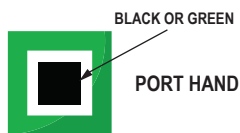


STANDARD DAYBEACONS CHARACTERISTICS

FIXED AIDS



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.

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.

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.

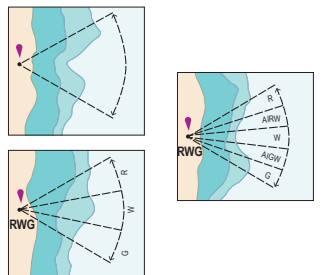
SECTOR LIGHTS

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.

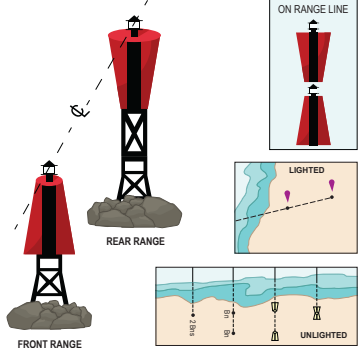


RANGES

FIXED AIDS

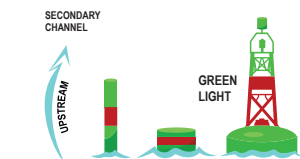
DESCRIPTION
A range consists of two or more fixed navigation marks situated some distance apart and at different elevations. May or may not be lighted. The shapes and colours of the daymarks and the colours and characters of lights are advertised in the "List of Lights".

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

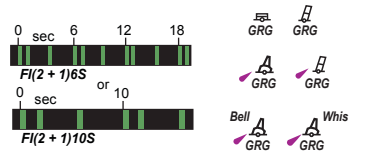


PORT BIFURCATION

LATERAL BUOYS



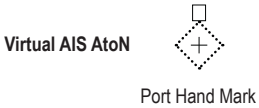
DESCRIPTION
● Green with one red horizontal band.
● Green light, composite group $F(2+1) 6s$ or $F(2+1) 10s$ (if equipped).
● If unlighted, it has a flat top.
● Topmark is a single green cylinder (if equipped).
● Lettered – no numbers.
● Green retroreflective material.



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.

AIS-ATON

DESCRIPTION
An AIS AtoN is an electronic (digital) aid to navigation that is broadcast by an authorized service provider using the AIS Message 21 (Aids-to-navigation report) and may be displayed on properly configured shipborne and shore-based navigation equipment. There are two types of AIS AtoN being used in Canada: Physical and Virtual. AIS AtoN provide a positive and all-weather means of identification to mariners. For more information, please go to [CCG e-Navigation Portal](#).

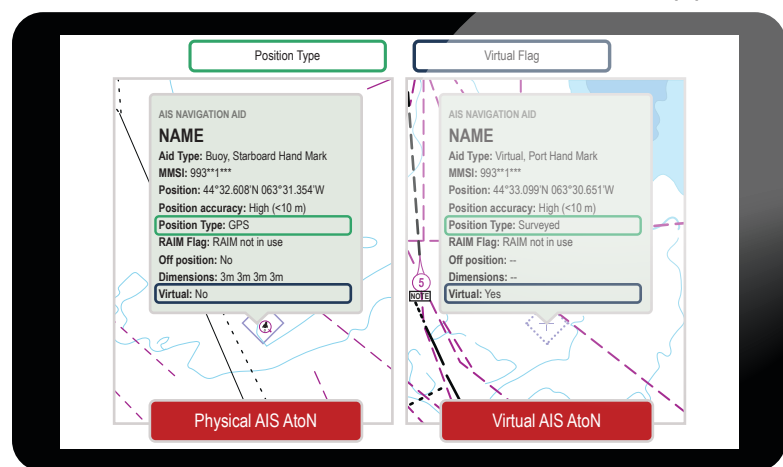


Port Hand Mark



Starboard Hand Mark

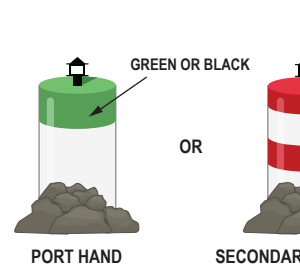
This is a fictitious EXAMPLE of a mariner's view from vessel's electronic equipment



