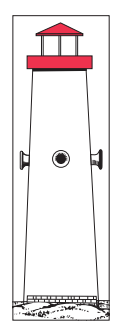


# THE CANADIAN AIDS TO NAVIGATION SYSTEM

## FIXED AIDS TO NAVIGATION

### MAJOR LIGHTED AIDS

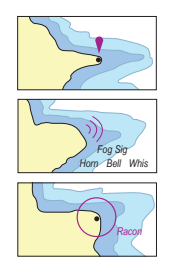


LIGHT  
FOG SIGNAL  
RACONS

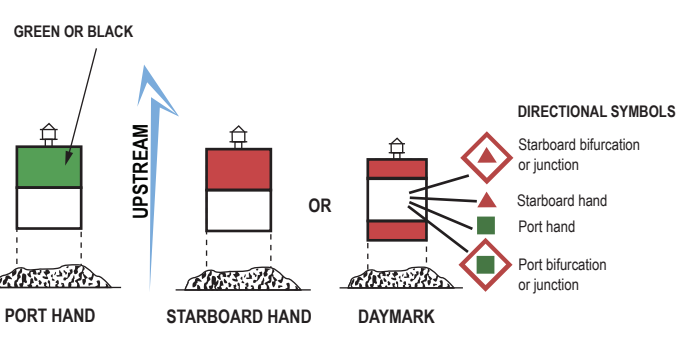
Major lighted aids to navigation may display a main light, are equipped with an emergency light, and may be equipped with a fog signal or RACON. The colour and character of the light are advertised on the chart and in the publication "list of lights, buoys and fog signals". The elevation of the light above the water level (metres (m) or feet (ft)) and nominal range (nautical miles (M)) may be indicated. Equipped with an emergency light of reduced intensity, FI(6)15s. When the colour of the light is not specified for any marine aid to navigation light, it is white.

Signal characteristics are advertised on the chart 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".

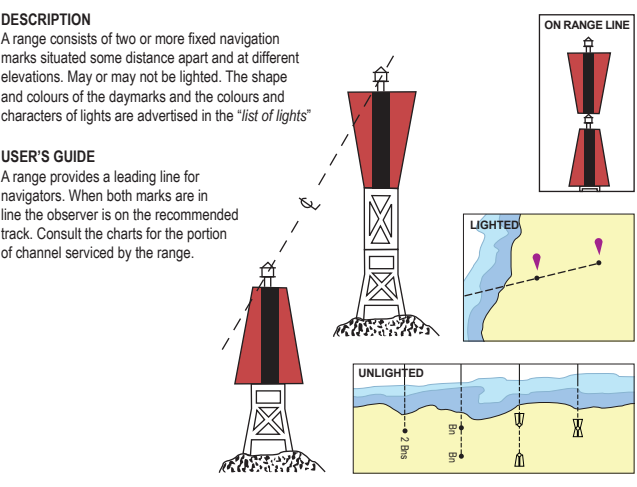


### MINOR LIGHTED AIDS

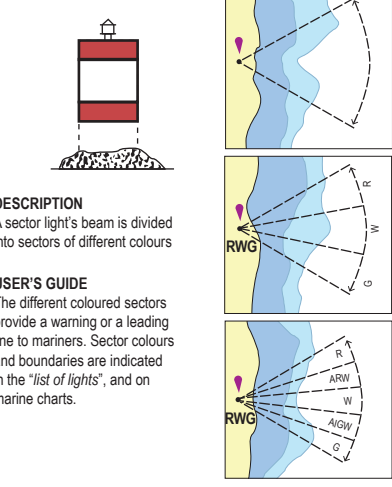


A minor lighted aid may display characteristics of lateral significance. Consult the "list of lights" for physical description of these aids.

