured to such a buoy.

INFORMATION
Information buoys display information such as locality, marina, campsite, etc. Mariners are encouraged to follow the information illustrated within the orange square.

HAZARD
Hazard buoys mark random hazards such as shoals and rocks. Information concerning the hazard is illustrated within the orange diamond.

CONTROL
Control buoys indicate speed limits, wash restrictions, etc. Mariners are urged to follow the restriction illustrated within the orange circle.

KEEP-OUT
Keep-out buoy marks areas in which boats are prohibited.

SCIENTIFIC (ODAS/SADO)
Ocean data acquisition system buoy (ODAS) collect meteorological and other scientific data.

DIVING
Diving buoys mark an area where scuba or other such diving activity is in progress. Not normally charted.

SWIMMING
Swimming buoys mark the perimeter of a swimming area. May not be charted.