MINOR LIGHTED AIDS/ SECONDARY LANDFALL AIDS

FIXED AIDS

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

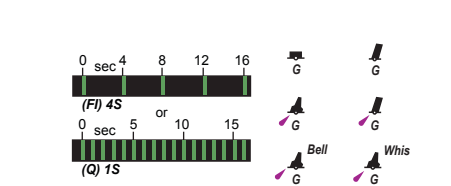


PORT HAND

LATERAL BUOYS



DESCRIPTION
● Green.
● Green light ($F(1) 4s$ or ($Q(1) 1s$) (if equipped).
● If unlighted, it has a flat top.
● Topmark is a single green cylinder (if equipped).
● Letter and odd number(s).
● Green retroreflective material.

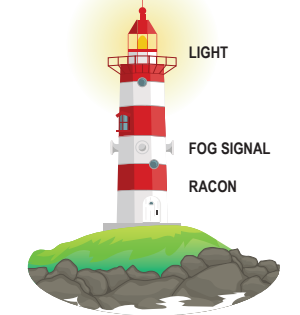


USER'S GUIDE
A port hand buoy marks the port (left) side of a channel or the location of a danger which must be kept on the vessel's port (left) side when proceeding in the upstream direction.

MAJOR LIGHTED AIDS

FIXED AIDS

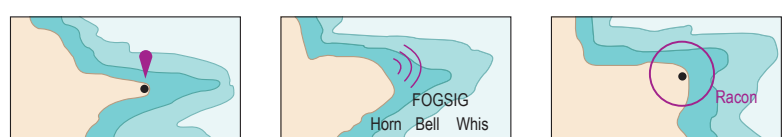
Major lighted aids to navigation may display a main light and may be equipped with a fog signal and/or RACON.



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".

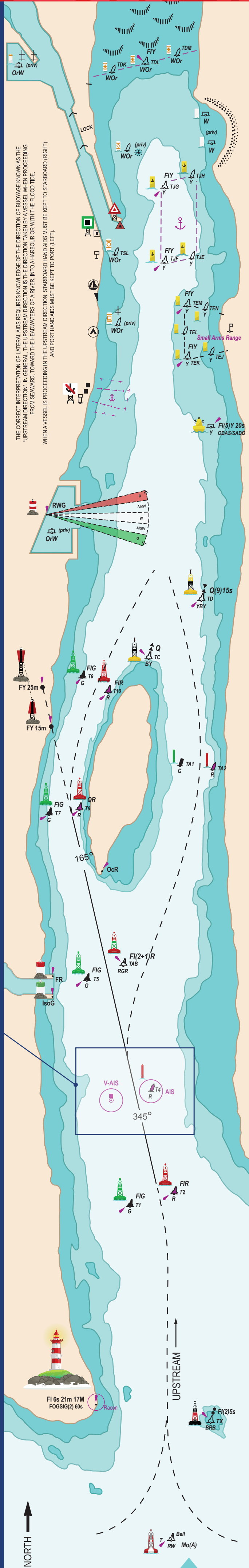


NOT TO BE USED FOR NAVIGATION

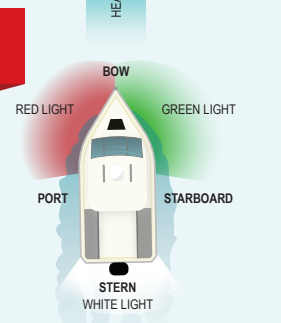
THIS ILLUSTRATION FORMS PART OF THE PUBLICATION "THE CANADIAN AIDS TO NAVIGATION SYSTEM" WHICH MAY BE OBTAINED, AS WELL AS AN EXPLANATION VIDEO ON THE CCG WEBSITE.

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 [CHS CHART NO. 1](#).

EXAMPLES PROVIDED ARE NOT A REPRESENTATION OF REAL LIFE SITUATIONS.



THE CANADIAN AIDS TO NAVIGATION SYSTEM | 2022



STANDARD DAYBEACONS CHARACTERISTICS

FIXED AIDS



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.