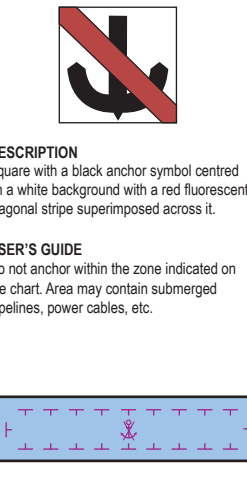
### RANGES



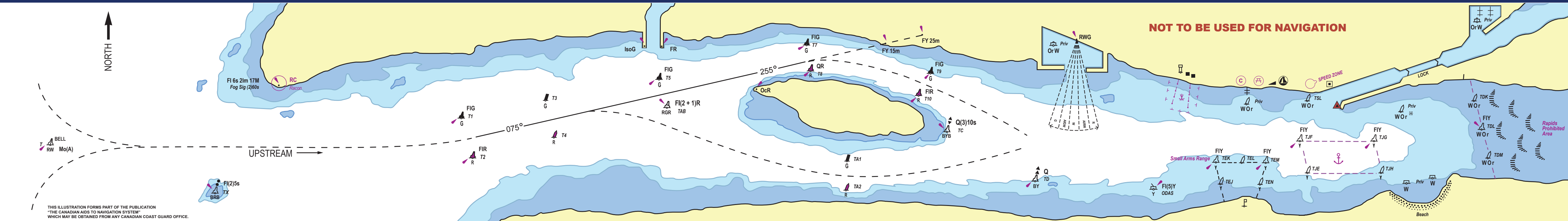
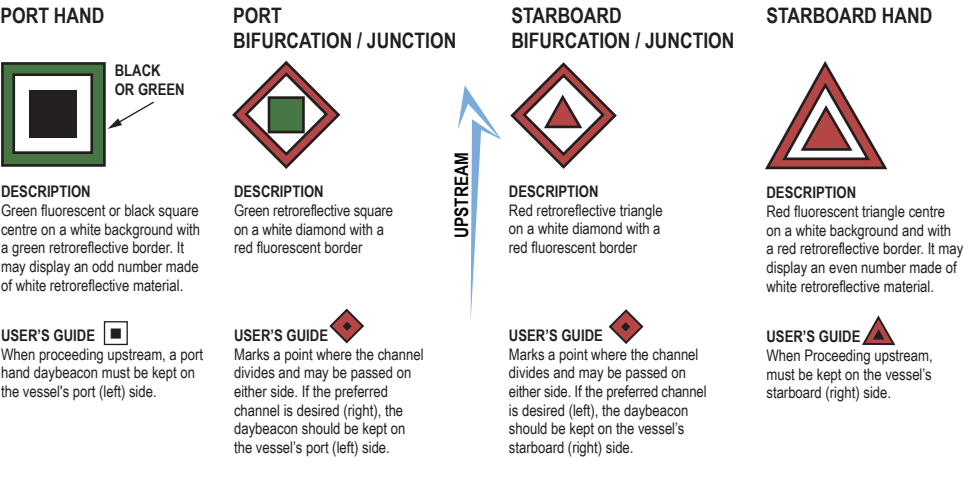
### SECTOR LIGHTS/SECONDARY LANDFALL AIDS



### NO ANCHORAGE



### STANDARD DAYBEACONS CHARACTERISTICS



## LATERAL BUOYS

### FAIRWAY

**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 to the port (left) when proceeding in either direction.

## 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, 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.

## LATERAL BUOYS

### PORT HAND

**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 port (left) side when proceeding in the upstream direction.

## LATERAL BUOYS

### STARBOARD HAND

**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.

## LATERAL BUOYS

### PORT BIFURCATION

**DESCRIPTION**

- Yellow and black.
- White lights - flash characters indicated below (if equipped).

**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.

## LATERAL BUOYS

### STARBOARD BIFURCATION

**DESCRIPTION**

- Black topmark cones point to the black portion(s) of the buoy.
- Lettered - no numbers.
- White 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.

**USER'S GUIDE**

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.

## 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 area. 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, campsites, 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 with 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)**

Ocean data acquisition system buoy collects 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 swimming area. May not be charted.