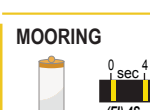
DESCRIPTION
Red fluorescent triangle centre on a white background and with a red retroreflective border. It may display an even number made of white retroreflective material.

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

SPECIAL BUOYS

- Yellow lights – flash characters indicated below (if equipped).
- Cautionary, scientific and anchorage buoys may display a yellow "X" topmark.

DESCRIPTION
● Shapes have no significance.
● May be lettered – no numbers.
● Yellow retroreflective material.



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

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.

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.

DIVING

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

SWIMMING

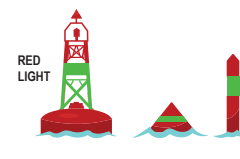
Swimming buoys mark the perimeter of a swimming area. May not be charted.

SCIENTIFIC (ODAS/SADO)

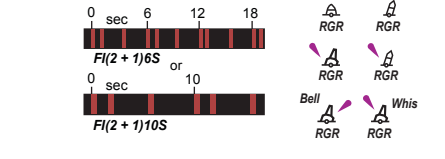
Ocean data acquisition system buoy (ODAS) collect meteorological and other scientific data.

STARBOARD BIFURCATION

LATERAL BUOYS



DESCRIPTION
● Red with one green horizontal band.
● Red light, composite group $F(2+1) 6s$ or $F(2+1) 10s$ (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.

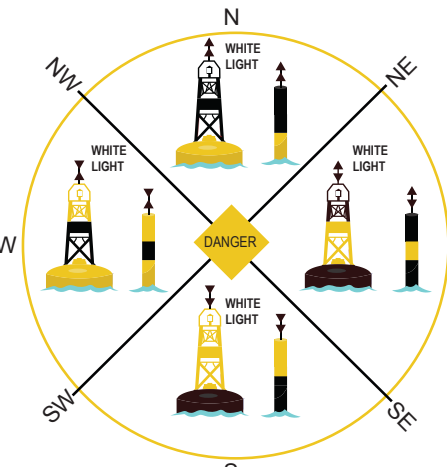


USER'S GUIDE
A starboard bifurcation buoy marks the point where a channel divides when proceeding in the upstream direction. When the preferred (main) channel is desired, the buoy should be kept on the vessel's starboard (right) side.

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.



FLASH GROUPS



TOPMARKS



A north cardinal aid indicates that the safest water exists to the north.

An east cardinal aid indicates that the safest water exists to the east.

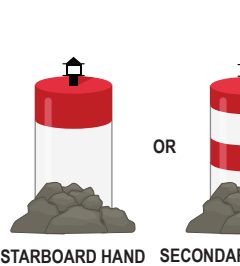
A south cardinal aid indicates that the safest water exists to the south.

A west cardinal aid indicates that the safest water exists to the west.

MINOR LIGHTED AIDS/ SECONDARY LANDFALL AIDS

FIXED AIDS

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

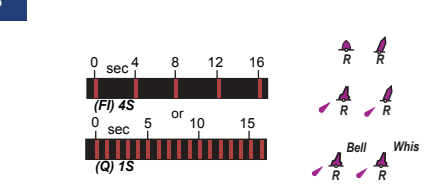


STARBOARD HAND

LATERAL BUOYS

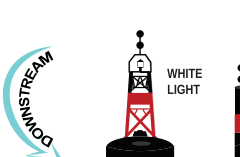


DESCRIPTION
● Red.
● Red light ($F(1) 4s$ or ($Q(1) 1s$) (if equipped).
● If unlighted, it has a pointed (conical) top.
● Topmark is a single red cone, point upward (if equipped).
● Letter and even number(s).
● Red retroreflective material.



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.

ISOLATED DANGER AIDS

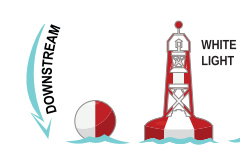


DESCRIPTION
● Black with one red horizontal band.
● White light, group $F(2) 5s$ or group $F(2) 10s$ (if equipped).
● Two black spherical topmarks.
● Lettered – no numbers.
● White retroreflective material.

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.

FAIRWAY

LATERAL BUOYS



DESCRIPTION
● Red & white vertical stripes.
● White light, group $M(A) 6s$ or ($L(F) 10s$) (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.